

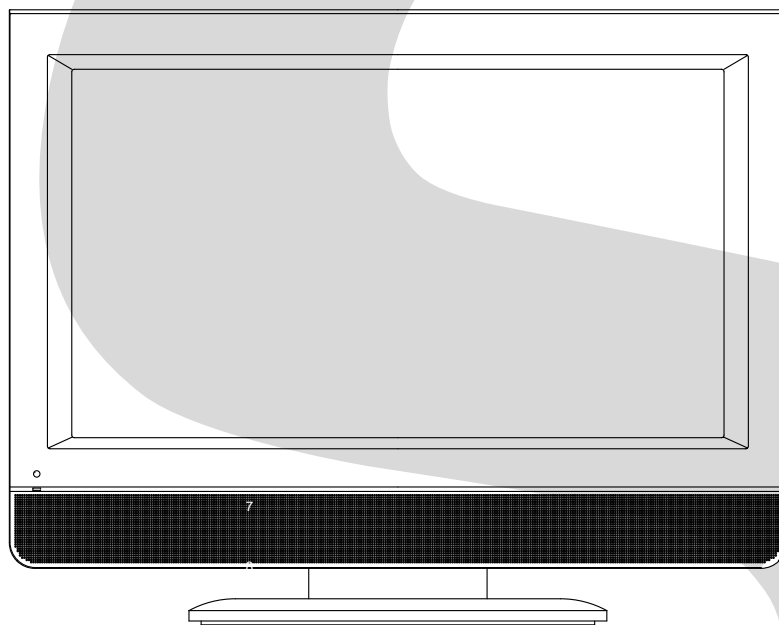
# TOSHIBA

FILE NO. 050-200420

## SERVICE MANUAL

### LCD COLOR TELEVISION/ DVD VIDEO PLAYER

# *23HLV84*



## CAUTION

THIS LCD COLOR TELEVISION EMPLOYS A LASER SYSTEM.

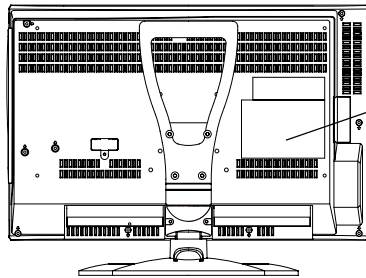
TO ENSURE PROPER USE OF THIS PRODUCT, PLEASE READ THIS SERVICE MANUAL CAREFULLY AND RETAIN FOR FUTURE REFERENCE. SHOULD THE UNIT REQUIRE MAINTENANCE, CONTACT AN AUTHORIZED SERVICE LOCATION-SEE SERVICE PROCEDURE.

USE OF CONTROLS, ADJUSTMENTS OR THE PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

TO PREVENT DIRECT EXPOSURE TO LASER BEAM, DO NOT TRY TO OPEN THE ENCLOSURE. VISIBLE LASER RADIATION MAY BE PRESENT WHEN THE ENCLOSURE IS OPENED. DO NOT STARE INTO BEAM.

### Location of the required Marking

The rating sheet and the safety caution are on the rear of the unit.



CERTIFICATION: COMPLIES WITH FDA  
RADIATION PERFORMANCE STANDARDS,  
21 CFR SUBCHAPTER J.

## PREPARATION OF SERVICING

The laser diode used for a pickup head may be destroyed with external static electricity. Moreover, even if it is operating normally after repair, when static electricity discharge is received at the time of repair, a life of product may become short. Please perform the following measure against static electricity, be careful of destruction of a laser diode enough at the time of repair, and work.

- It works on the desk which performed measures against static electricity, such as conductive mat.
- Soldering iron with ground wire or ceramic type is used.
- A worker needs to use a ground conductive wrist strap for body.

## IMPORTANT SERVICE SAFETY INFORMATION

Safety precautions to be followed during servicing:

1. Parts marked with an  $\triangle$  are critical parts for safety. Replace only with the one described in the parts list.
2. Before returning the DVD product to the customer, make the appropriate leakage current check or resistance measurements to ensure that exposed parts are properly insulated from the supply circuit.

A leakage current check is recommended for this unit. Plug the AC line cord directly into a 120V 60Hz AC outlet (do not use an isolation transformer for this check). Use a leakage current tester (Fig. 1) or a metering system which complies with Underwriters Laboratories (UL 1409). Measure for current from all exposed metal parts of the cabinet to a known earth ground: particularly, any exposed metal part having a return path to the chassis. Any current measured must not exceed 0.5mA. Any measurement not within the limits outlined above are indicative of a potential shock hazard and corrective action must be taken before returning the unit to the customer.

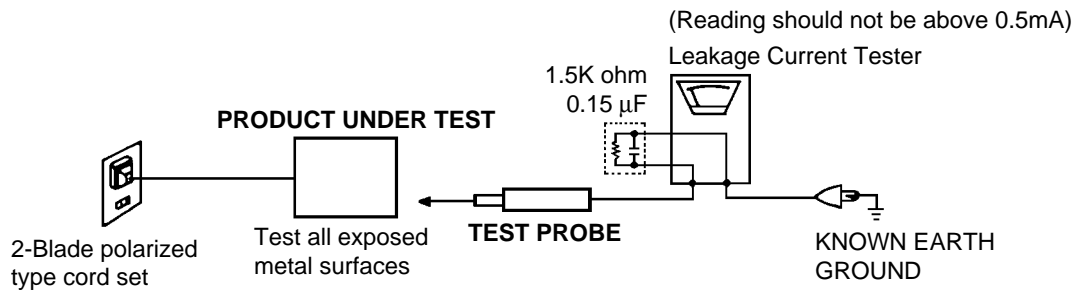


Fig. 1 AC Leakage Test

# IMPORTANT SAFEGUARDS

## 1. READ INSTRUCTIONS

All the safety and operating instructions should be read before the unit is operated.

## 2. RETAIN INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

## 3. HEED WARNINGS

All warnings on the unit and in the operating instructions should be adhered to.

## 4. FOLLOW INSTRUCTIONS

All operating and use instructions should be followed.

## 5. CLEANING

Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

## 6. ATTACHMENTS

Do not use attachments not recommended by the unit's manufacturer as they may cause hazards.

## 7. WATER AND MOISTURE

Do not use this unit near water. For example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

## 8. ACCESSORIES

Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury, and serious damage to the unit. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer.

- 8A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

PORTABLE CART WARNING  
(symbol provided by RETAC)



S3126A

## 9. VENTILATION

Slots and openings in the cabinet and in the back or bottom are provided for ventilation, to ensure reliable operation of the unit, and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the unit on a bed, sofa, rug, or other similar surface. This unit should never be placed near or over a radiator or heat source. This unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

## 10. POWER SOURCES

This unit should be operated only from the type of power source indicated on the rating plate. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For units intended to operate from battery power, or other sources, refer to the operating instructions.

## 11. GROUNDING OR POLARIZATION

This unit is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug. If your unit is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin, this plug will only fit into a grounding-type power outlet. This too, is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

## 12. POWER-CORD PROTECTION

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

## 13. LIGHTNING

To protect your unit from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the unit due to lightning and power line surges.

## 14. POWER LINES

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

## 15. OVERLOADING

Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

## 16. OBJECT AND LIQUID ENTRY

Do not push objects through any openings in this unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.

## 17. OUTDOOR ANTENNA GROUNDING

If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

## 18. SERVICING

Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

## 19. DAMAGE REQUIRING SERVICE

Unplug this unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the unit.
- c. If the unit has been exposed to rain or water.
- d. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
- e. If the unit has been dropped or the cabinet has been damaged.
- f. When the unit exhibits a distinct change in performance, this indicates a need for service.

## 20. REPLACEMENT PARTS

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock or other hazards.

## 21. SAFETY CHECK

Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

## 22. WALL OR CEILING MOUNTING

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

## 23. HEAT

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

## 24. CONNECTING

When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.

## 25. SOUND VOLUME

Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.

## 26. SOUND DISTORTION

Do not allow the product output distorted sound for a longtime. It may cause speaker overheating and fire.

## 27. HEADPHONES

When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously with high volume sound, it may cause hearing damage.

## 28. LASER BEAM

Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.

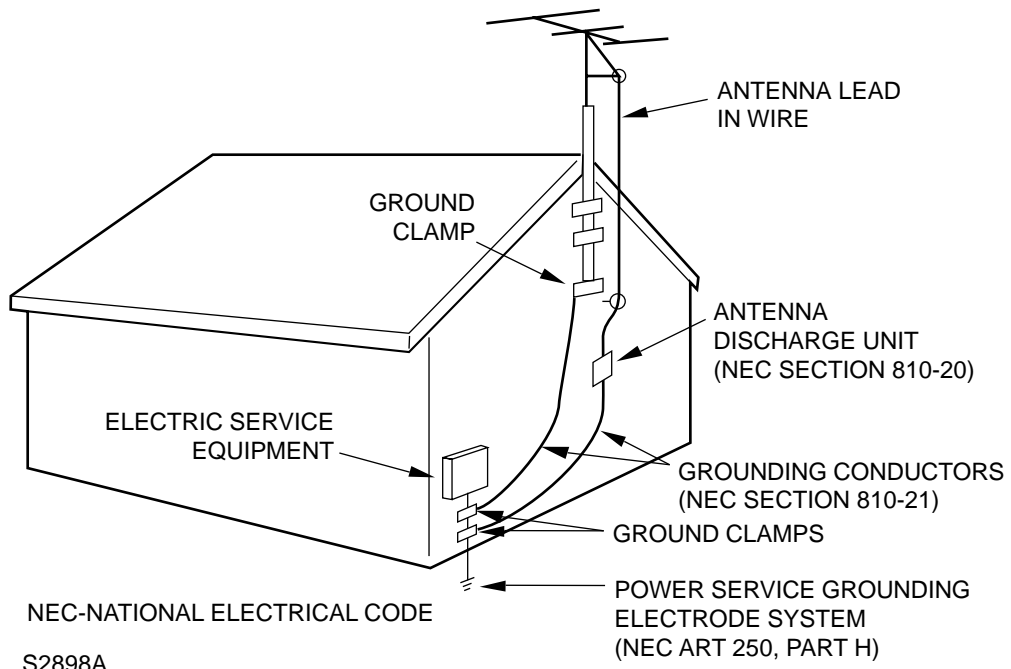
## 29. DISC

Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

## 30. NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

EXAMPLE OF ANTENNA GROUNDING AS PER THE NATIONAL ELECTRICAL CODE



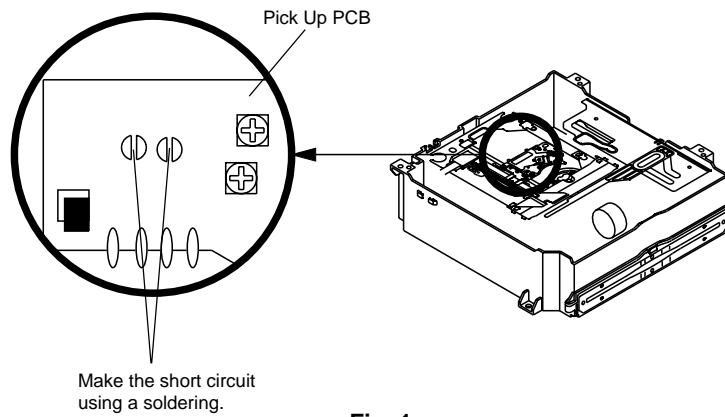
## WHEN REPLACING DVD DECK

### [ When the removal of the DVD Deck ]

Before removing Pick Up PCB and DVD PCB connector, make the short circuit on the position as shown **Fig. 1** using a soldering. If you remove the DVD Deck with no soldering, the Laser may be damaged.

### [ When the installation of the DVD Deck ]

Remove all the soldering on the short circuit position after the connection of Pick Up PCB and DVD PCB connector.



**Fig. 1**

## DISC REMOVAL METHOD AT NO POWER SUPPLY

1. Remove the Back Cabinet. (Refer to item 1 of the DISASSEMBLY INSTRUCTIONS.)
2. Slide the Rack Loading toward the arrow direction by hand to release the lock. (Refer to Fig. 1)
3. Take out the Disc from the DVD Deck. Be careful not to scratch on the Disc.

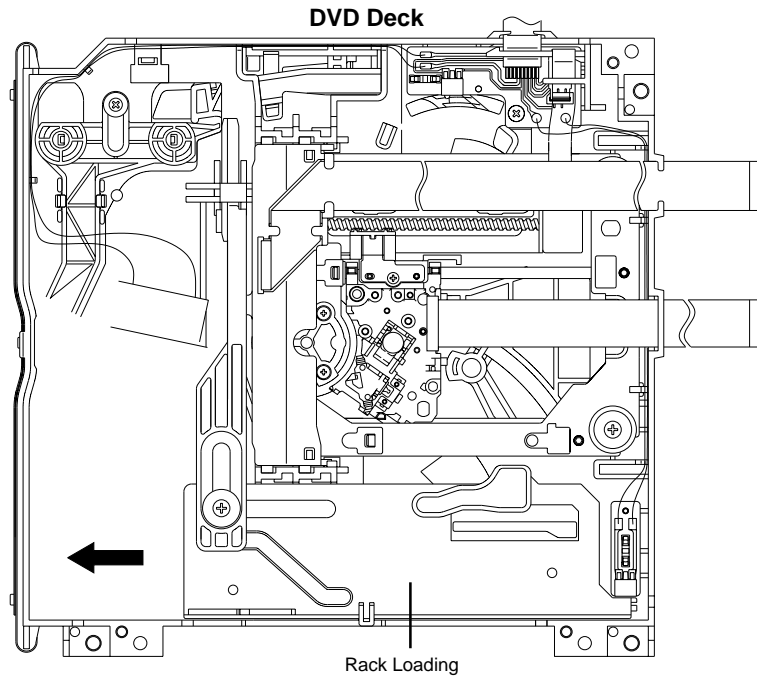


Fig. 1

## PARENTAL CONTROL - RATING LEVEL 4 DIGIT PASSWORD CANCELLATION

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

1. Turn Unit ON.
2. Simultaneously press and hold the 'STOP' key on the front panel.
3. Press and hold the '7' key on the remote control unit.
4. Hold both keys for more than 2 seconds.
5. The On Screen Display message 'PASSWORD CLEAR' will appear.
6. The 4 digit password has now been cleared

## TRAY LOCK

Tray cannot be opened by setting the Tray Lock, please follow the steps below.

1. Turn Unit ON.
2. Set the DVD to the Stop Mode.
3. Press and hold the 'STOP' key on the front panel.
4. Simultaneously press and hold the '9' key on the remote control unit.
5. Hold both keys for more than 2 seconds.
6. The On Screen Display message '🔒' will appear.
7. The Tray Lock has now been set up.

To unlock the Tray Lock, please follow the steps below.

1. Turn Unit ON.
2. Set the DVD to the Stop Mode.
3. Press and hold the 'STOP' key on the front panel.
4. Simultaneously press and hold the '9' key on the remote control unit.
5. Hold both keys for more than 2 seconds.
6. The On Screen Display message '🔓' will appear.
7. The Tray Lock has now been cleared.



## 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 50°F~70°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 carefull 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.

# CONTENTS

<b>CAUTION</b> .....	A1-1
<b>PREPARATION OF SERVICING</b> .....	A1-1
<b>IMPORTANT SERVICE SAFETY INFORMATION</b> .....	A1-2
<b>IMPORTANT SAFEGUARDS</b> .....	A1-3~A1-5
<b>WHEN REPLACING DVD DECK</b> .....	A1-6
<b>DISC REMOVAL METHOD AT NO POWER SUPPLY</b> .....	A1-7
<b>PARENTAL CONTROL - RATING LEVEL</b> .....	A1-7
<b>TRAY LOCK</b> .....	A1-7
<b>ABOUT LEAD FREE SOLDER (PbF)</b> .....	A1-8
<b>CONTENTS</b> .....	A2-1
<b>GENERAL SPECIFICATIONS</b> .....	A3-1~A3-8
<b>DISASSEMBLY INSTRUCTIONS</b>	
1. REMOVAL OF MECHANICAL PARTS AND P. C. BOARDS .....	B1-1~B1-3
2. REMOVAL OF DVD DECK PARTS .....	B2-1~B2-3
3. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC .....	B3-1, B3-2
<b>SERVICE MODE LIST</b> .....	C-1
<b>CONFIRMATION OF HOURS USED</b> .....	C-1
<b>WHEN REPLACING EEPROM (MEMORY) IC</b> .....	C-2, C-3SD
<b>ELECTRICAL ADJUSTMENTS</b> .....	D-1~D-3
<b>BLOCK DIAGRAMS</b>	
DVD .....	E-1, E-2
TV .....	E-3, E-4
STEREO/SOUND AMP .....	E-5, E-6
MICON/SUB MICON .....	E-7, E-8
IN/OUT/HD/VD .....	E-9, E-10
INTERFACE .....	E-11, E-12
MICON2 .....	E-13, E-14
SCALER1/SCALER2/LVDS/ADC/MEMORY/BUS .....	E-15, E-16
<b>PRINTED CIRCUIT BOARDS</b>	
LCD .....	F-1, F-2
DVD/OPERATION2 .....	F-3, F-4
AV/REMOCON/OPERATION .....	F-5~F-8
HD-MI/START/SW/END SW .....	F-9, F-10
<b>SCHEMATIC DIAGRAMS</b>	
TUNER/STEREO .....	G-1, G-2
SUB MICON .....	G-3, G-4
SOUND AMP .....	G-5, G-6
IN/OUT .....	G-7, G-8
TV POWER .....	G-9, G-10
OPERATION1/REMOCON .....	G-11, G-12
DECODER .....	G-13, G-14
SCALER1(1/2) .....	G-15, G-16
SCALER1(2/2) .....	G-17, G-18
LVDS .....	G-19, G-20
ADC .....	G-21, G-22
IN/OUT2 .....	G-23, G-24
SCALER2 .....	G-25, G-26
REG/HD/VD .....	G-27, G-28
MEMORY .....	G-29, G-30
BUS TRANSCEIVER .....	G-31, G-32
MPEG/MICON/DSP .....	G-33, G-34
MEMORY2 .....	G-35, G-36
RF AMP .....	G-37, G-38
AUDIO/VIDEO .....	G-39, G-40
MOTOR DRIVE .....	G-41, G-42
REGULATOR2 .....	G-43, G-44
OPERATION2 .....	G-45, G-46
INTERFACE .....	G-47, G-48
MICON2 .....	G-49, G-50
START SW/END SW .....	G-51, G-52
<b>INTERCONNECTION DIAGRAM</b> .....	G-53, G-54
<b>WAVEFORMS</b> .....	H-1~H-4
<b>MECHANICAL EXPLODED VIEWS</b> .....	I1-1~I1-3
<b>DVD DECK EXPLODED VIEWS</b> .....	I2-1, I2-2
<b>MECHANICAL REPLACEMENT PARTS LIST</b> .....	J1-1~J1-4
<b>DVD DECK REPLACEMENT PARTS LIST</b> .....	J2-1, J2-2
<b>ELECTRICAL REPLACEMENT PARTS LIST</b> .....	J3-1~J3-16

# GENERAL SPECIFICATIONS

G-1	TV System	LCD	LCD Size / Visual Size	22.95 inch / 583.0mmV	
			LCD Type	Color TFT LCD	
			Number of Pixels	1366(H) x 768(V)	
			View Range	88/88 degree	
			Left/Right Up/Down	88/88 degree	
		Color System		NTSC	
		Speaker	Position	2 Speaker	
			Size	Front	
			Impedance	1.8 x 3.9 inch	
		Sound Output	Max	16 ohm	
			10%(Typical)	5.0W + 5.0W	
				---	
G-2	DVD System	Color System		NTSC	
		Disc		DVD, CD-DA, CD-R/RW, Video CD	
				DVD-R/RW (Video Format Only)	
		Disc Diameter		120 mm , 80 mm(with Disc Adapter)	
		Deck	Disc Loading System	Slot in Type	
			Motor		3 Motors
		Pick up			1-Lens 2-Beams System
		Playback time(Max)	DVD 1-Layer		135min (4.7GB)
			DVD 2-Layer		245min (8.5GB)
			CD		74min
			Video CD		74min
		Search speed	Fwd	Actual	4 step
					2-45 times (DVD, VIDEO CD)
					4-40 times (CD)
	Rev	Actual	4 step		
			2-45 times (DVD, VIDEO CD)		
			4-40 times (CD)		
Slow speed	Fwd	Actual	1/7 -1/2 times		
			--		
	Rev	Actual	1/7 -1/2 times		
			--		
G-3	Tuning System	Broadcasting System		US System M	
		Tuner and Receive CH	System	1Tuner	
			Destination	US (W/CABLE)	
			Tuning System	F-Synth	
			Input Impedance	VHF/UHF 75 Ohm	
			CH Coverage	2-69, 4A, A-5-A-1, A-1, J-W, W+1-W+84	
		Intermediate Frequency	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-4	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		-8.0dBm/50k ohm
			Output Level	at DVD	-12.0dBm/1k ohm (-20dBFS 0dBFS=2.0Vrms)
				at TV	-8 dBm/1k ohm (0dBm=0.775Vrms)
					0-600mV /1k ohm (Variable out mode)
			Digital Output Level		0.5 V p-p/75 ohm
			S/N Ratio at DVD (Weighted)		90dB
			Harmonic Distortion		0.02% (1KHz)
			Frequency Response :	at DVD	4Hz - 22kHz
		at Video CD	4Hz - 20kHz		
		at SVCD	4Hz - 20kHz		
		at CD	4Hz - 20kHz		
G-5	Power	Power Source	AC	120V, 60Hz	
			DC	--	
		Power Consumption		at AC	110W at 120V 60Hz
				at DC	--
		Stand by (at AC)		1W at 120V 60Hz	
		Per Year		-- kWh/Year	
Protector	Power Fuse			Yes	
	Safety Circuit			Yes	
	IC Protector(Micro Fuse)			No	

## GENERAL SPECIFICATIONS

G-6	Regulation	Safety Radiation Laser	UL / CSA FCC / IC DHHS
G-7	Temperature	Operation Storage	+5oC ~ +40oC -20oC ~ +60oC
G-8	Operating Humidity		Less than 80% RH
G-9	On Screen Display	Menu (TV) Menu Type Picture Mode(Picture preference) Brightness Contrast Color Tint Sharpness Color Temperature Cable Clear Reset Audio MTS Bass Treble Balance Stable Sound Speakers On/Off Dolby Virtual WOW SRS 3D WOW Focus WOW Tru Bass HDMI Reset Setup Language Clock Set TV/CABLE CH Program Add/ Erase Closed Caption Picture Size Picture Scroll Cinema Mode Aspect Back Lighting Option On Timer Favorite CH CH Label VIDEO Label Locks V-Chip Lock New Password Panel Lock PC Monitor Menu Brightness Contrast Hor Position Ver Position Phase Clock Auto Adjust Reset Color Temperature Menu Red Green Blue Reset	Yes Icon Yes Yes Yes Yes Yes Yes Yes Yes Yes No Yes

## GENERAL SPECIFICATIONS

	Control Level	Yes
	Volume	Yes
	Brightness	Yes
	Contrast	Yes
	Color	Yes
	Tint	Yes
	Sharpness	Yes
	Bass	Yes
	Treble	Yes
	Balance	Yes
	Picture Scroll	Yes
	Back Lighting	Yes
	H Position	Yes
	V Position	Yes
	Red	Yes
	Green	Yes
	Blue	Yes
	Stereo, SAP, Mono	Yes
	CH / AV(Line) / DVD / PC	Yes
	Color Stream HD (Component)	Yes
	HDMI	Yes
	Channel (TV/Cable)	Yes
	CH Label	Yes
	Video Label	Yes
	Clock	Yes
	Game Timer	Yes
	Front Panel Lock	Yes
	On Timer	Yes
	Sleep Timer	Yes
	Reset	Yes
	Sound Mute	Yes
	V-chip Rating	Yes
	NOT AVAILABLE	Yes
	Picture Size	Yes

# GENERAL SPECIFICATIONS

G-10	On Screen Display	Menu (DVD)		Yes
		Menu Type		Character
		Language		Yes
		Menu		Yes
		Subtitle		Yes
		Audio		Yes
		Picture		Yes
		TV Screen Size(4:3, 16:9)		Yes
		OSD Display On/Off		Yes
		JPEG Interval		Yes
		Select Files		Yes
		Sound		Yes
		DRC (Dynamic Range Control)		Yes
		dts Decode		No
		Output(5.1ch/ 2ch)		No
		Surround On/Off		No
		Center On/Off		No
		Sub Woofer On/Off		No
		Parental		Yes
		Password Lock/ Un Lock		Yes
		Rating Level		Yes
		Other		Yes
		OSD Language(Set up Language)		Yes
		Output(RGB/Composite)		No
		Eject		Yes
		No disc		Yes
		Reading		Yes
		Play		Yes
		Still/Pause		Yes
		Stop		Yes
		Prohibit Mark		Yes
		Step		Yes
		Skip(>> )		Yes
		Skip( <<)		Yes
		Random		Yes (CD, VIDEO CD, MP3, WMA, JPEG )
		Repeat		Yes
		Slow+		Yes
		Slow-		Yes
		Search+		Yes
		Search-		Yes
		Jump		Yes
		Resume		Yes
		Title No.		Yes
		Chapter No.		Yes
		Track No.		Yes
		Time		Yes
		Subtitle No.		Yes
		Angle No.		Yes
		Vocal On/Off		Yes
		Audio No.		Yes
Audio Stereo L/R		Yes (Video CD)		
Zoom		Yes		
Marker No.		No		
Program Play Back		Yes (CD, VIDEO CD, MP3, WMA, JPEG )		
Surround On/Off		No		
Screen Saver		No		
MP3/WMA/JPEG		Yes		
Folder Name		Yes		
File Name		Yes		
File No		Yes		
Time		Yes (MP3, WMA Only)		
Track No		Yes		
G-11	OSD Language	(TV) (DVD)	English, French, Spanish English, French, Spanish	
G-12	Clock and Timer	Sleep Timer	Max Time Step	120 Min _ 10 Min _
		On Timer	Program	Yes
		Wake Up Timer		No
		Timer Back-up (at Power Off Mode)	more than	-- Min Sec

# GENERAL SPECIFICATIONS

G-13	Remote Control	Unit	RC-JX	
		Glow in Dark Remocon	Yes	
		Format	TOSHIBA / NEC	
		Custom Code	40-BF / 71-8E h	
		Power Source	Voltage(D.C) UM size x pcs	3V UM-4 x 2 pcs
		Total Keys		50 Keys
		Keys	Power	Yes
			TV(DVD)	Yes
			VCR	Yes
			CABLE	Yes
			1	Yes
			2	Yes
			3	Yes
			TV/DVD	Yes
			4	Yes
			5	Yes
			6	Yes
			100	Yes
			7	Yes
			8	Yes
			9	Yes
			0	Yes
			UP / CH +	Yes
			LEFT / VOL-	Yes
			ENTER	Yes
			RIGHT / VOL+	Yes
			DOWN / CH -	Yes
			EXIT / CANCEL	Yes
			INPUT	Yes
			PIC SIZE	Yes
			MUTE	Yes
			DISPLAY / RECALL	Yes
			SLEEP	Yes
			TV MENU/SETUP	Yes
			CODE	Yes
			SUBTITLE	Yes
			AUDIO SELECT	Yes
			DVD MENU	Yes
			TOP MENU	Yes
			PLAY MODE	Yes
			RETURN	Yes
			REPEAT A-B	Yes
			ANGLE	Yes
			JUMP	Yes
			ZOOM/QUICK VIEW	Yes
			<SKIP	Yes
			SKIP>	Yes
			<<REW / SEARCH	Yes
			PLAY	Yes
			FF / SEARCH>>	Yes
	TV/VCR	Yes		
	STOP	Yes		
	PAUSE/STEP	Yes		
	REC	Yes		
	< SLOW	Yes		
	SLOW >	Yes		

# GENERAL SPECIFICATIONS

<b>G-14</b>	<b>Features (TV)</b>	Auto Shut Off	Yes		
		Auto Search	No		
		Comb Filter	Yes		
			<u>3 -D</u>		
		Energy Star	Yes		
		Game Position	No		
		Power On Memory	Yes		
		Variable Audio Out	Yes		
		Mode (Picture Preference)	Yes		
		Color Temperature Control	Yes		
		Cable Clear	No		
		SAP	Yes		
		Stable Sound	Yes		
		Virtual Dolby	Yes		
		SRS WOW(SRS 3D/Focus/Tru Bass)	Yes		
		CABLE	Yes		
		CH Program (Auto CH Memory)	Yes		
		Closed Caption	Yes		
		Picture Size	Yes		
		Picture Scroll	Yes		
		Cinema Mode	Yes		
		Aspect	Yes		
		On Timer	Yes		
		Sleep Timer	Yes		
		Favorite CH	No		
		CH Label	Yes		
		VIDEO Label	Yes		
		V-Chip	Yes		
			<u>USA Type</u>		
		CH Lock	Yes		
		Video Lock	Yes		
		Game Timer(Max Time:120Min)	Yes		
		Panel Lock	Yes		
		Direct Input Selection	Yes		
		PC Monitor Input	Yes		
		Available Scan Rates (Component/HDMI)	480i/480p/720p/1080i		
		Auto Setup(Language/CH Program)	Yes		
		Freeze frame	No		
		<b>Features (DVD)</b>	Parental Lock (DVD Only)	Yes	
			Tray Lock	Yes	
			Video CD Playback	Yes	
			SVCD Playback	No	
				Overlay Graphics And Text	No
				Command List	No
				Entry Point Jump	No
			MP3 Playback	Yes	
			JPEG	Yes	
			WMA	Yes	
			Digital Out (Dolby Digital)	Yes	
				(MPEG)	Yes
				(PCM)	Yes
				(DTS)	Yes
			Down Mix Out (Dolby Digital)	Yes	
	(DTS)		No		
Screen Saver	No				
Audio DAC	192kHz / 24bit				



## GENERAL SPECIFICATIONS

<b>G-15</b>	<b>Accessories</b>	Owner's Manual	Language w/Guarantee Card	English / French 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		
AV Cord (2Pin-1Pin)		No				
Registration Card (NDL Card)		No				
300,75ohm to 75ohm Antenna Adapter		Yes				
Sheet Information (Return)		No				
Sheet Information (HDMI)		Yes				
<b>G-16</b>	<b>Interface</b>	Switch	Top	Power (Tact)	Yes	
				Channel Up/Menu Up	Yes	
				Channel Down/Menu Down	Yes	
				Volume Up/Menu >	Yes	
				Volume Down/Menu <	Yes	
				Menu	Yes	
				Play	Yes	
				Eject	Yes	
				Skip+, Search+	Yes	
				Skip-, Search-	Yes	
				Still/Pause	No	
				Stop	Yes	
				Main Power SW	No	
				Input Select	Yes	
				Rear	Main Power SW	No
			Indicator		Power	Yes (Red)
				Stand-by	No	
				On Timer	No	
		Terminals	Rear	Video Input 1	RCA x 1	
				Audio Input 1	RCA x 2(Stereo)	
				S - Input 1	Yes	
				Video Output	No	
				Audio Output	RCA x 2 (Variable)	
				Component Input(w/ Analog Audio L/R)	RCA x 5	
				HDMI Input(w/ Analog Audio L/R)	HDMI x 1(RCA x 2)	
				PC Monitor Input(w/ Analog Audio L/R)	Dsub15pin x 1(RCA x 2)	
				Digital Audio Output	Coaxial (DVD Only)	
				DC Jack (Center +)	No	
				VHF/UHF Antenna Input	F Type	
				AC Outlet	No	
				Side	Video Input 2	RCA x 1
					Audio Input 2	RCA x 2(Stereo)
	Other Terminal			Headphone		
<b>G-17</b>	<b>Set Size</b>	Approx. W x D x H (mm)	610 x 276 x 484			
		w/o Handle, Stand Approx. W x D x H (mm)	610 x 115.5 x 438.5			
<b>G-18</b>	<b>Weight</b>	Net (Approx.)	11.5kg (25.4 lbs)			
		Net w/o Handle, Stand (Approx.)	10.5kg (23.2 lbs)			
		Gross (Approx.)	14.5kg (32.0 lbs)			

## GENERAL SPECIFICATIONS

<b>G-19</b>	<b>Carton</b>	Master Carton	No
		Content	--- Sets
		Material	--- / ---
		Dimensions W x D x H(mm)	---
		Description of Origin	---
		Gift Box	Yes
		Material	Double/Brown
		W/Color Photo Label	No
		W/Handle	No
		Dimensions W x D x H(mm)	720 x 383 x 590
		Design	As Per Buyer 's
		Description of Origin	Yes
		Drop Test	1 Corner / 3 Edges / 6 Surfaces
		Height (cm)	62
Container Stuffing (40' container)	394 Sets		
<b>G-20</b>	<b>Material</b>	Cabinet Front	PS 94V0 DECABROM
		Rear	PS 94V0 DECABROM
		Jack Panel	--
		PCB Non-Halogen Demand	No
		Eyelet Demand	Yes
<b>G-21</b>	<b>Environment</b>	Pb Free Lead-free Solder	Yes
		Other	No
		Cd Free	No

# DISASSEMBLY INSTRUCTIONS

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

### 1-1: HANDLE/BACK COVER ASS'Y (Refer to Fig. 1-1)

1. Remove the 4 screws ①.
2. Remove the Handle in the direction of arrow (A).
3. Unlock the 6 supports ②.
4. Remove the Back Cover Ass'y in the direction of arrow (B).

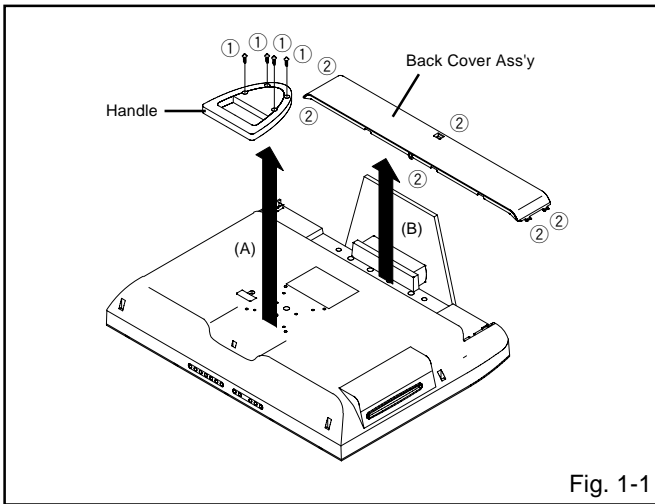


Fig. 1-1

### 1-2: HINGE ASS'Y (Refer to Fig. 1-2)

1. Remove the 4 screws ①.
2. Remove the Stand in the direction of arrow (A).
3. Remove the 8 screws ②.
4. Remove the Stand Angle in the direction of arrow (B).
5. Remove the 4 screws ③.
6. Remove the Hinge Ass'y in the direction of arrow (C).

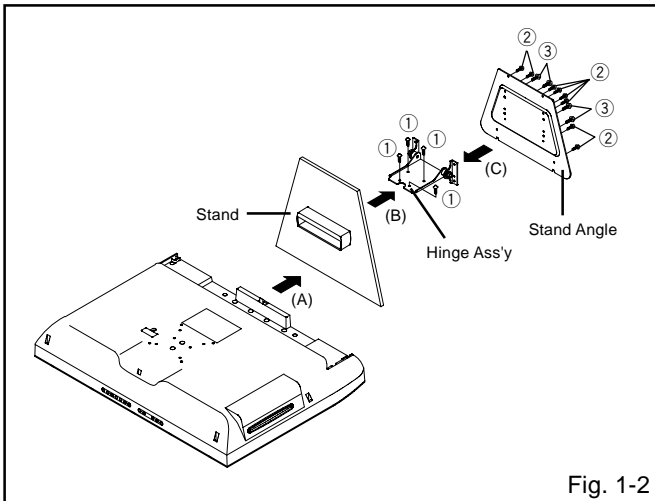


Fig. 1-2

### 1-3: BACK CABINET (Refer to Fig. 1-3)

1. Remove the 8 screws ①.
2. Remove the screw ②.
3. Remove the screw ③.
4. Remove the Back Cabinet in the direction of arrow.

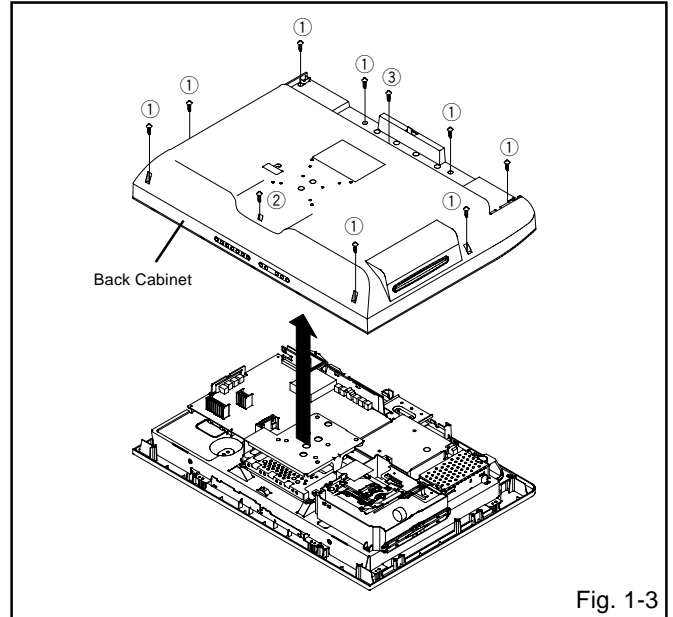


Fig. 1-3

### 1-4: HANDLE ANGLE (Refer to Fig. 1-4)

1. Remove the 3 screws ①.
2. Remove the Handle Angle in the direction of arrow.

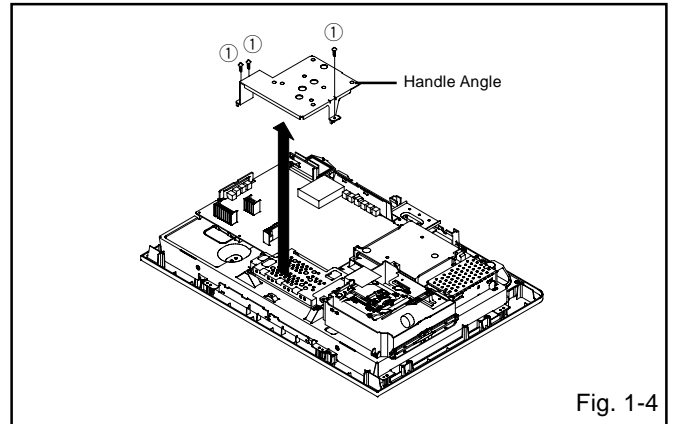


Fig. 1-4

## DISASSEMBLY INSTRUCTIONS

### 1-5: DVD DECK (Refer to Fig. 1-5)

1. Make the short circuit on the position as shown Fig. 1-5 using a soldering. If you remove the DVD Deck with no soldering, the Laser may be damaged.
2. Disconnect the following connectors: (CP2301, CP2302 and CP2601).
3. Remove the 4 screws ①.
4. Remove the DVD Deck in the direction of arrow.

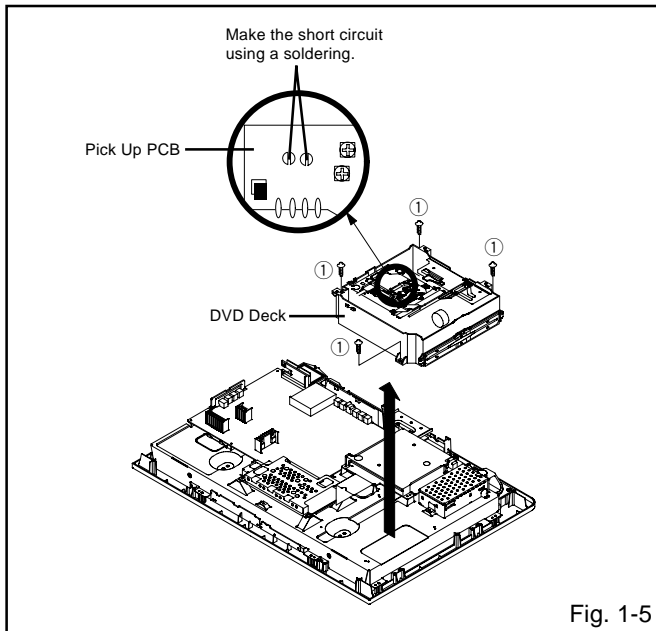


Fig. 1-5

### NOTE

1. Use the Pb Free solder and the exclusive soldering iron.
2. Manual soldering conditions
  - Soldering temperature:  $320 \pm 20^{\circ}\text{C}$
  - Soldering time: Within 3 seconds
  - Soldering combination: 45/55 Sn/Pb
3. When Soldering/Removing of solder, use the drawing equipment over the Pick Up Unit to prevent the Flux smoke from it.
4. When the installation of the DVD Deck, remove all the soldering on the short circuit position after the connection of Pick Up PCB and DVD PCB connector.

### 1-6: DVD PCB (Refer to Fig. 1-6)

1. Disconnect the following connectors: (CP501 and CP752).
2. Remove the screw ①.
3. Remove the Shield FFC.
4. Remove the 3 screws ②.
5. Remove the DVD PCB and Shield DVD in the direction of arrow.

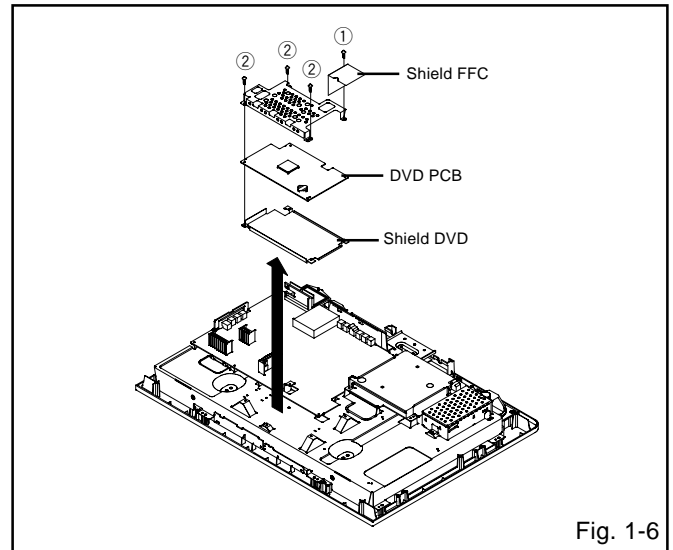


Fig. 1-6

### 1-7: HD-MI PCB (Refer to Fig. 1-7)

1. Disconnect the following connector: (CP803).
2. Remove the screw ①.
3. Remove the 3 screws ②.
4. Remove the Jack Plate 2 in the direction of arrow (A).
5. Remove the 3 screws ③.
6. Remove the HD-MI PCB in the direction of arrow (B).

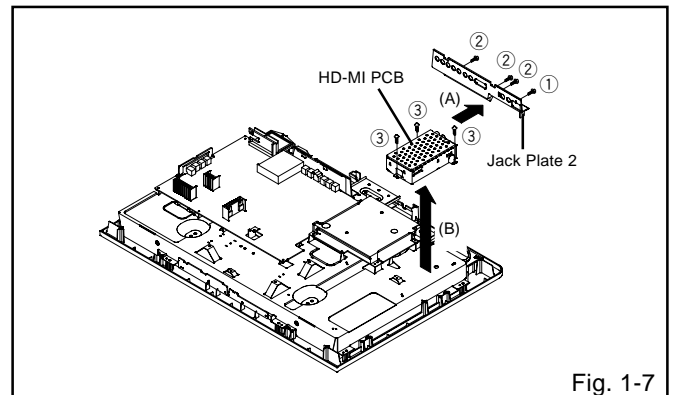


Fig. 1-7

### 1-8: LCD PCB (Refer to Fig. 1-8)

1. Disconnect the following connectors: (CP107, CP3200, CP4201 and CP4202).
2. Remove the 5 screws ①.
3. Remove the Shield LCD and LCD PCB in the direction of arrow.

# DISASSEMBLY INSTRUCTIONS

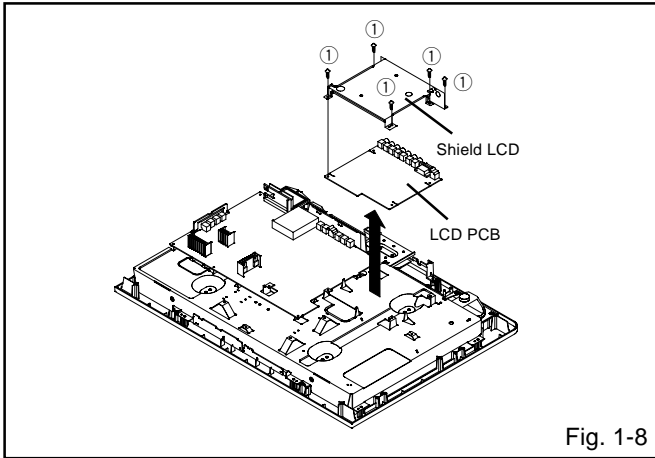


Fig. 1-8

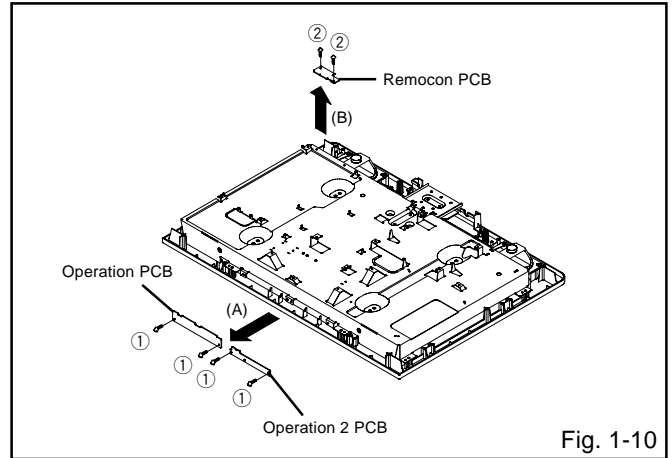


Fig. 1-10

## 1-9: AV PCB (Refer to Fig. 1-9)

1. Disconnect the following connectors:  
(CP101, CP104 CP301, CP3801 and CP3802).
2. Remove the 2 screws ①.
3. Remove the AC Cord Holder in the direction of arrow (A).
4. Remove the screw ②.
5. Remove the 3 screws ③.
6. Remove the Jack Plate 1 and Jack Shield 1 in the direction of arrow (B).
7. Remove the screw ④.
8. Remove the Side Jack Plate and Side Jack Shield in the direction of arrow (C).
9. Remove the 5 screws ⑤.
10. Remove the AV PCB in the direction of arrow (D).

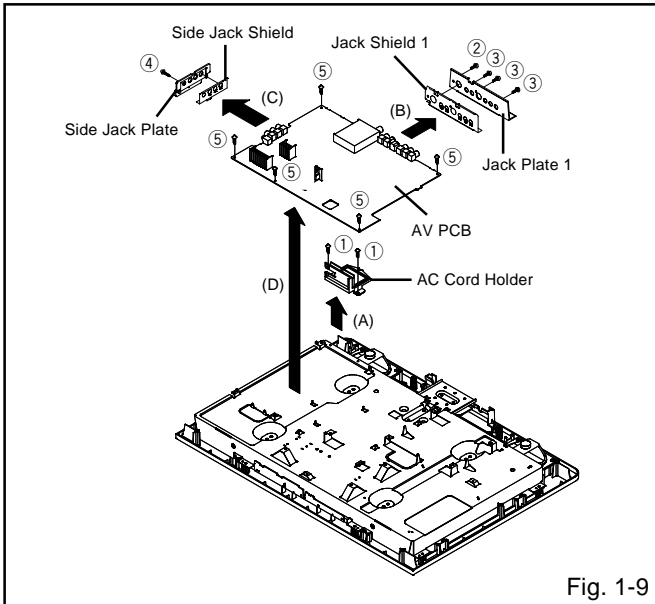


Fig. 1-9

## 1-11: LCD COVER/LCD PANEL (Refer to Fig. 1-11)

1. Remove the 2 screws ①.
2. Remove the 2 screws ②.
3. Remove the Angle Hinge in the direction of arrow (A).
4. Remove the 4 screws ③.
5. Remove the 8 screws ④.
6. Remove the Shield Remocon and LCD Cover in the direction of arrow (B).
7. Remove the LCD Panel in the direction of arrow (C).

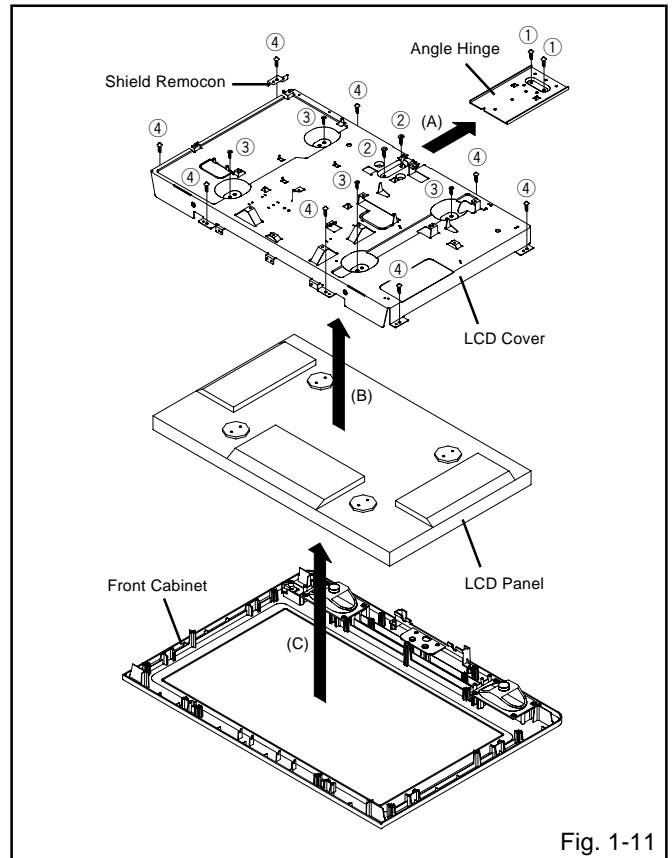


Fig. 1-11

## 1-10: OPERATION PCB/OPERATION 2 PCB/REMOCON PCB (Refer to Fig. 1-10)

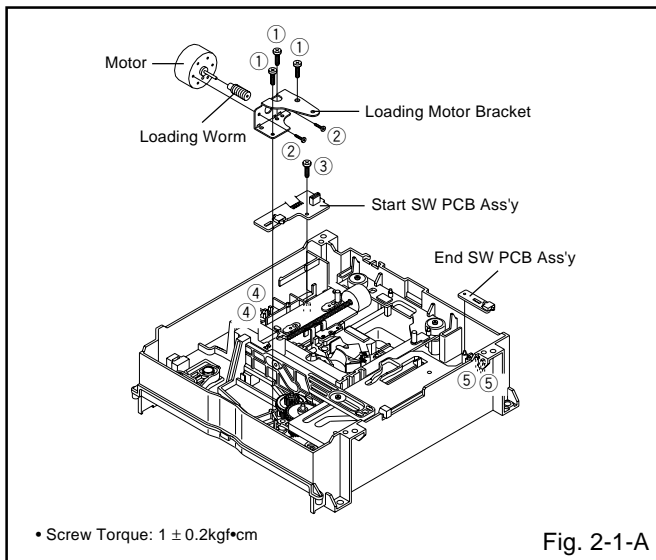
1. Remove the 4 screws ①.
2. Remove the Operation PCB and Operation 2 PCB in the direction of arrow (A).
3. Remove the 2 screws ②.
4. Remove the Remocon PCB in the direction of arrow (B).

# DISASSEMBLY INSTRUCTIONS

## 2. REMOVAL OF DVD DECK PARTS

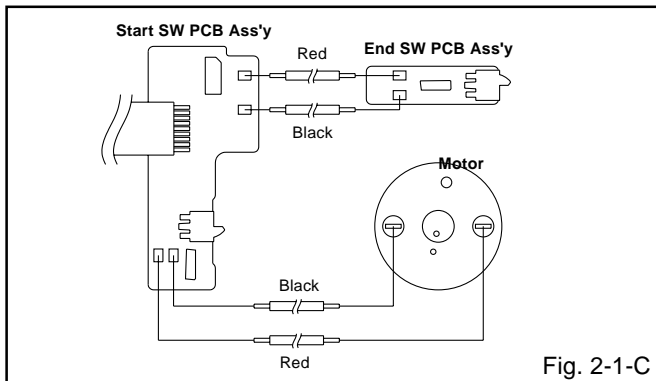
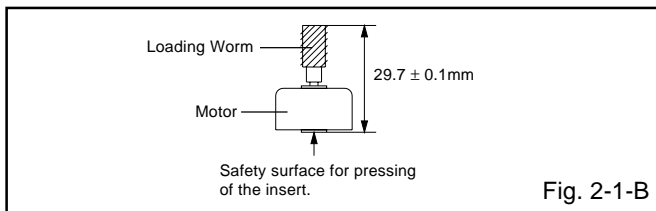
### 2-1: LOADING MOTOR ASS'Y/START SW PCB ASS'Y/ END SW PCB ASS'Y (Refer to Fig. 2-1-A)

1. Remove the 3 screws ①.
2. Remove the Loading Motor Ass'y.
3. Remove the 2 screws ②.
4. Remove the Motor and Loading Worm.
5. Disconnect the following connector: (CP2).
6. Remove the screw ③.
7. Unlock the 2 supports ④ and remove the Start SW PCB Ass'y.
8. Unlock the 2 supports ⑤ and remove the End SW PCB Ass'y.



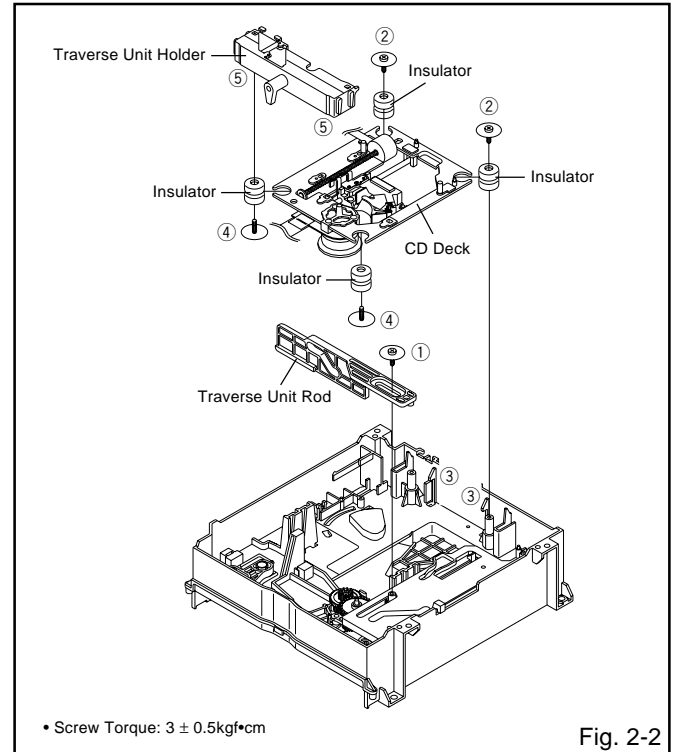
#### NOTE

1. In case of the Loading Worm installation, check if the value of the Fig. 2-1-B is correct.
2. When installing the wire, install it correctly as Fig. 2-1-B.



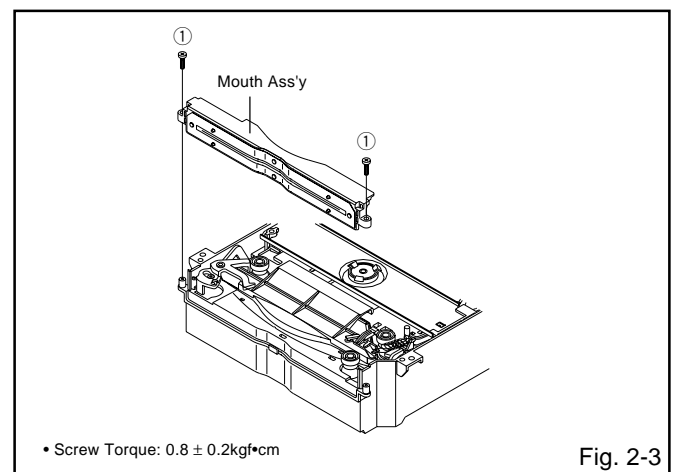
### 2-2: TRAVERSE UNIT ROD/TRAVERSE UNIT HOLDER/ CD DECK/INSULATOR (Refer to Fig. 2-2)

1. Remove the screw ①.
2. Remove the Traverse Unit Rod.
3. Remove the 2 screws ③.
4. Unlock the 2 supports ④ and remove the CD Deck Block.
5. Remove the 2 screws ⑤.
6. Unlock the 2 supports ⑥ and remove the Traverse Unit Holder.
7. Remove the 4 Insulators.



### 2-3: MOUTH ASS'Y (Refer to Fig. 2-3)

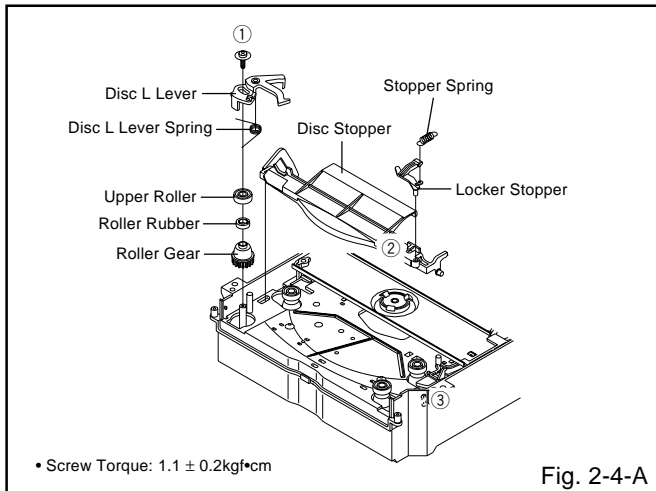
1. Remove the 2 screws ①.
2. Remove the Mouth Ass'y.



# DISASSEMBLY INSTRUCTIONS

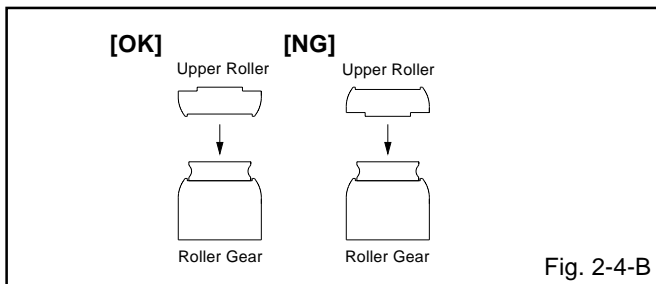
## 2-4: DISC L LEVER/DISC STOPPER/LOCKER STOPPER/ROLLER GEAR (Refer to Fig. 2-4-A)

1. Remove the screw ①.
2. Remove the Disc L Lever and Disc L Lever Spring.
3. Remove the Stopper Spring.
4. Unlock the support ② and remove the Locker Stopper.
5. Unlock the support ③ and remove the Disc Stopper.
6. Remove the Upper Roller, Roller Rubber and Roller Gear.



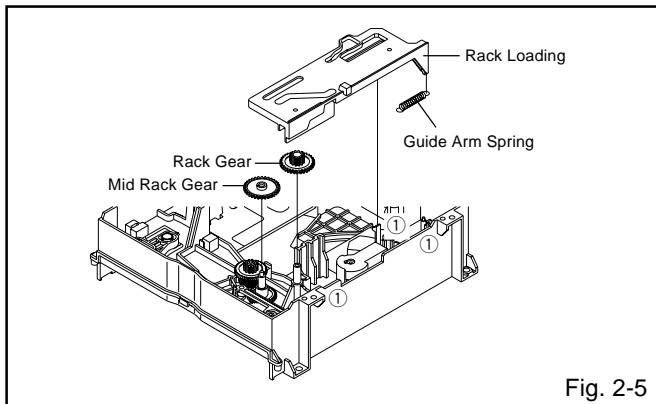
### NOTE

1. In case of the Upper Roller installation, install correctly as Fig. 2-4-B.



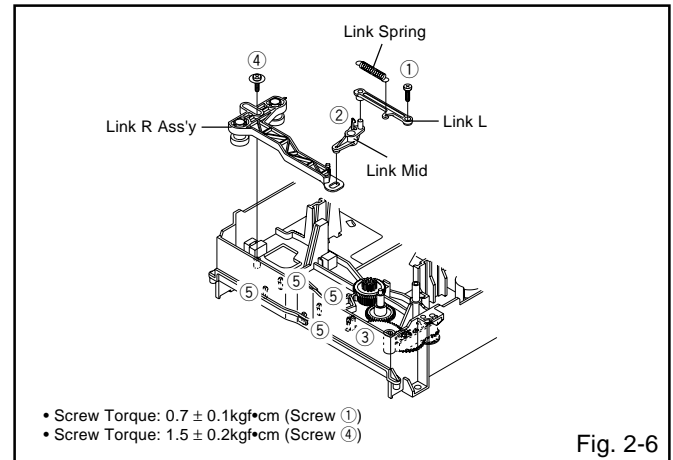
## 2-5: RACK LOADING/RACK GEAR/GUIDE ARM SPRING/MID RACK GEAR (Refer to Fig. 2-5)

1. Remove the Guide Arm Spring.
2. Unlock the 3 supports ① and remove the Rack Loading.
3. Remove the Rack Gear and Mid Rack Gear.



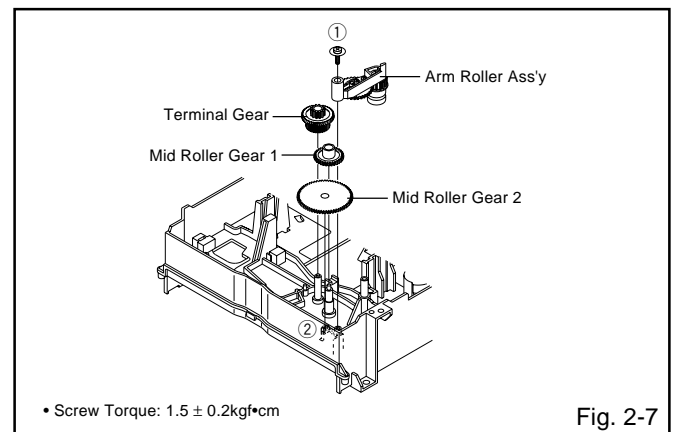
## 2-6: LINK R ASS'Y/LINK L/LINK MID/LINK SPRING (Refer to Fig. 2-6)

1. Remove the screw ①.
2. Remove the Link Spring.
3. Unlock the support ② and remove the Link L.
4. Unlock the support ③ and remove the Link Mid.
5. Remove the screw ④.
6. Unlock the 4 supports ⑤ and remove the Link R Ass'y.



## 2-7: ARM ROLLER ASS'Y/MID ROLLER 1/2 GEAR/TERMINAL GEAR (Refer to Fig. 2-7)

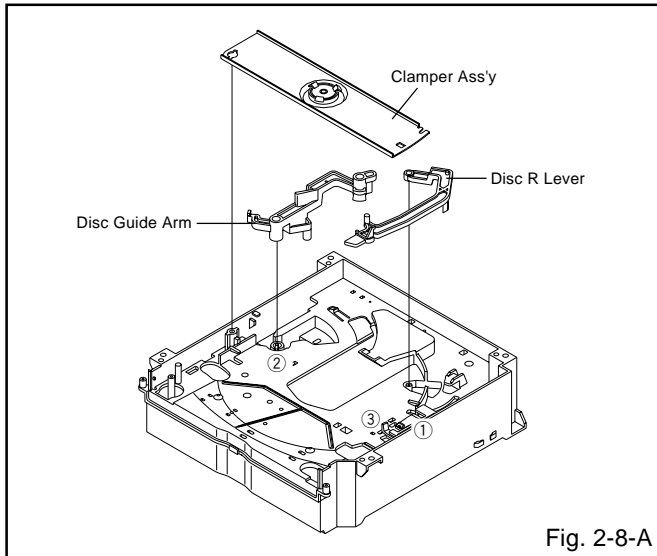
1. Remove the screw ①.
2. Remove the Arm Roller Ass'y.
3. Remove the Terminal Gear and Mid Roller Gear 1.
4. Unlock the support ② and remove the Mid Roller Gear 2.



# DISASSEMBLY INSTRUCTIONS

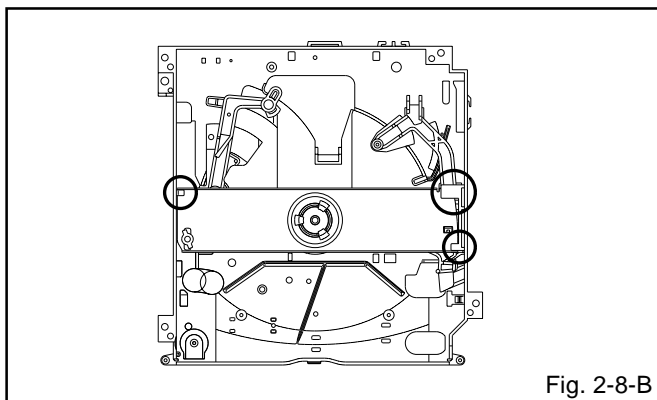
## 2-8: CLAMPER ASS'Y/DISC GUIDE ARM/DISC R LEVER (Refer to Fig. 2-8-A)

1. Unlock the support ① and remove the Clamper Ass'y.
2. Unlock the support ② and remove the Disc Guide Arm.
3. Unlock the support ③ and remove the Disc R Lever.



### NOTE

1. When installing the Clamper Ass'y, check if the Clamper Ass'y is locked correctly as Fig. 2-8-B.





# DISASSEMBLY INSTRUCTIONS

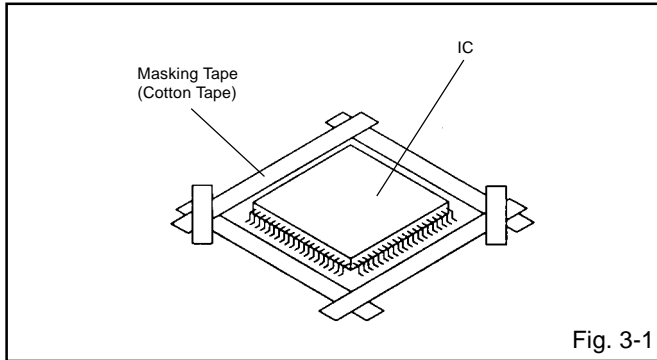
## 3. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

### REMOVAL

1. Put the Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. (Refer to Fig. 3-1.)

#### NOTE

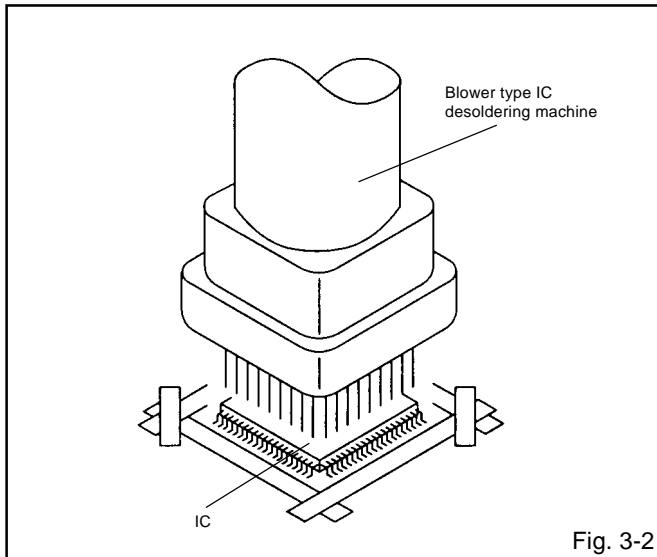
Masking is carried out on all the parts located within 10 mm distance from IC leads.



2. Heat the IC leads using a blower type IC desoldering machine. (Refer to Fig. 3-2.)

#### NOTE

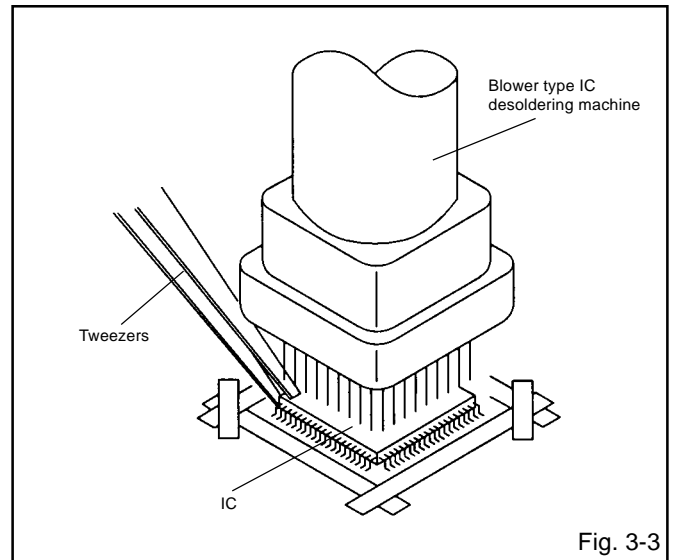
Do not add the rotating and the back and forth directions force on the IC, until IC can move back and forth easily after desoldering the IC leads completely.



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

#### NOTE

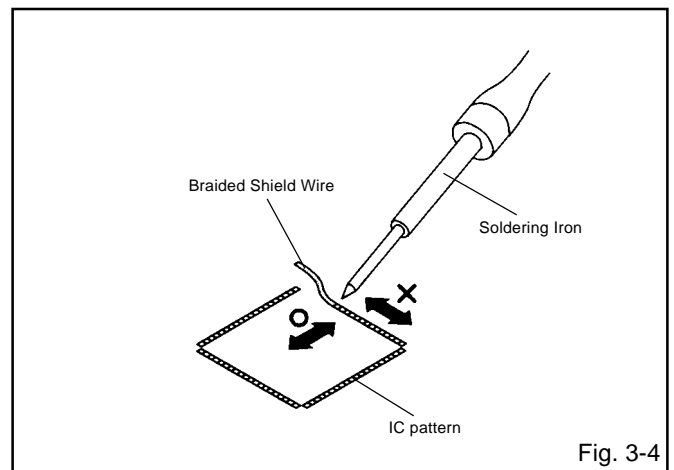
Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.



4. Peel off the Masking Tape.
5. Absorb the solder left on the pattern using the Braided Shield Wire. (Refer to Fig. 3-4.)

#### NOTE

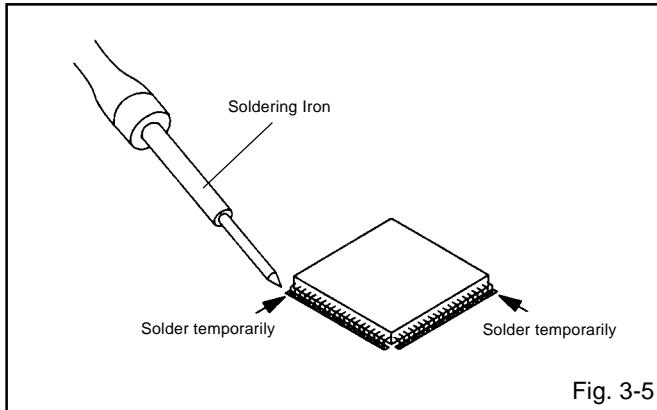
Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.



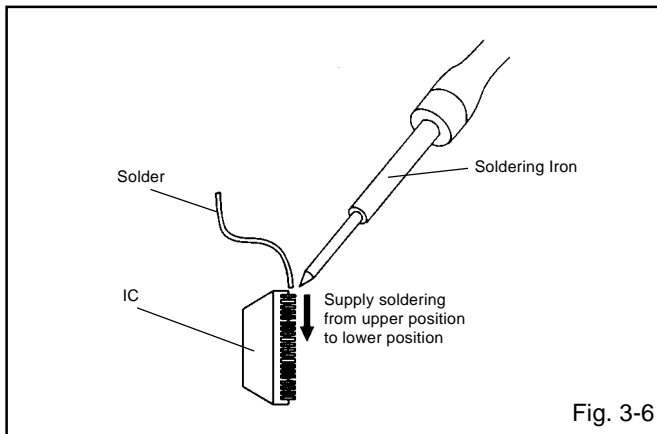
# DISASSEMBLY INSTRUCTIONS

## 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. 3-5.)



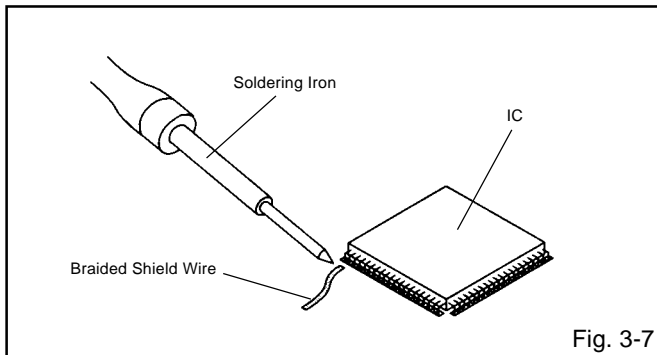
2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. (Refer to Fig. 3-6.)



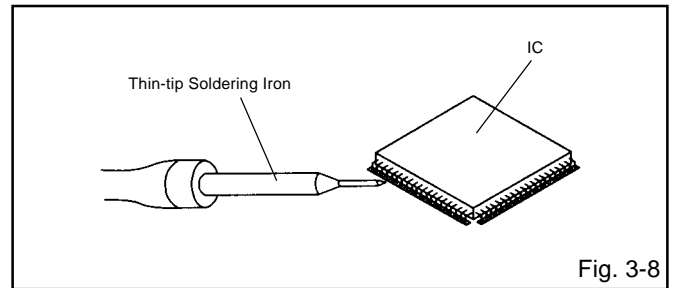
3. Absorb the solder left on the lead using the Braided Shield Wire. (Refer to Fig. 3-7.)

### 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. 3-8.)



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, be always sure to replace the IC in this case.

# SERVICE MODE LIST

This unit 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 a standard time (second).

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 the factory on. NOTE: If you set a 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.	POWER ON total hours are displayed on the screen. Refer to the "CONFIRMATION OF HOURS USED"  Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
ALL mode	VOL. DOWN (Minimum)	9	2 sec.	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).
DVD mode (No disc)	STOP	7	2 sec.	Releasing of PARENTAL LOCK. Refer to the "PARENTAL CONTROL - RATING LEVEL". NOTE: The function will only work without the setting of DVD disc at DVD mode.
DVD mode (Stop)	STOP	9	2 sec.	Tray cannot be opened. Refer to the "TRAY LOCK". NOTE: No indications on the screen when the Tray Lock is setting.

## CONFIRMATION OF HOURS USED

POWER ON total hours 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".**

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.
4. After the confirmation of using hours, turn off the power.

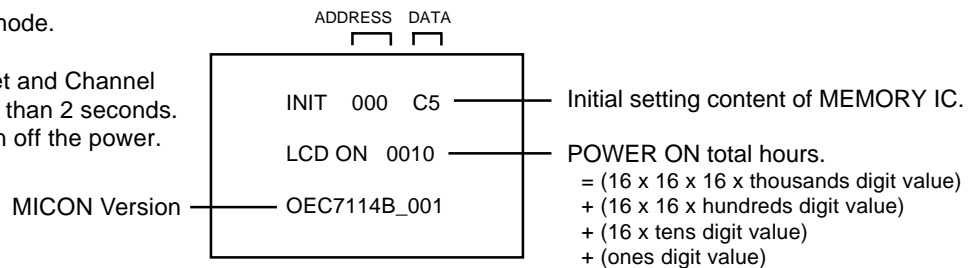
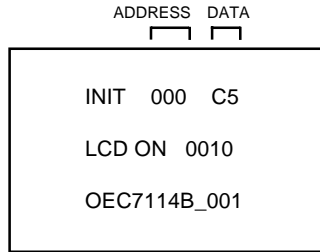


FIG. 1

## WHEN REPLACING EEPROM (MEMORY) IC

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 TABLE 1 and 2.

### Main Micon side EEPROM (IC199) initial setting



**FIG. 1**

\*1

INI	USA	CANADA
000	C5	45

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
000	*1	A2	01	80	A3	10	86	6C	C2	C1	B3	03	38	36	03	35
010	01	05	1F	24	40	45	5D	62	45	4A	18	20	05	0A	00	00
020	8F	00	00	00	00	00	00	00	00	19	00	5A	98	33	04	76
030	77	0F	07	23	1F	07	00	22	46	81	01	07	04	40	40	40
040	00	C0	40	00	12	2A	2A	00	13	00	00	50	70	72	99	59
050	68	99	59	00	73	14	1C	2C	24	16	00	00	00	00	00	EC
060	E6	E6	EB	F2	15	F5	08	0D	07	07	73	01	45	80	23	00
070	F1	00	40	20	5E	70	40	80	11	22	DD	00	00	00	00	19
080	FE	02	12	22	23	00	0D	00	00	00	00	00	00	00	00	00
090	00	00	00	00	00	00	00	00	00	00	00	23	27	2A	2D	30
0A0	33	36	39	3C	3F	42	45	48	4B	4E	51	53	55	57	58	59
0B0	5A	5B	5C	5D	5E	5F	61	63	65	67	69	6A	6B	6C	6D	6E
0C0	6F	70	71	71	72	72	73	73	74	74	75	75	75	75	76	76
0D0	76	76	77	77	77	77	78	78	78	78	79	42	00	00	00	EF
0E0	06	04	FB	F1	F4	F5	F7	3C	4F	02	18	24	3F	49	00	3F
0F0	54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
100	DC	F1	3C	22	22	DA	71	69	33	00	0E	38	22	22	DA	71
110	69	33	33	44	33	77	59	99	59	01	01	8C	04	03	05	81
120	02	81	02	81	02	00	0B	01	01	8C	04	03	05	D0	81	02
130	81	02	81	02	00	0B	05	35	90	08	39	0E	14	44	80	80
140	80	6B	3F	68	36	62	B5	20	06	00	25	FC	00	35	90	08
150	D0	23	06	20	80	80	80	6B	3F	68	36	62	B5	20	01	00
160	25	FC	00	67	10	A0	C0	03	25	36	80	80	80	6B	3F	68
170	36	62	B5	20	06	0A	00	FC	00	89	70	98	B5	03	05	94
180	80	80	80	6B	3F	68	36	62	B5	20	06	0A	00	FC	00	---

**Table 1**

## WHEN REPLACING EEPROM (MEMORY) IC

1. Turn on the POWER, and set to the TV mode.
2. Enter DATA SET mode by setting 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 1.
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 7 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.

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

10. Turn on the POWER, and set to the TV mode.
11. 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.

### Sub Micon side EEPROM (IC104) initial setting

	ADDRESS	DATA
INIT	00	18
SUM	1221	
ROM	0000	
OE6081B	0100	

FIG. 2

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
00	18	11	0A	10	0A	00	11	00	00	04	FA	00	00	FA	00	00
10	00	F9	00	00	F9	00	00	F9	00	00	F9	00	00	00	C0	0F
20	FF	00	F0	0F	EE	00	F7	FF	0E	AA	CC	CA	80	00	00	00
30	00	00	00	07	8C	8F	00	00	00	07	8C	8F	00	00	00	09
40	8C	8F	00	00	00	00	00	00	00	00	00	00	00	00	00	00

Table 2

1. Turn on the POWER, and set to the TV mode.
2. Enter DATA SET mode by setting 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 1.
4. Again, 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.
5. 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.
6. Press RIGHT/LEFT button to select DATA. When DATA is selected, it will "blink".
7. Again, step through the DATA using UP/DOWN button until required DATA value has been selected.
8. Pressing RIGHT/LEFT button will take you back to ADDRESS for further selection if necessary.
9. Repeat steps 5 to 8 until all data has been checked.
10. 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.

11. Turn on the POWER, and set to the TV mode.
12. Press both VOL. DOWN button on the set and Channel button **(1)** on the remote control for more than 2 seconds.
13. After the finishing of the initializing of shipping, the unit will turn off automatically.  
The unit will now have the correct DATA for the new MEMORY IC.

# ELECTRICAL ADJUSTMENTS

## 1. BEFORE MAKING ELECTRICAL ADJUSTMENTS

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

Prepare the following measurement tools for electrical adjustments.

1. Oscilloscope
2. AC Voltmeter
3. Pattern Generator
4. Multi-Sound Signal Generator

### 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 second to appear the adjustment mode on the screen as shown in Fig. 1-1.

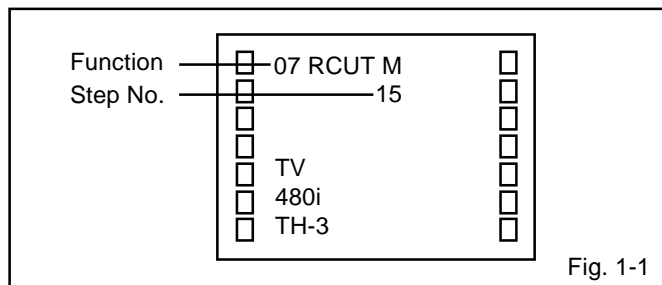


Fig. 1-1

3. Use the Channel UP/DOWN button or Channel button (1-0) on the remote control to select the options shown in Fig. 1-2.
4. And, press the VOL. DOWN button on the set and the Channel button (9) on the remote control for more than 2 second to appear the adjustment mode on the screen as shown in Fig. 1-3.
5. Use the Channel UP/DOWN button or Channel button (1-0) on the remote control to select the options shown in Fig. 1-4.
6. Press the MENU button on the remote control to end the adjustments.
7. To display the adjustment screen for AV, CS and HD-MI mode, press the INPUT button on the remote control. And, to display the adjustment screen for DVD mode, press the TV/DVD button on the remote control. Press the VOL.DOWN button on the set and the channel (9) on the remote control for more than 2 second.

NO.	FUNCTION	NO.	FUNCTION
07	RCUT M	36	GCUT W
08	GCUT M	37	BCUT W
09	BCUT M	38	DRI1 W
10	DRI1 M	39	DRI2 W
11	DRI2 M	40	MD6 W
12	MD6 M	41	DTHON W
13	DTHON M	42	DRREF W
14	DRREF M	43	RCUT2 W
15	RCUT2 M	44	GCUT2 W
16	GCUT2 M	45	BCUT2 W
17	BCUT2 M	46	GAINR W
18	GAINR M	47	GAING W
19	GAING M	48	GAINB W
20	GAINB M	49	BRI CEN
21	RCUT C	50	BRI MAX
22	GCUT C	51	BRI MIN
23	BCUT C	52	CON CEN
24	DRI1 C	53	CON MAX
25	DRI2 C	54	CON MIN
26	MD6 C	55	COL CEN
27	DTHON C	56	COL MAX
28	DRREF C	57	COL MIN
29	RCUT2 C	58	TIN CEN
30	GCUT2 C	59	TIN MAX
31	BCUT2 C	60	TIN MIN
32	GAINR C	61	SHA CEN
33	GAING C	62	SHA MAX
34	GAINB C	63	SHA MIN
35	RCUT W		

Fig. 1-2

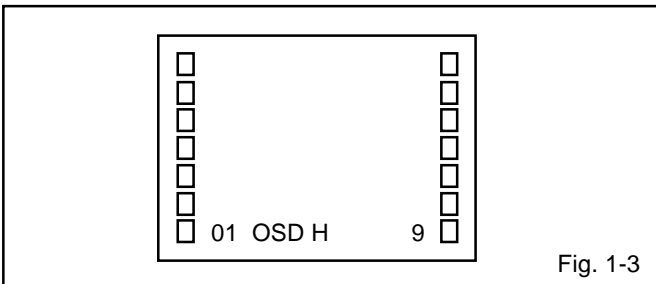


Fig. 1-3

NO.	FUNCTION
01	OSD
05	G OFFSET
15	BACK LIGHT CENT
16	BACK LIGHT MAX
17	BACK LIGHT MIN
58	TEST STEREO
59	TEST AUDIO

Fig. 1-4

# ELECTRICAL ADJUSTMENTS

## 2. BASIC ADJUSTMENTS

### 2-1: CONTRAST MAX

1. Activate the adjustment mode display of **Fig. 1-1** and press the channel button (**53**) on the remote control to select "CON MAX".
2. Check if the step No. CON MAX is "5A".
3. Receive a broadcast and check if the picture is normal.
4. Press the INPUT button on the remote control to set to the AV mode.  
Then perform the above adjustments 1~3.
5. Press the TV/DVD button on the remote control to set to the DVD mode.
6. Activate the adjustment mode display of **Fig. 1-1** and press the channel button (**53**) on the remote control to select "CON MAX".
7. Check if the step No. CON MAX is "56".
8. Receive a broadcast and check if the picture is normal.
9. Press the INPUT button on the remote control to set to the CS mode.
10. Activate the adjustment mode display of **Fig. 1-1** and press the channel button (**53**) on the remote control to select "CON MAX".
11. Check if the step No. CON MAX is "42".
12. Receive a broadcast and check if the picture is normal.
13. Press the INPUT button on the remote control to set to the HD-MI mode. Then perform the above adjustments 10~12.

### 2-2: WHITE BALANCE

1. Place the set with Aging Test for more than 5 minutes.
2. Receive the White 10% signal. (CS Input jack)
3. Using the remote control, set the brightness and contrast to normal position.
4. Activate the adjustment mode display of **Fig. 1-3** and press the channel button (**04**) on the remote control to select "R OFFSET".
5. Adjust the VOL UP/DOWN button on the remote control to adjust the "R OFFSET" and "B OFFSET".

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

Please check if the fixed values of each the adjustment items are set correctly referring below.

#### (SUB MICON)

#### (RF/AV/S-VIDEO/CS/HD-MI MODE)

NO.	FUNCTION	RF	AV	STEP NO.			HD-MI
				S-VIDEO	DVD	CS	
07	RCUT M	82	82	82	82	82	82
08	GCUT M	81	81	81	81	81	81
09	BCUT M	7D	7D	7D	7D	7D	7D
10	DRI1 M	3F	3F	3F	3F	3F	3F
11	DRI2 M	40	40	40	40	40	40
12	MD6 M	0	0	0	0	0	0
13	DTHON M	0	0	0	0	0	0
14	DRREF M	0	0	0	0	0	0
15	RCUT2 M	3F	3F	3F	3F	3F	3F
16	GCUT2 M	40	40	40	40	40	40
17	BCUT2 M	3F	3F	3F	3F	3F	3F
18	GAINR M	40	40	40	40	40	40

NO.	FUNCTION	RF	AV	STEP NO.			HD-MI
				S-VIDEO	DVD	CS	
19	GAING M	3E	3E	3E	3E	3E	3E
20	GAINB M	41	41	41	41	41	41
21	RCUT C	79	79	79	79	7D	7D
22	GCUT C	7B	7B	7B	7B	7B	7B
23	BCUT C	7F	7F	7F	7F	7F	7F
24	DRI1 C	3F	3F	3F	3F	3F	3F
25	DRI2 C	3E	3E	3E	3E	3E	3E
26	MD6 C	0	0	0	0	0	0
27	DTHON C	0	0	0	0	0	0
28	DRREF C	0	0	0	0	0	0
29	RCUT2 C	41	41	41	41	41	41
30	GCUT2 C	44	44	44	44	44	44
31	BCUT2 C	3E	3E	3E	3E	3E	3E
32	GAINR C	3D	3D	3D	3D	3D	3D
33	GAING C	3F	3F	3F	3F	3F	3F
34	GAINB C	49	49	49	49	49	49
35	RCUT W	92	92	92	92	92	92
36	GCUT W	8C	8C	8C	8C	8C	8C
37	BCUT W	8A	8A	8A	8A	8A	8A
38	DRI1 W	3F	3F	3F	3F	3F	3F
39	DRI2 W	40	40	40	40	40	40
40	MD6 W	0	0	0	0	0	0
41	DTHON W	0	0	0	0	0	0
42	DRREF W	0	0	0	0	0	0
43	RCUT2 W	31	31	31	31	31	31
44	GCUT2 W	38	38	38	38	38	38
45	BCUT2 W	36	36	36	36	36	36
46	GAINR W	45	45	45	45	45	45
47	GAING W	3A	3A	3A	3A	3A	3A
48	GAINB W	34	34	34	34	34	34
49	BRI CEN	C1	C1	C1	C1	B8	B8
50	BRI MAX	EA	EA	EA	EA	D0	D0
51	BRI MIN	A0	A0	A0	A0	80	80
52	CON CEN	30	30	30	30	28	28
53	CON MAX	5A	5A	5A	56	42	42
54	CON MIN	1B	1B	1B	1B	23	23
55	COL CEN	90	88	88	3B	A0	A0
56	COL MAX	A5	A5	A5	A5	E0	E0
57	COL MIN	00	00	00	00	00	00
58	TIN CEN	3D	3D	3D	3D	40	40
59	TIN MAX	7F	7F	7F	7F	7F	7F
60	TIN MIN	00	00	00	00	00	00
61	SHA CEN	15	15	15	15	15	15
62	SHA MAX	3F	3F	3F	3F	3F	3F
63	SHA MIN	00	00	00	00	00	00

#### (MAIN MICON)

#### (RF/AV/S-VIDEO/CS/HD-MI MODE)

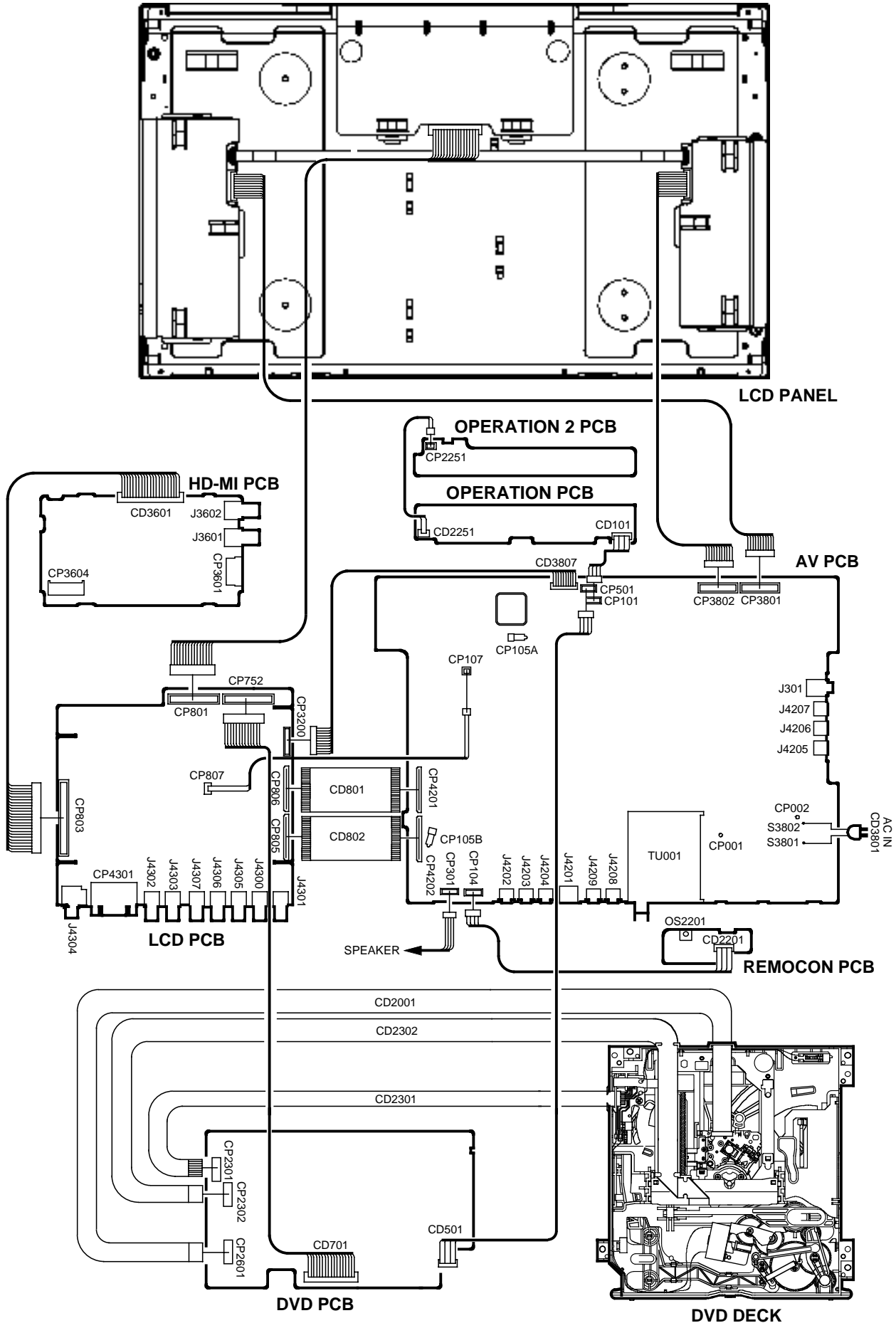
NO.	FUNCTION	RF	AV	STEP NO.			HD-MI
				S-VIDEO	DVD	CS	
01	OSD H	35	35	35	35	35 (480i)	35 (480i)
	OSD					2 (1080i,720p)	2 (1080i,720p)
05	G OFFSET	0	0	0	0	0	0
15	BACK LIGHT CENT	128	128	128	128	128	128
16	BACK LIGHT MAX	255	255	255	255	255	255
17	BACK LIGHT MIN	0	0	0	0	0	0
58	TEST STEREO	0	0	0	0	0	0
59	TEST AUDIO	0	0	0	0	0	0

#### (PC MODE)

FUNCTION	STEP NO.
BRIGHT MAX	150
BRIGHT CENTER	90
BRIGHT MIN	0
CONT MAX	150
CONT CENTER	75
CONT MIN	0
RED CENTER	128
GREEN CENTER	128
BLUE CENTER	128

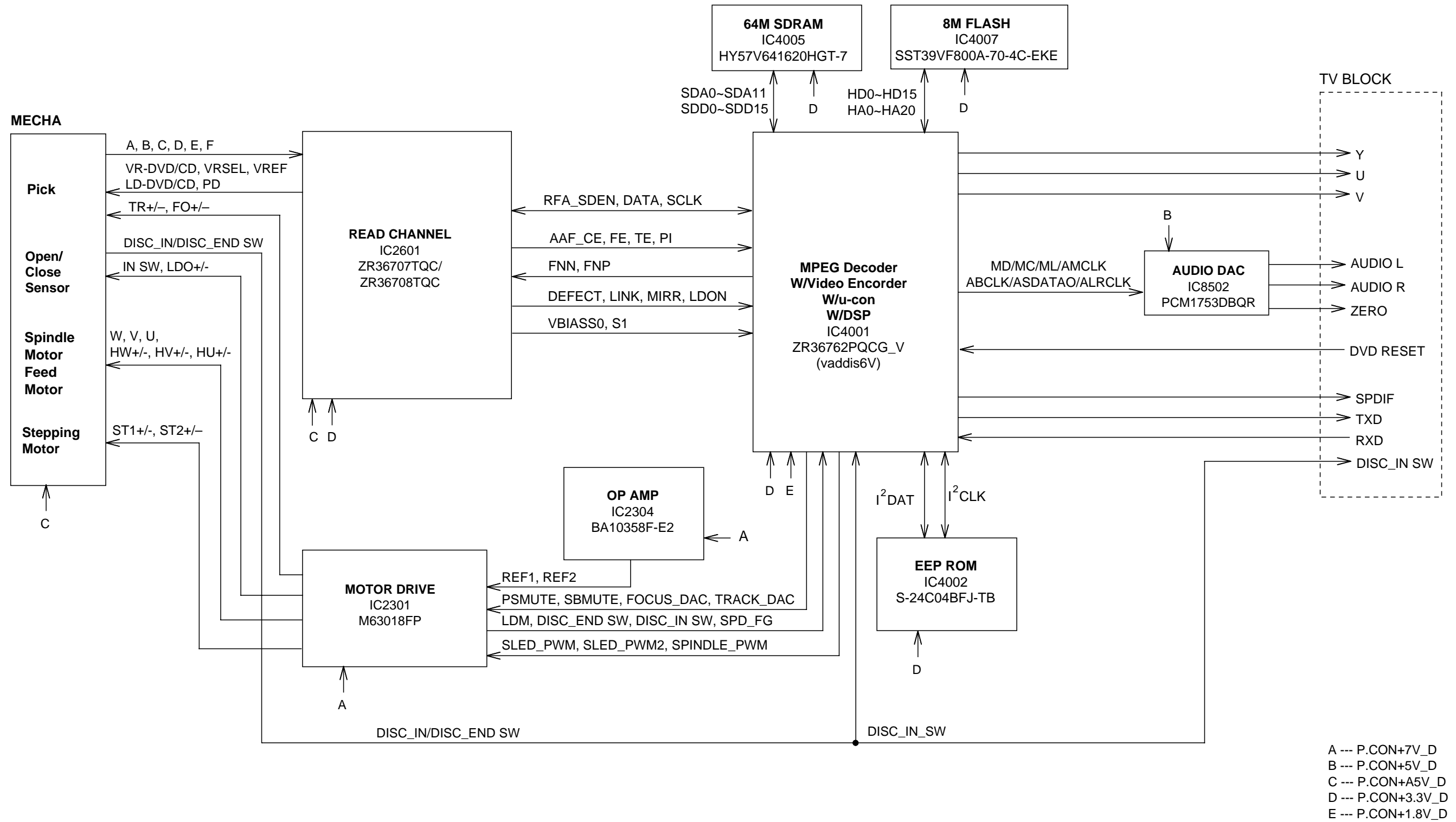
# ELECTRICAL ADJUSTMENTS

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

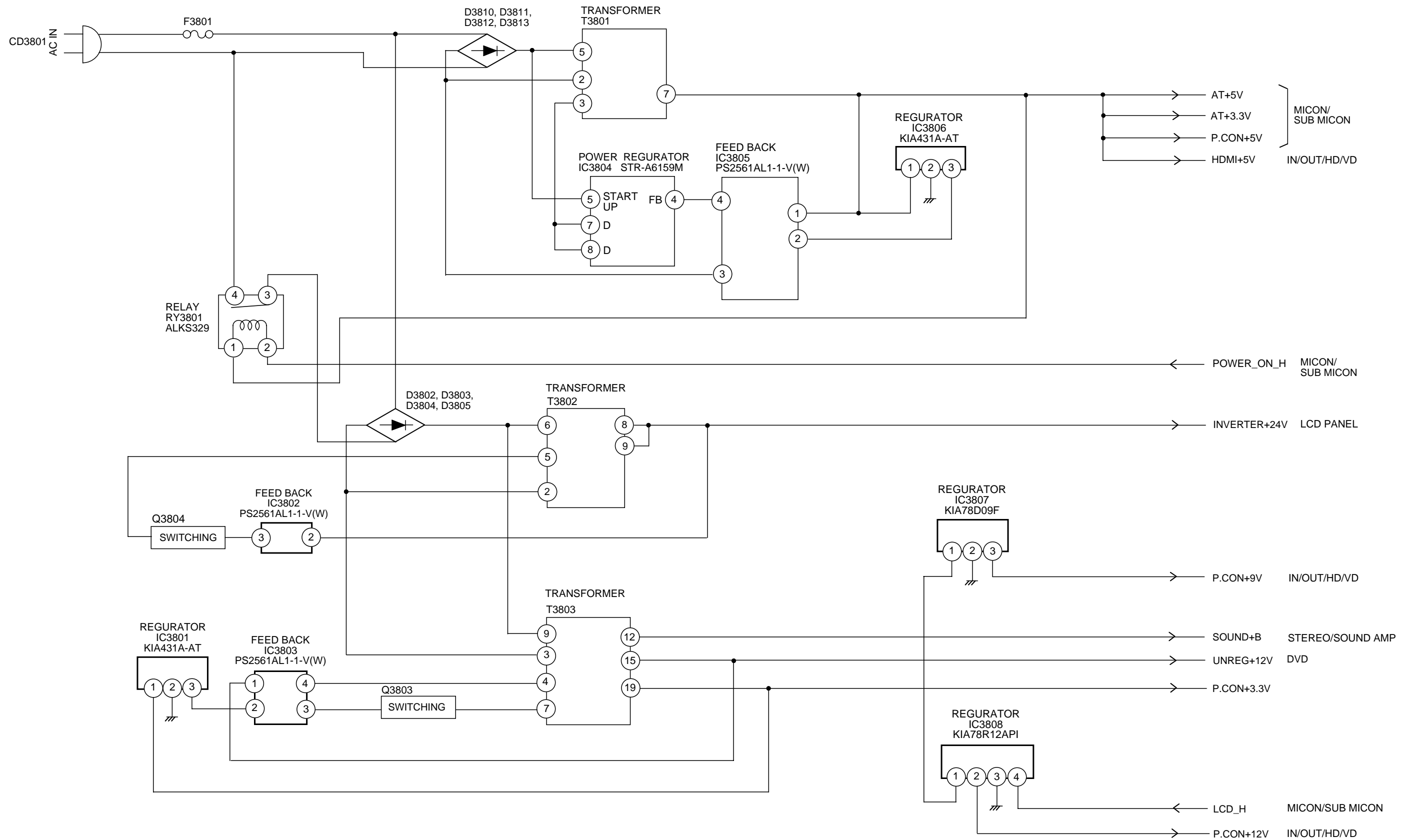




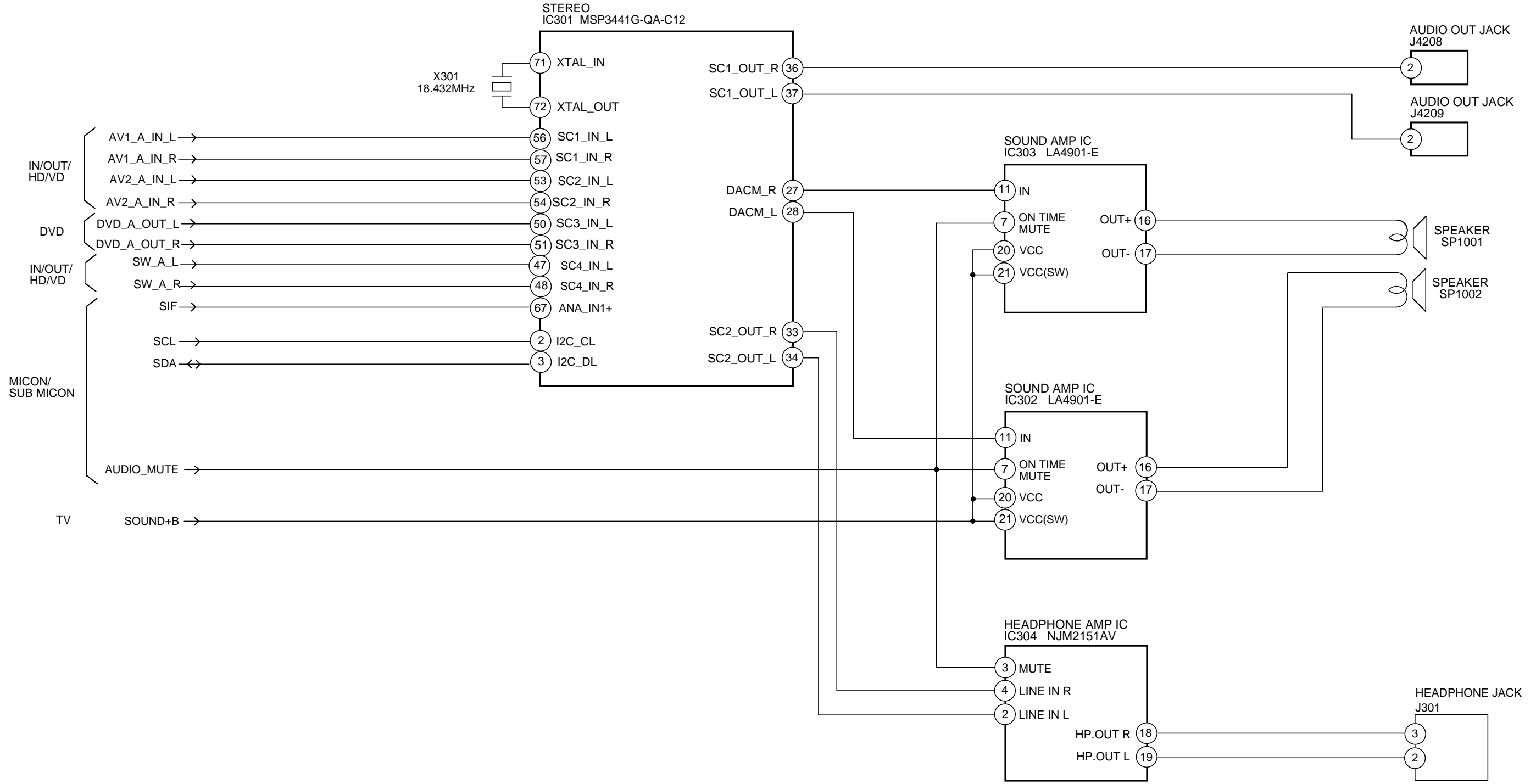
# DVD BLOCK DIAGRAM



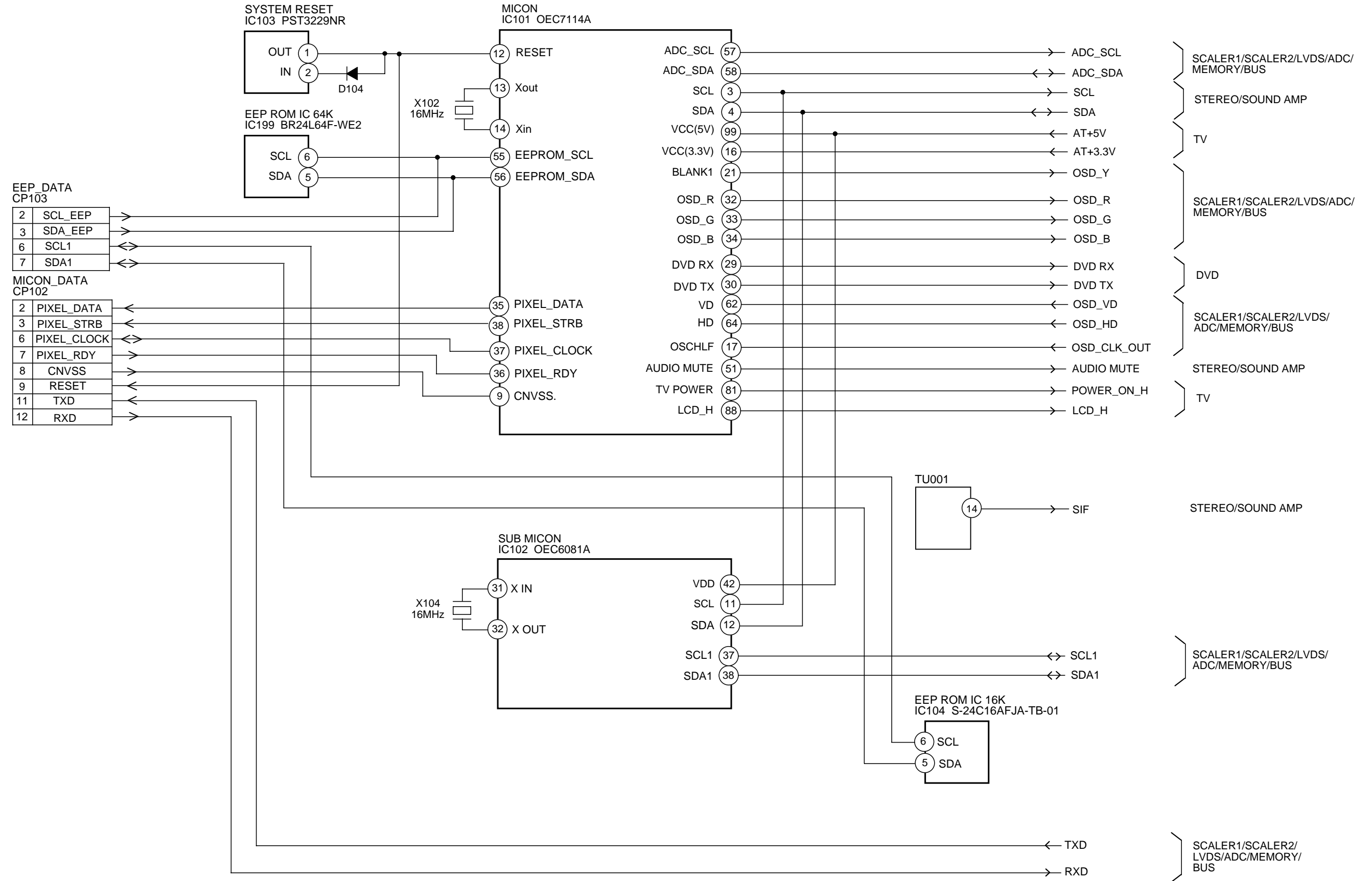
# TV BLOCK DIAGRAM



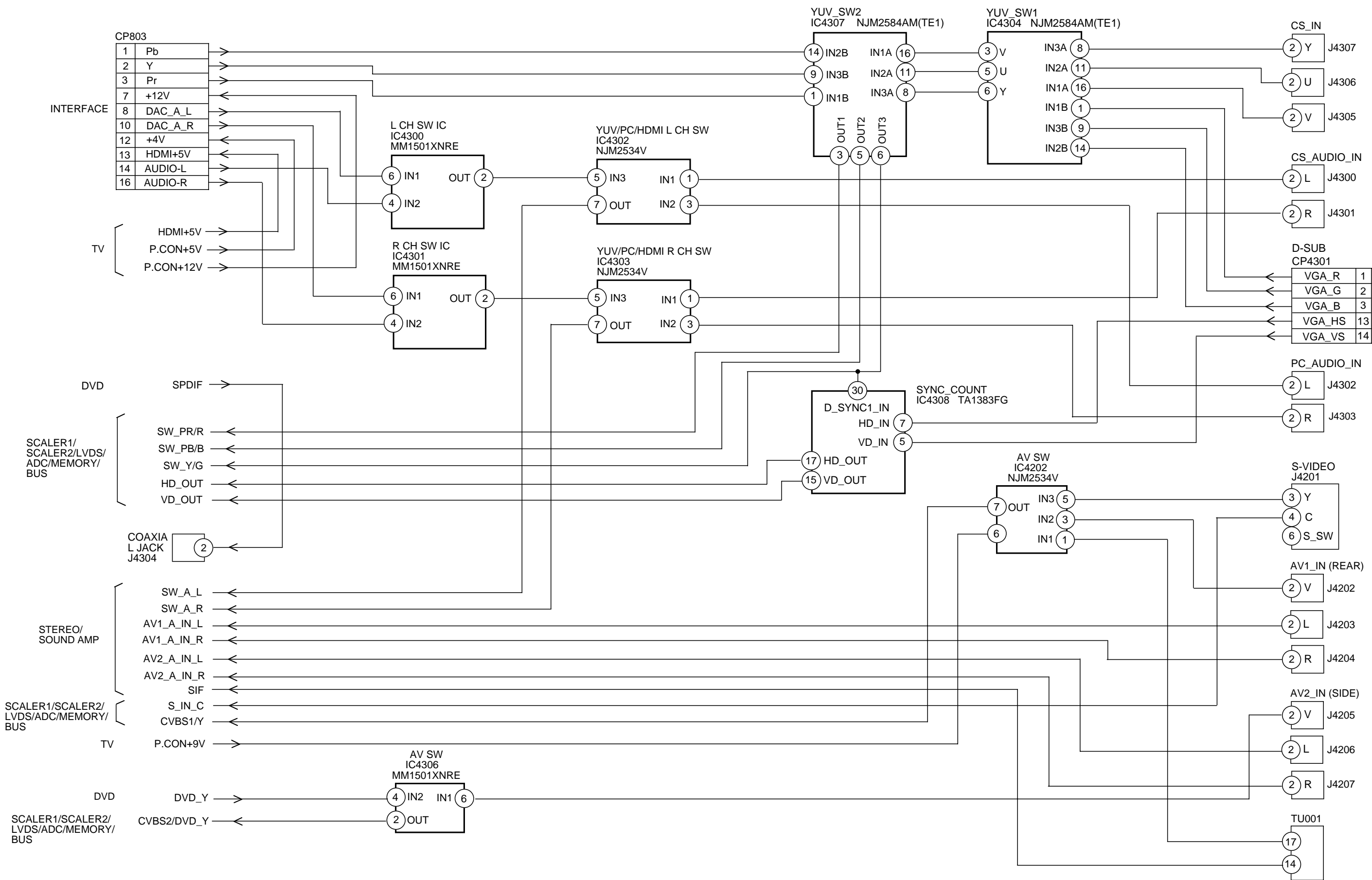
# STEREO/SOUND AMP BLOCK DIAGRAM



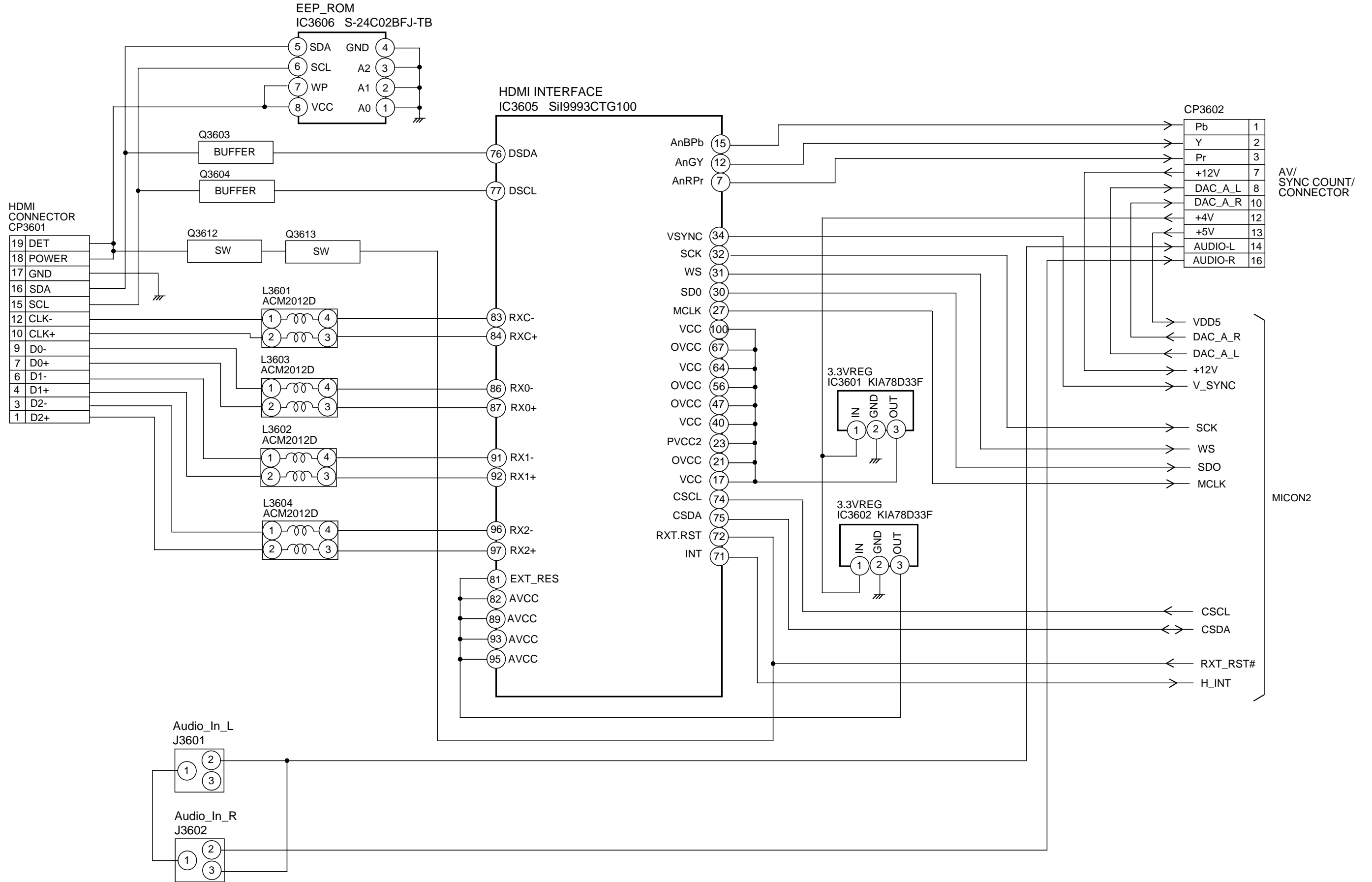
# MICON/SUB MICON BLOCK DIAGRAM



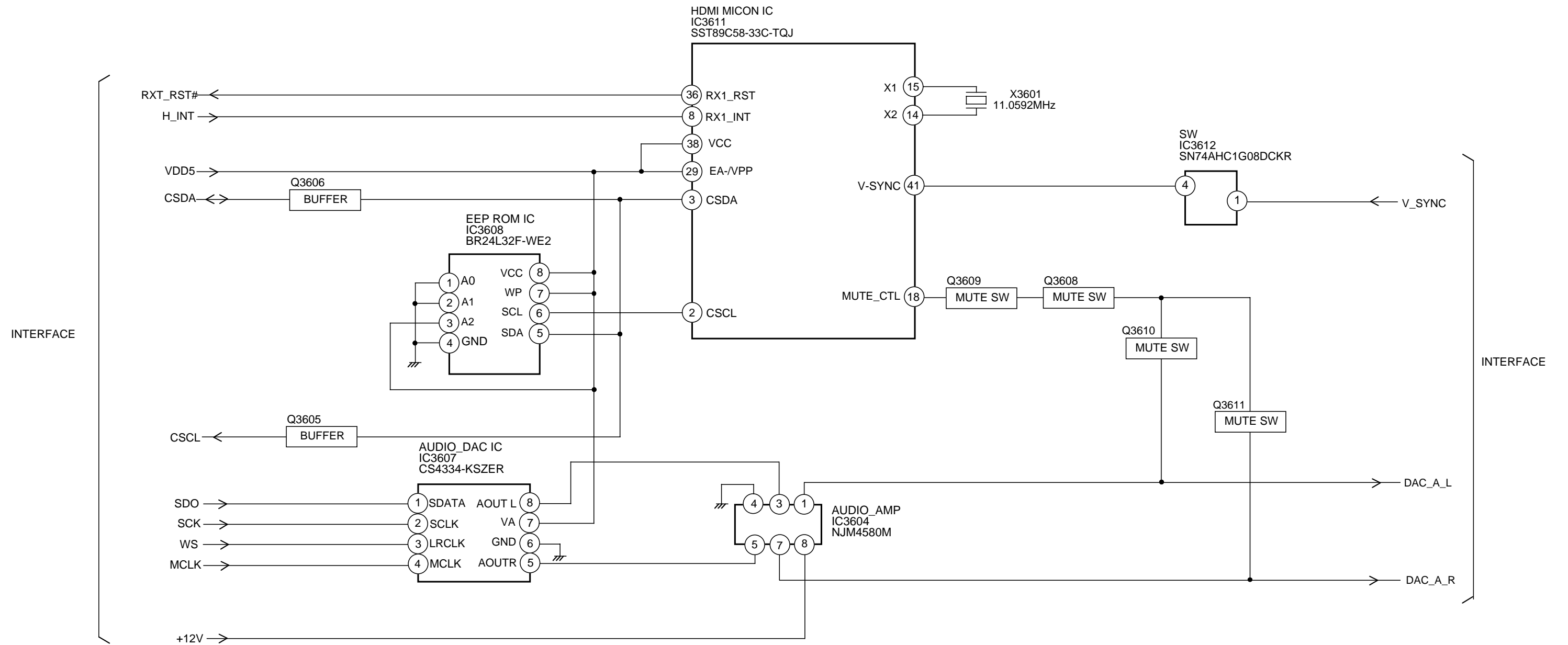
# IN/OUT/HD/VD BLOCK DIAGRM



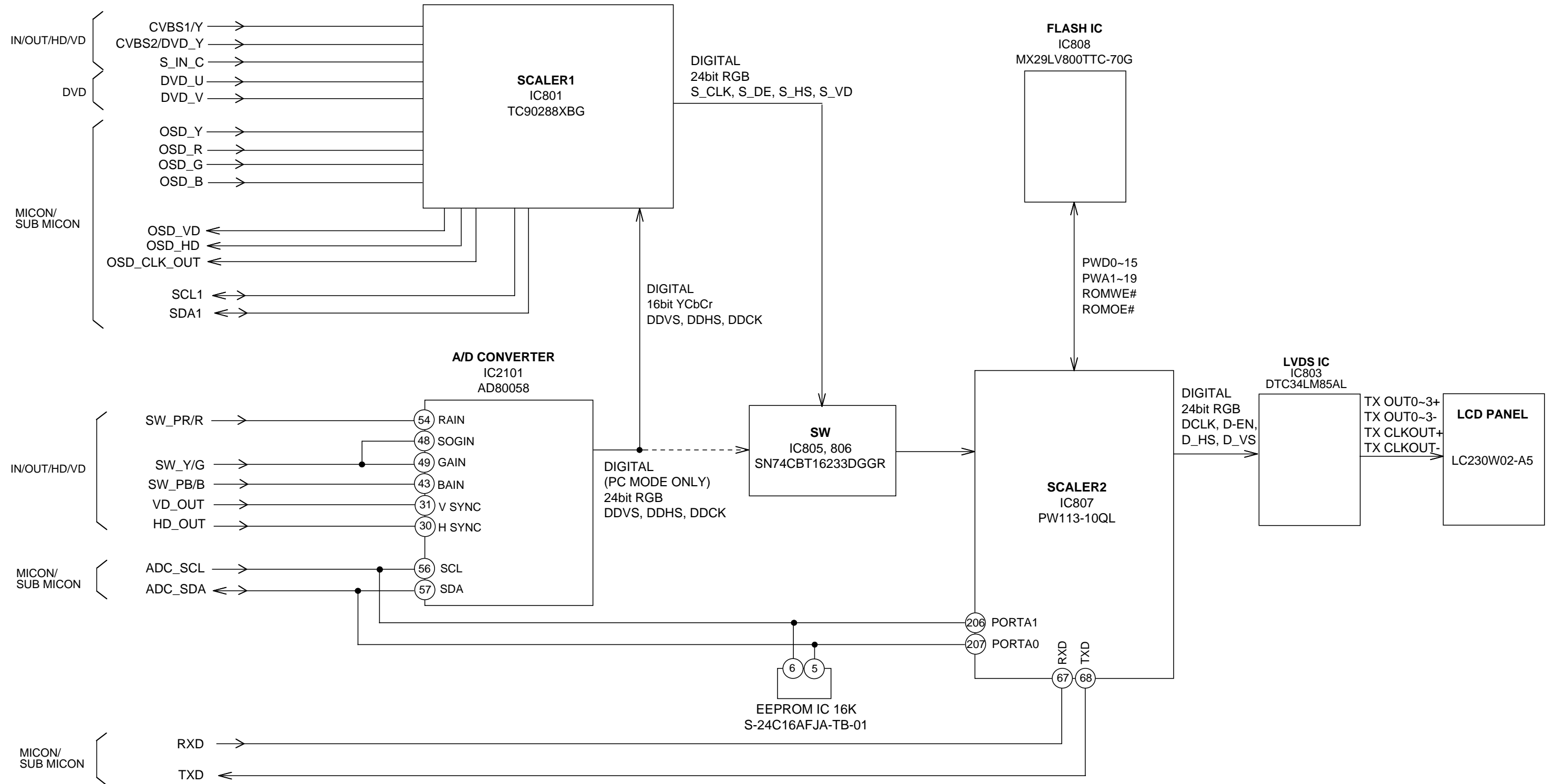
# INTERFACE BLOCK DIAGRAM



# MICON2 BLOCK DIAGRAM



# SCALER1/SCALER2/LVDS/ADC/MEMORY/BUS DIAGRAM

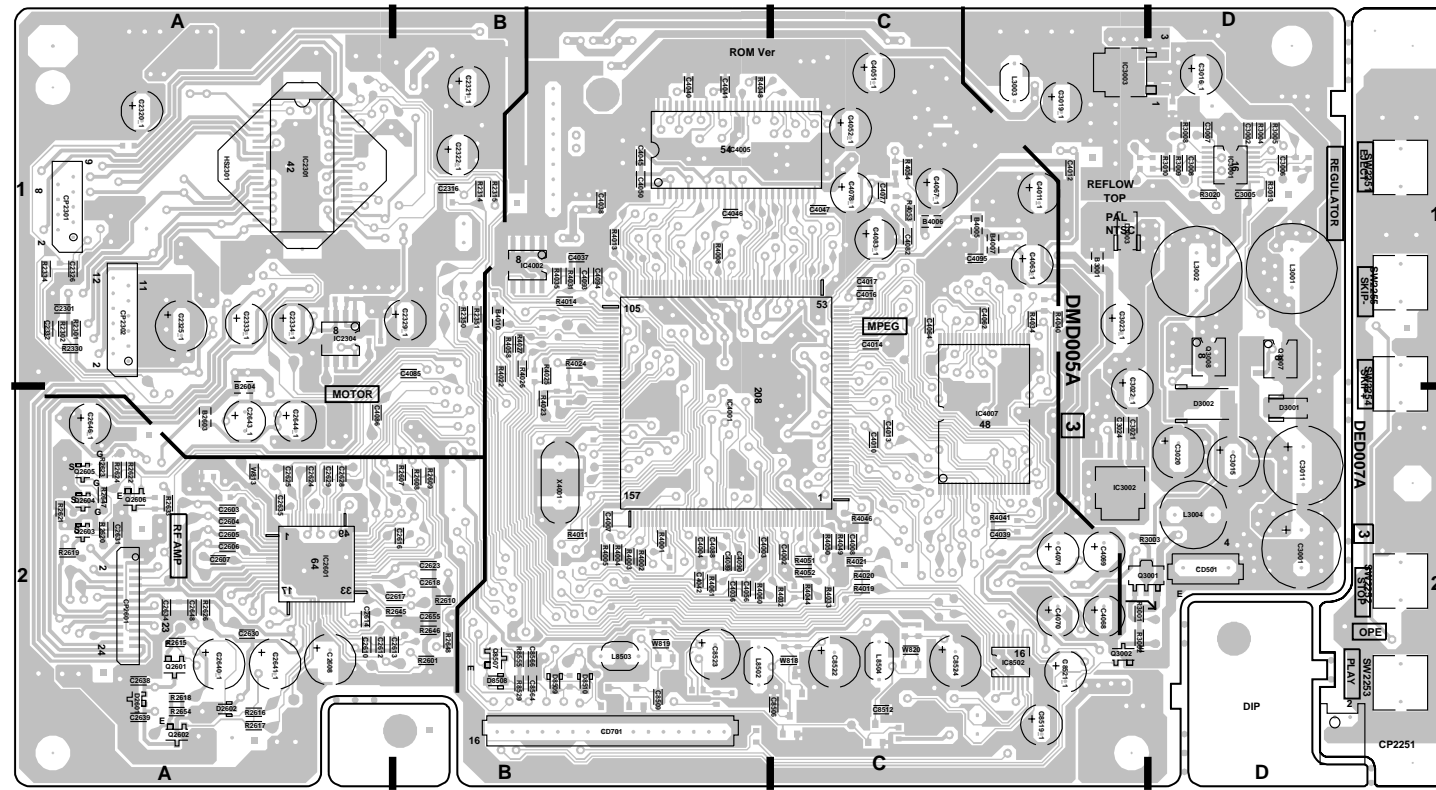




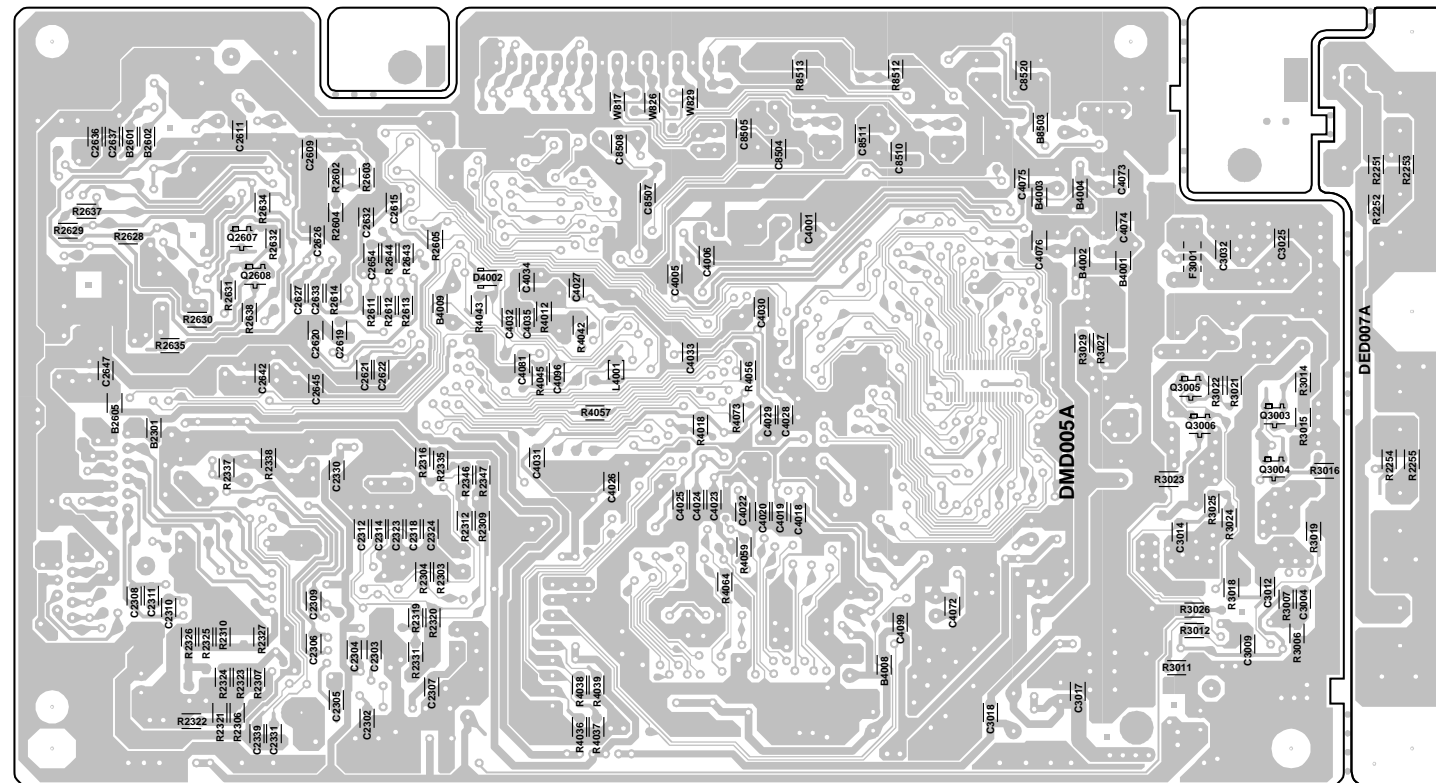


# PRINTRD CIRCUIT BOARDS

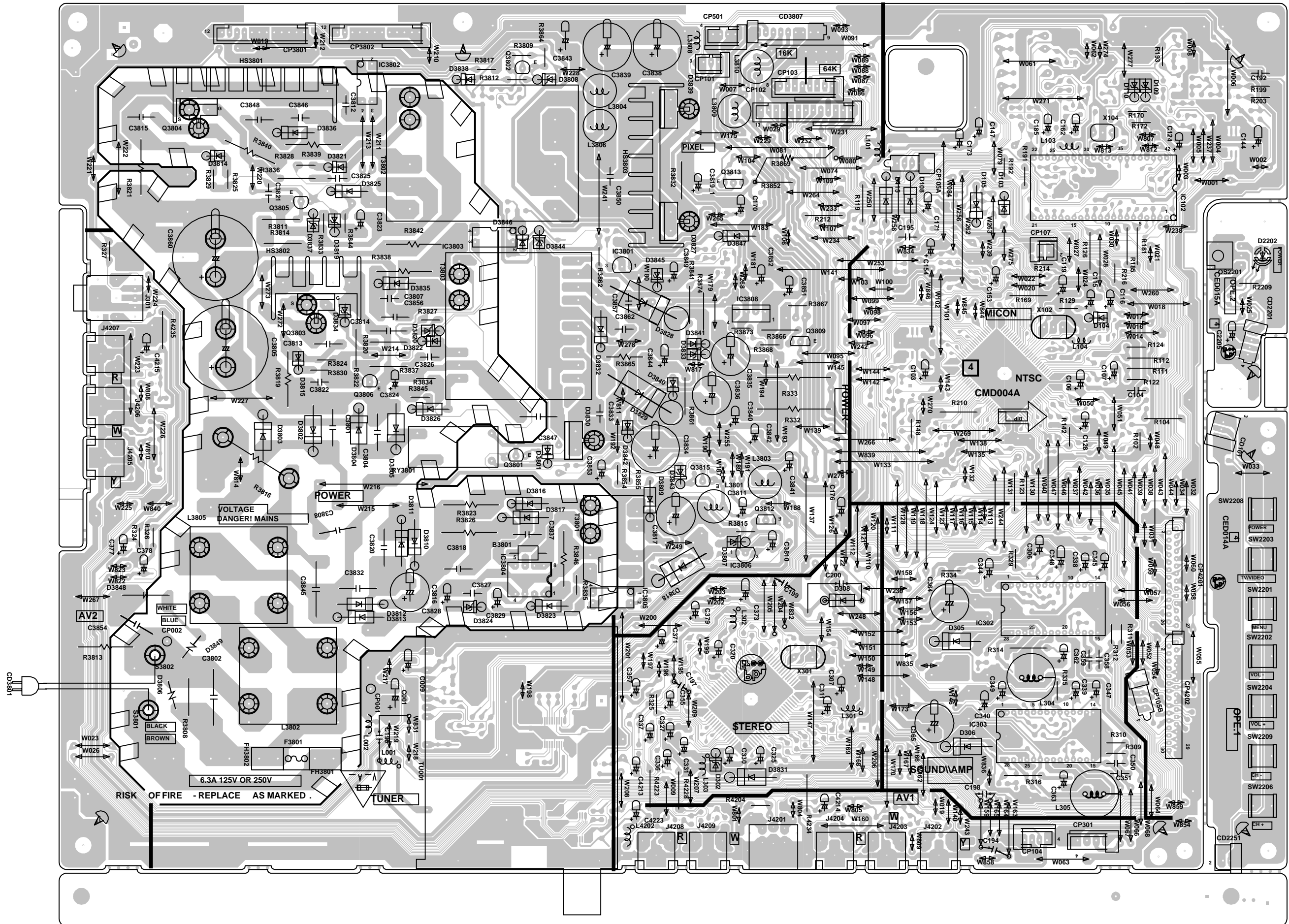
## DVD/OPERATION2 (TOP SIDE)



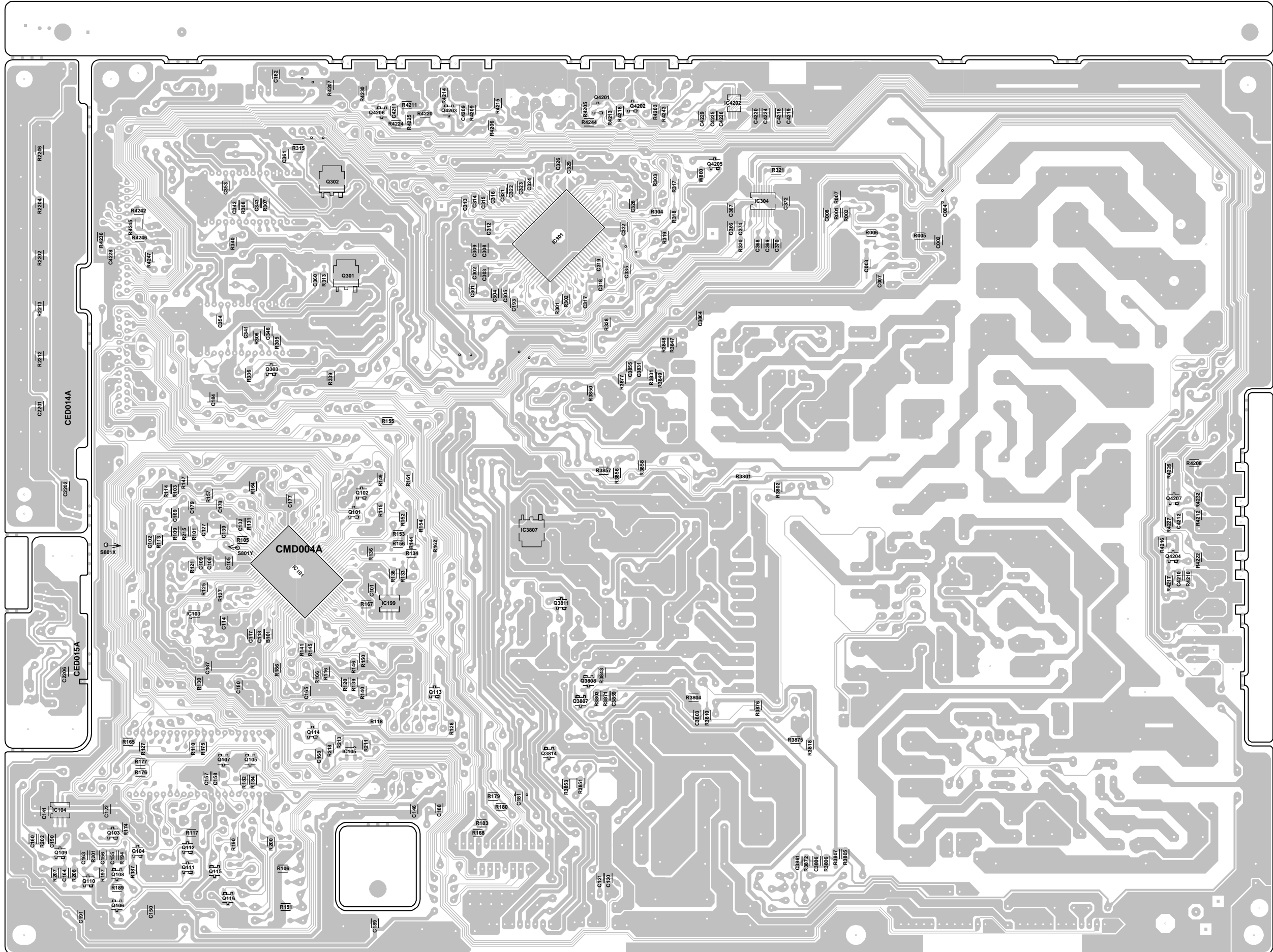
## DVD/OPERATION2 (BOTTOM SIDE)



**PRINTED CIRCUIT BAORDS**  
**AV/REMOCON/OPERATION (INSERTED PARTS)**  
**SOLDER SIDE**

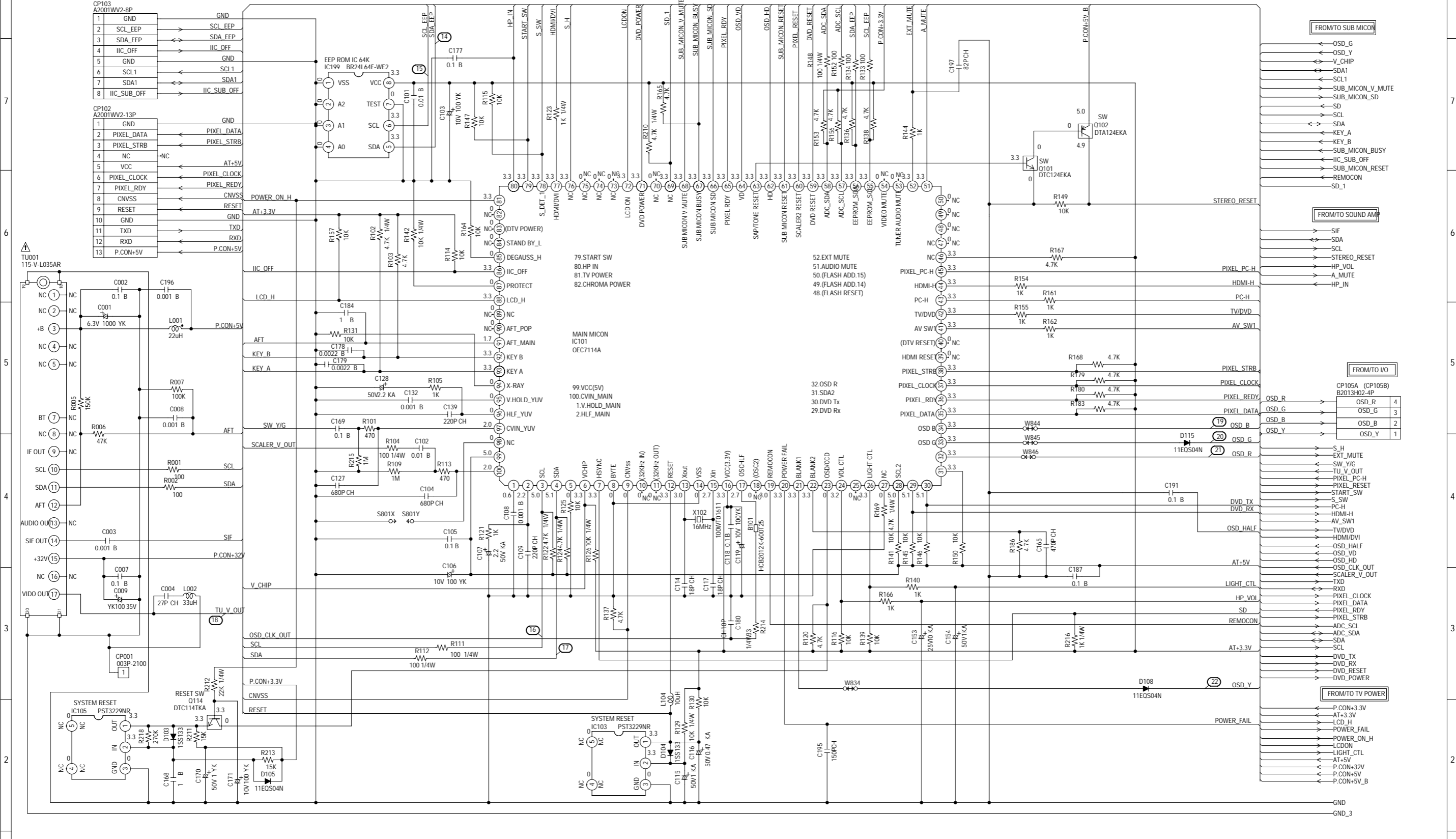


PRINTED CIRCUIT BAORDS  
 AV/REMOCON/OPERATION (CHIP MOUNTED PARTS)  
 SOLDER SIDE





# TUNER/MICON SCHEMATIC DIAGRAM (AV PCB)



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

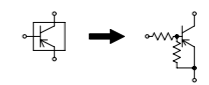
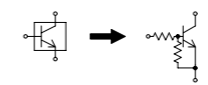
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

**CAUTION** 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 SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR

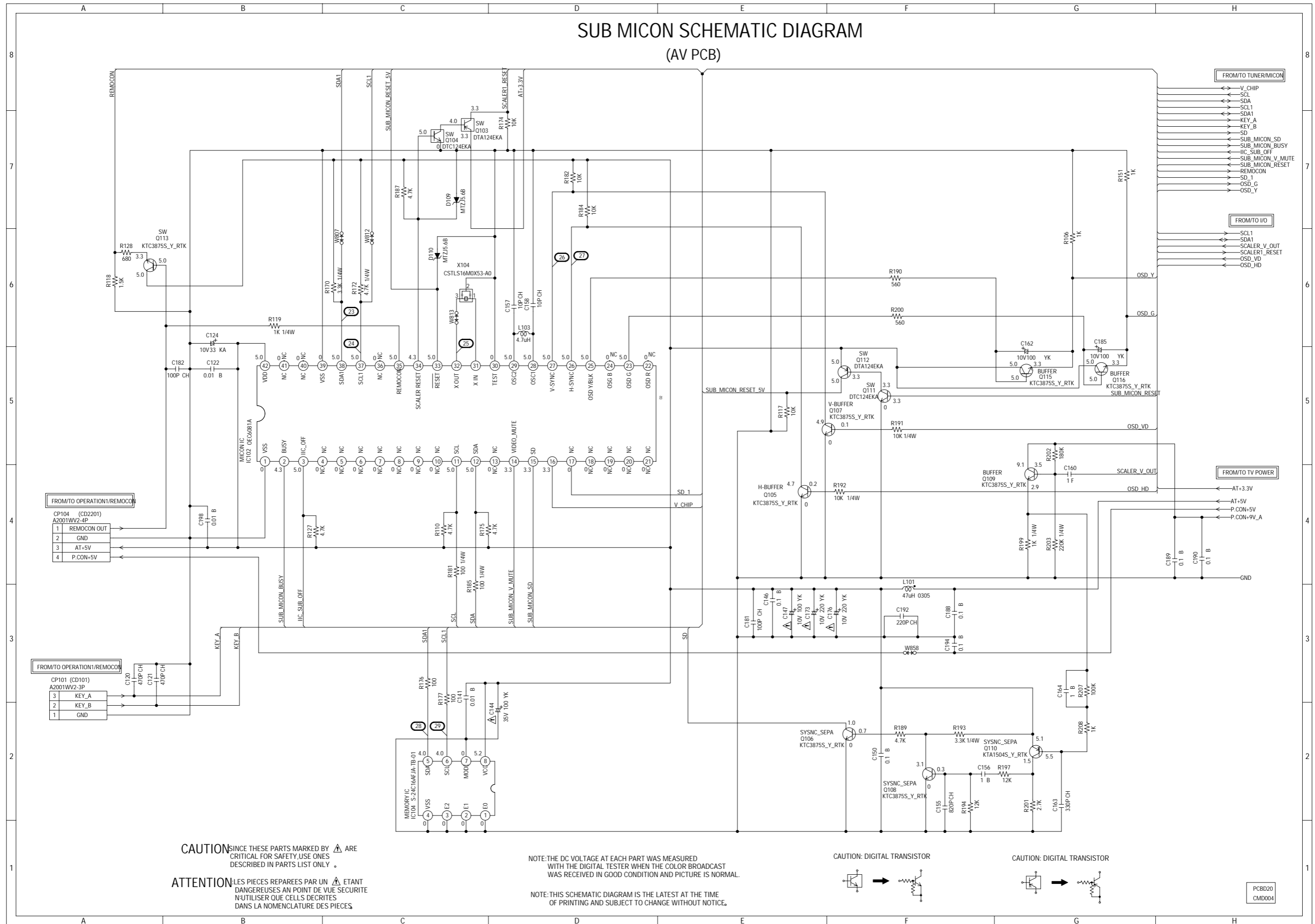
CAUTION: DIGITAL TRANSISTOR



PCBD20  
CMD004

# SUB MICON 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 DECRITES 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.

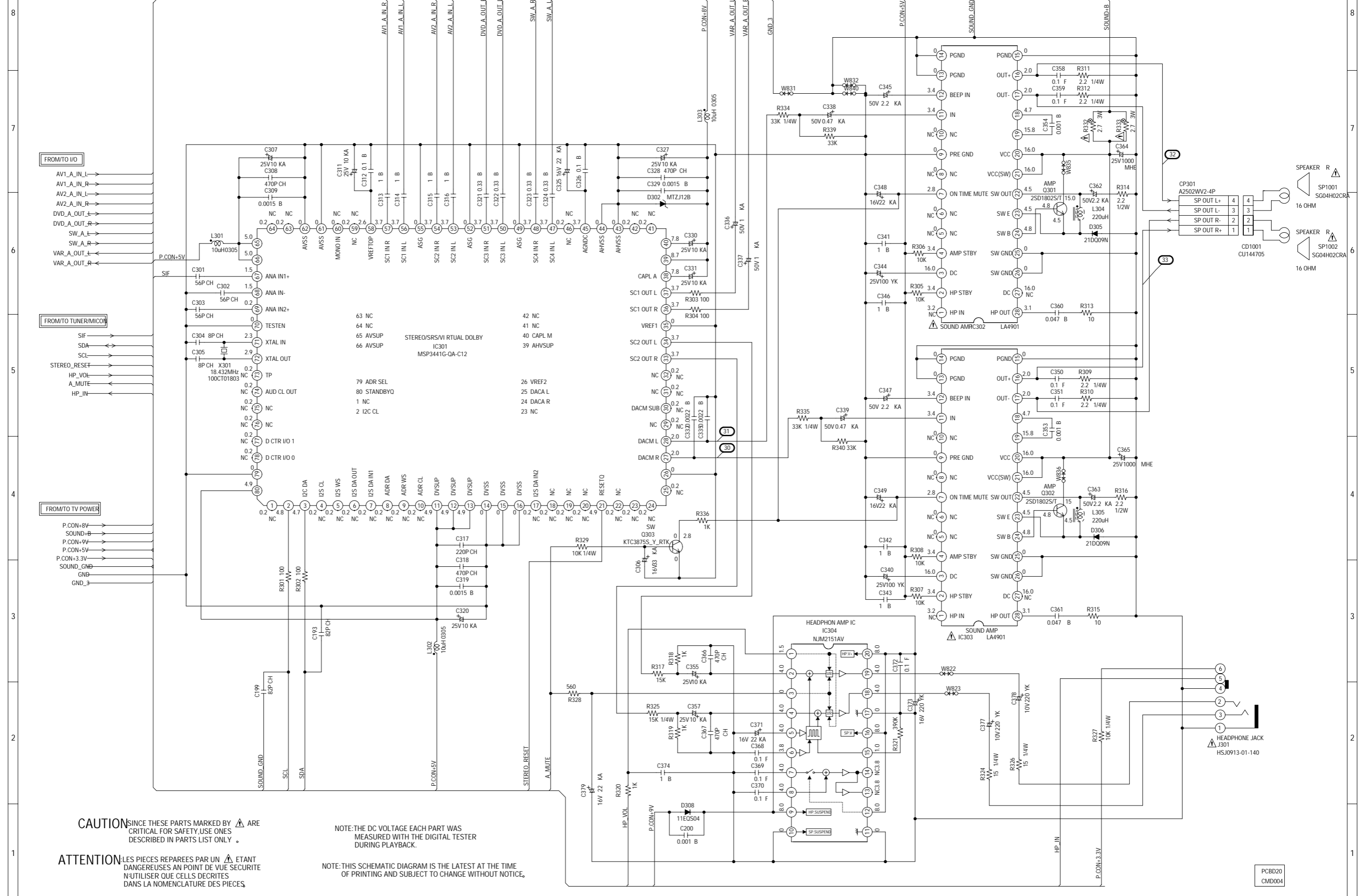
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

PCBD20  
CMD004

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

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

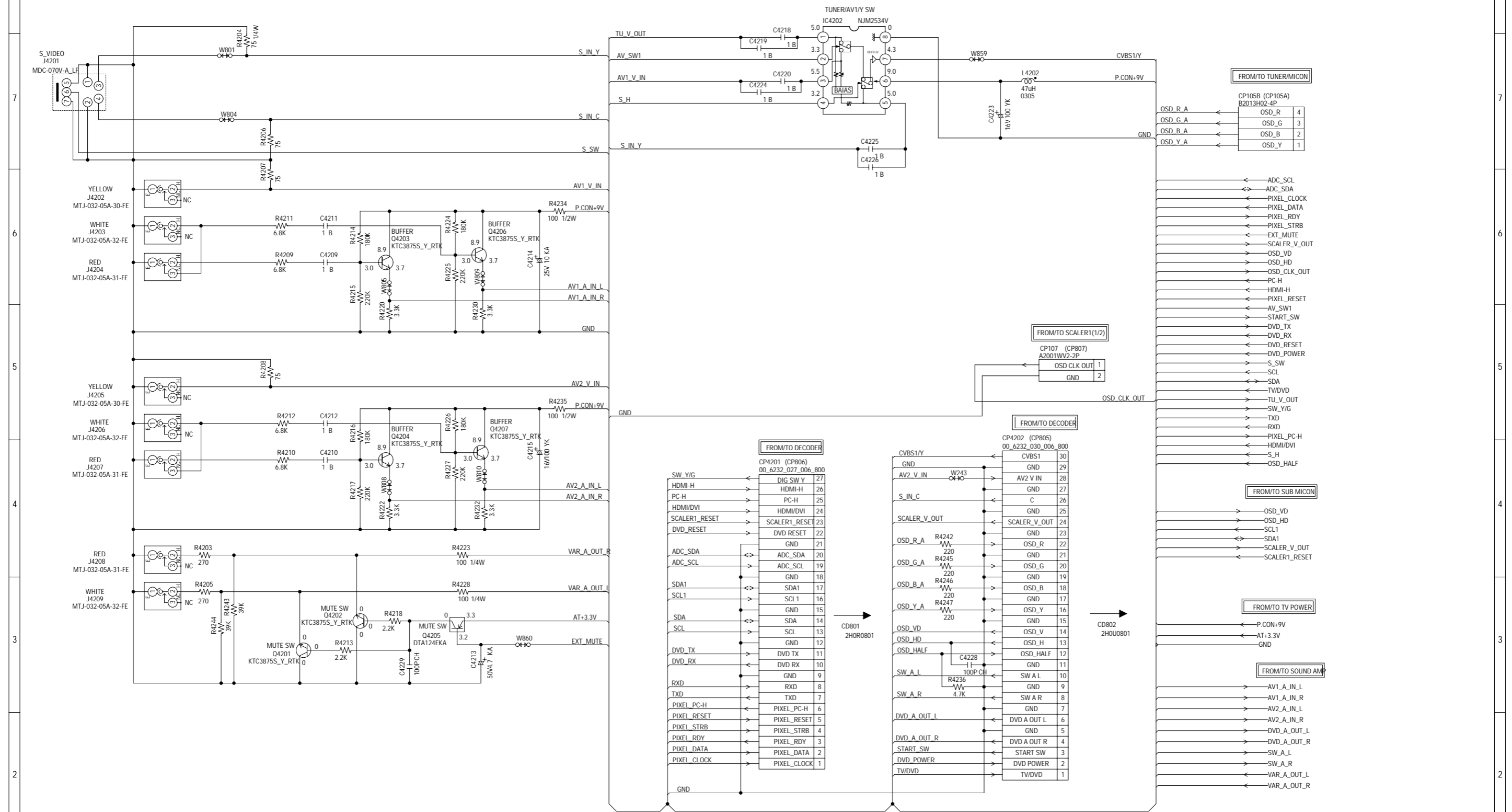
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

PCBD20  
CMD004

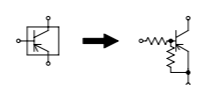


# IN/OUT SCHEMATIC DIAGRAM

(AV PCB)



CAUTION: DIGITAL TRANSISTOR



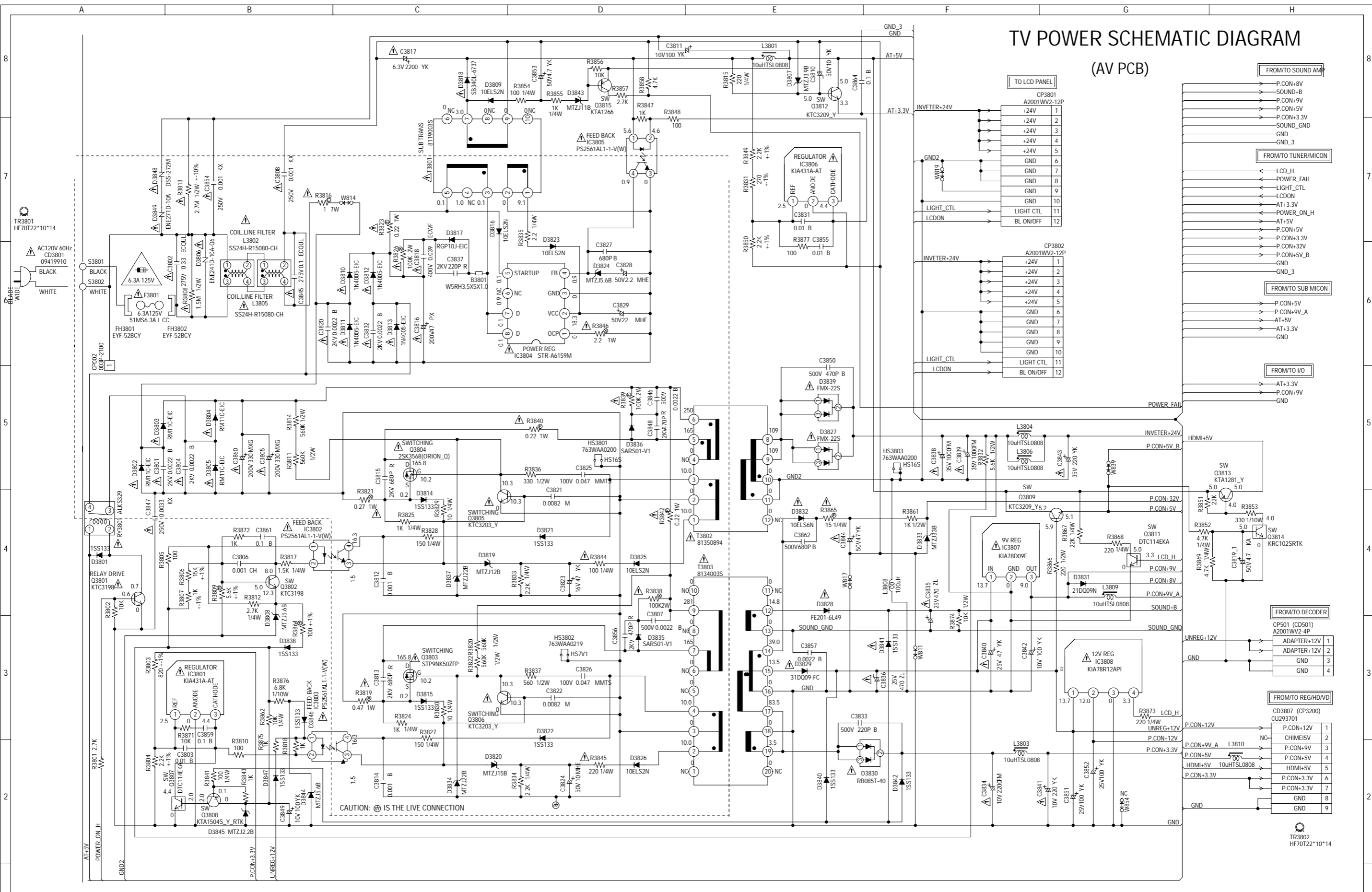
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

PCBD20  
CMD004

# TV POWER SCHEMATIC DIAGRAM

(AV PCB)



**CAUTION** :FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE. 6.3A 125V (F3801).

**ATTENTION** :POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 6.3A 125V (F3801).

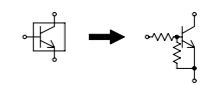
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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.

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

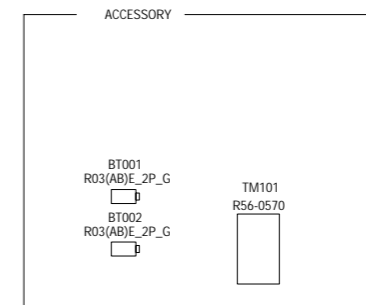
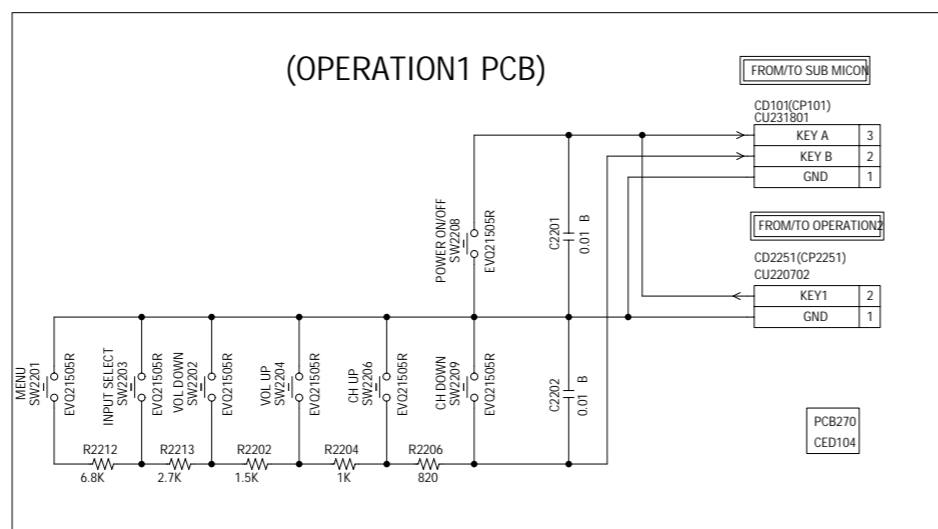
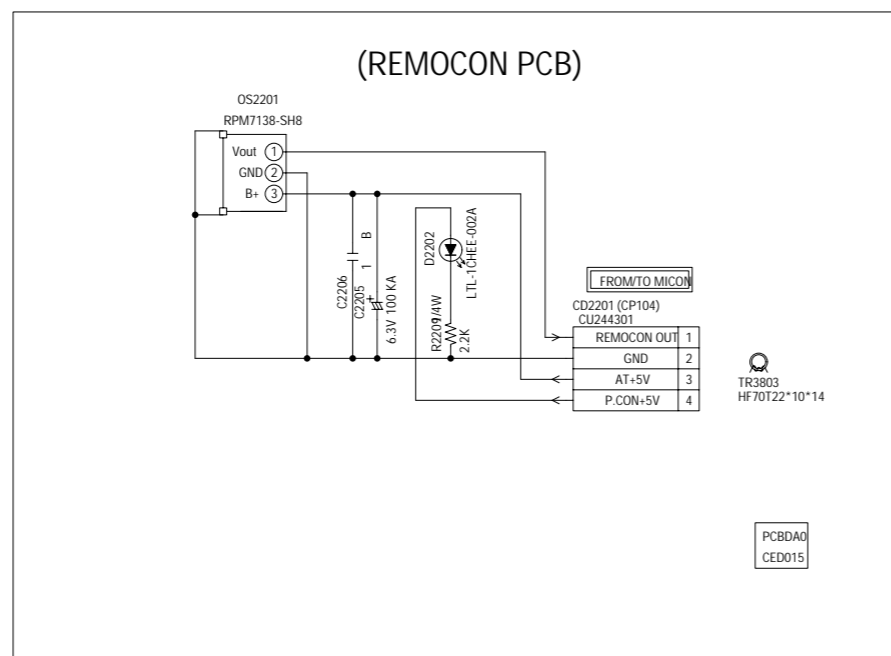
**CAUTION** :SINCE THESE PARTS MARKED BY ⊕ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

CAUTION: DIGITAL TRANSISTOR



PCB20  
CMD004

# OPERATION1/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.

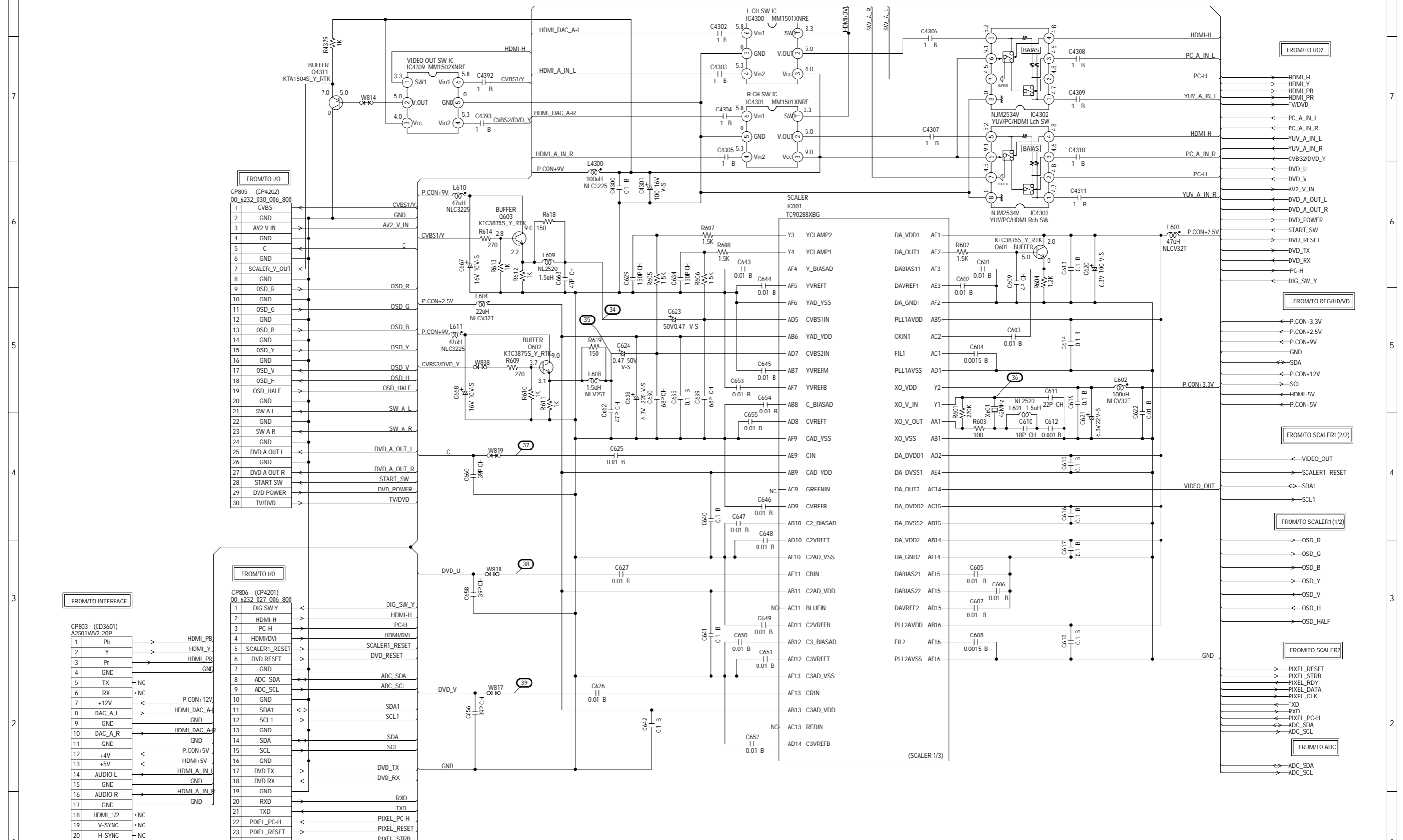
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

**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 CELLS DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

# DECODER SCHEMATIC DIAGRAM

(LCD PCB)



FROM/TO I/O

CP805 (CP4202)	00_6232_030_006_800	
1	CVBS1	CVBS1/Y
2	GND	GND
3	AV2 V IN	AV2 V IN
4	GND	CVBS1/Y
5	C	C
6	GND	GND
7	SCALER_V_OUT	GND
8	GND	GND
9	OSD_R	OSD_R
10	GND	OSD_G
11	OSD_G	OSD_G
12	GND	OSD_B
13	OSD_B	OSD_B
14	GND	OSD_Y
15	OSD_Y	OSD_Y
16	GND	OSD_H
17	OSD_V	OSD_V
18	OSD_HALF	OSD_HALF
19	OSD_HALF	OSD_HALF
20	GND	SW A L
21	SW A L	SW A L
22	GND	SW A R
23	SW A R	SW A R
24	GND	DVD A OUT L
25	DVD A OUT L	DVD A OUT L
26	GND	DVD A OUT R
27	DVD A OUT R	DVD A OUT R
28	START SW	START_SW
29	DVD POWER	DVD_POWER
30	TV/DVD	TV/DVD

FROM/TO I/O

CP806 (CP4201)	00_6232_027_006_800	
1	DIG SW Y	DIG_SW_Y
2	HDMI-H	HDMI-H
3	PC-H	PC-H
4	HDMI/DVI	HDMI/DVI
5	SCALER1_RESET	SCALER1_RESET
6	DVD RESET	DVD_RESET
7	GND	ADC_SDA
8	ADC_SDA	ADC_SDA
9	ADC_SCL	ADC_SCL
10	GND	SDA1
11	SDA1	SDA1
12	SCL1	SCL1
13	GND	SDA
14	SDA	SDA
15	SCL	SCL
16	GND	DVD_TX
17	DVD TX	DVD_TX
18	DVD RX	DVD_RX
19	GND	RXD
20	RXD	RXD
21	TXD	TXD
22	PIXEL_PC-H	PIXEL_PC-H
23	PIXEL_RESET	PIXEL_RESET
24	PIXEL_STRB	PIXEL_STRB
25	PIXEL_RDY	PIXEL_RDY
26	PIXEL_DATA	PIXEL_DATA
27	PIXEL_CLK	PIXEL_CLK

FROM/TO INTERFACE

CP803 (CD3601)	AZ501WV2-20P	
1	Pb	HDMI_PB
2	Y	HDMI_Y
3	Pr	HDMI_PR
4	GND	GND
5	TX	NC
6	RX	NC
7	+12V	P.CON+12V
8	DAC_A_L	HDMI_DAC_A_L
9	GND	GND
10	DAC_A_R	HDMI_DAC_A_R
11	GND	GND
12	+4V	P.CON+5V
13	+5V	HDMI+5V
14	AUDIO-L	HDMI_A_IN_L
15	GND	GND
16	AUDIO-R	HDMI_A_IN_R
17	GND	GND
18	HDMI_1/2	NC
19	V-SYNC	NC
20	H-SYNC	NC

FROM/TO I/O2

HDMI-H	HDMI_H
PC-A_IN_L	PC_A_IN_L
PC-H	PC_H
YUV_A_IN_L	YUV_A_IN_L
TV/DVD	TV/DVD
PC-A_IN_L	PC_A_IN_L
PC-A_IN_R	PC_A_IN_R
YUV_A_IN_R	YUV_A_IN_R
PC-A_IN_R	PC_A_IN_R
CVBS2/DVD_Y	CVBS2/DVD_Y
DVD_U	DVD_U
DVD_V	DVD_V
DVD_A_OUT_L	DVD_A_OUT_L
DVD_A_OUT_R	DVD_A_OUT_R
DVD_POWER	DVD_POWER
DVD_RESET	DVD_RESET
DVD_TX	DVD_TX
DVD_RX	DVD_RX
PC-H	PC_H
DIG_SW_Y	DIG_SW_Y

FROM/TO REG/H/DVD

P.CON+3.3V	P.CON+3.3V
P.CON+2.5V	P.CON+2.5V
P.CON+9V	P.CON+9V
GND	GND
SDA	SDA
P.CON+12V	P.CON+12V
SCL	SCL
HDMI+5V	HDMI+5V
P.CON+5V	P.CON+5V

FROM/TO SCALER1(2/2)

VIDEO_OUT	VIDEO_OUT
SCALER1_RESET	SCALER1_RESET
SDA1	SDA1
SCL1	SCL1

FROM/TO SCALER1(1/2)

OSD_R	OSD_R
OSD_G	OSD_G
OSD_B	OSD_B
OSD_Y	OSD_Y
OSD_V	OSD_V
OSD_H	OSD_H
OSD_HALF	OSD_HALF

FROM/TO SCALER2

PIXEL_RESET	PIXEL_RESET
PIXEL_STRB	PIXEL_STRB
PIXEL_RDY	PIXEL_RDY
PIXEL_DATA	PIXEL_DATA
PIXEL_CLK	PIXEL_CLK
TXD	TXD
RXD	RXD
PIXEL_PC-H	PIXEL_PC-H
ADC_SDA	ADC_SDA
ADC_SCL	ADC_SCL

FROM/TO ADC

ADC_SDA	ADC_SDA
ADC_SCL	ADC_SCL

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.

PCB340  
CED016

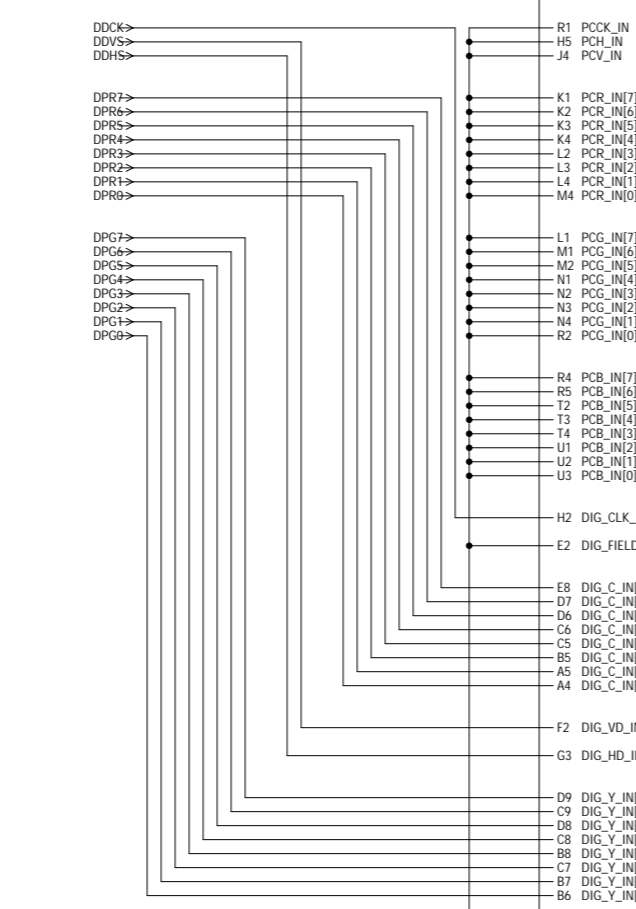
# SCALER1(1/2) SCHEMATIC DIAGRAM

(LCD PCB)

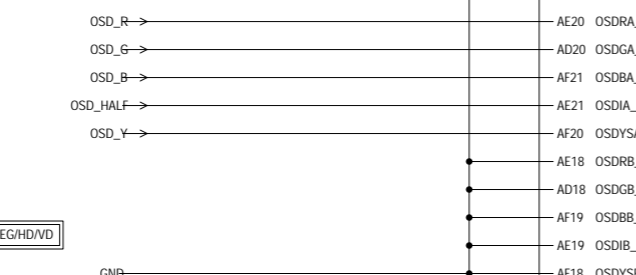
SCALER IC801 TC90288XBG

NC	A3	NC_A3	NC_V1	V1	NC
NC	A6	NC_A6	NC_V3	V3	NC
NC	A7	NC_A7	NC_V4	V4	NC
NC	A22	NC_A22	NC_V22	V22	NC
NC	A23	NC_A23	NC_V26	V26	NC
NC	A24	NC_A24	NC_AA2	AA2	NC
NC	B3	NC_B3	NC_AA3	AA3	NC
NC	B4	NC_B4	NC_AA4	AA4	NC
NC	B22	NC_B22	NC_AA25	AA25	NC
NC	B23	NC_B23	NC_AB2	AB2	NC
NC	B24	NC_B24	NC_AB3	AB3	NC
NC	C1	NC_C1	NC_AB4	AB4	NC
NC	C2	NC_C2	NC_AB23	AB23	NC
NC	C4	NC_C4	NC_AB24	AB24	NC
NC	C23	NC_C23	NC_AC3	AC3	NC
NC	C25	NC_C25	NC_AC4	AC4	NC
NC	C26	NC_C26	NC_AC5	AC5	NC
NC	D1	NC_D1	NC_AC6	AC6	NC
NC	D2	NC_D2	NC_AC7	AC7	NC
NC	D5	NC_D5	NC_AC8	AC8	NC
NC	D24	NC_D24	NC_AC10	AC10	NC
NC	D25	NC_D25	NC_AC12	AC12	NC
NC	D26	NC_D26	NC_AC16	AC16	NC
NC	E1	NC_E1	NC_AC19	AC19	NC
NC	E15	NC_E15	NC_AC19	AC19	NC
NC	E23	NC_E23	NC_AC20	AC20	NC
NC	E24	NC_E24	NC_AC22	AC22	NC
NC	E25	NC_E25	NC_AC25	AC25	NC
NC	E26	NC_E26	NC_AC26	AC26	NC
NC	F1	NC_F1	NC_AD3	AD3	NC
NC	F23	NC_F23	NC_AD4	AD4	NC
NC	F24	NC_F24	NC_AD6	AD6	NC
NC	F25	NC_F25	NC_AD13	AD13	NC
NC	G1	NC_G1	NC_AD16	AD16	NC
NC	G26	NC_G26	NC_AD21	AD21	NC
NC	H4	NC_H4	NC_AE5	AE5	NC
NC	H22	NC_H22	NC_AE6	AE6	NC
NC	H26	NC_H26	NC_AE7	AE7	NC
NC	J1	NC_J1	NC_AE8	AE8	NC
NC	J3	NC_J3	NC_AE10	AE10	NC
NC	J26	NC_J26	NC_AE12	AE12	NC
NC	K5	NC_K5	NC_AE14	AE14	NC
NC	M3	NC_M3	NC_AF1	AF1	NC
NC	M5	NC_M5	NC_AF8	AF8	NC
NC	R3	NC_R3	NC_AF11	AF11	NC
NC	T1	NC_T1	NC_AF12	AF12	NC
NC	U4	NC_U4			NC

FROM/TO ADC



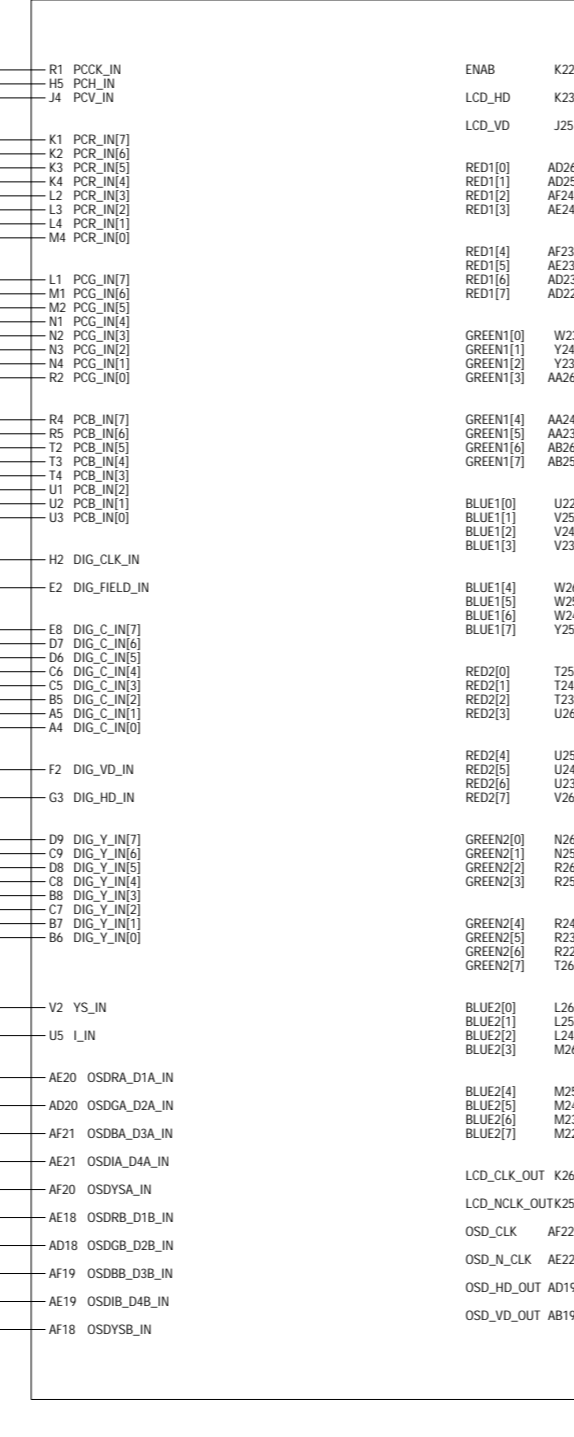
FROM/TO DECODER



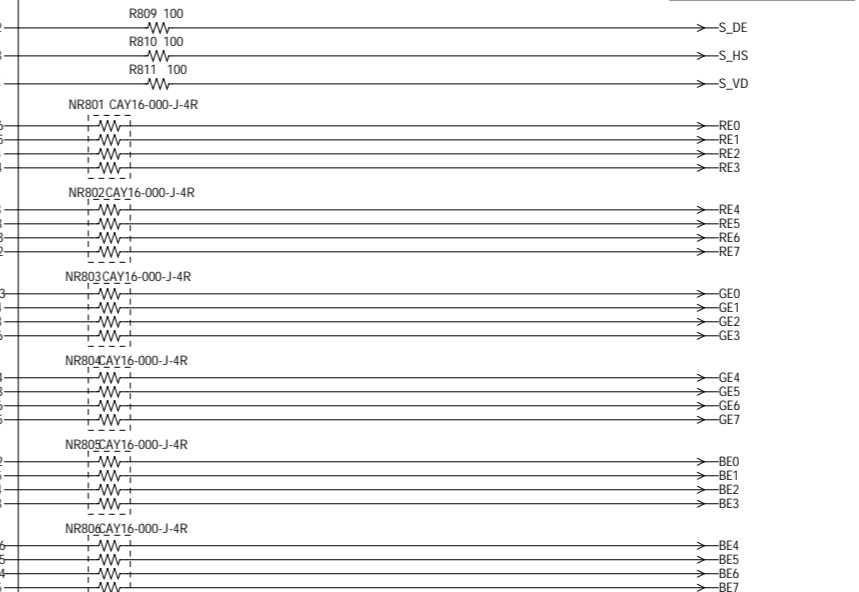
FROM/TO REG/HD/VD



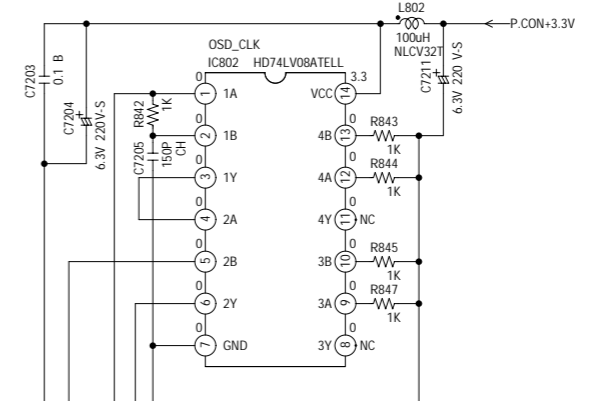
SCALER IC801 TC90288XBG



FROM/TO BUS TRANSCEIVER



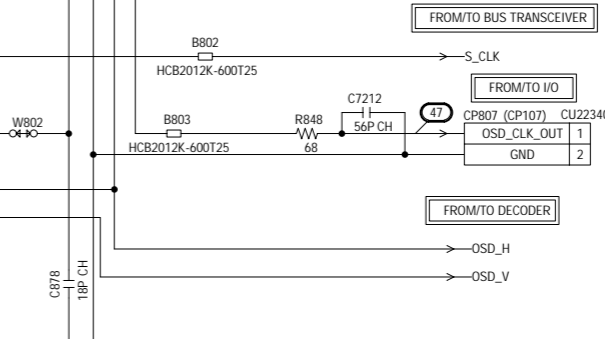
FROM/TO REG/HD/VD



FROM/TO BUS TRANSCEIVER

FROM/TO I/O

FROM/TO DECODER



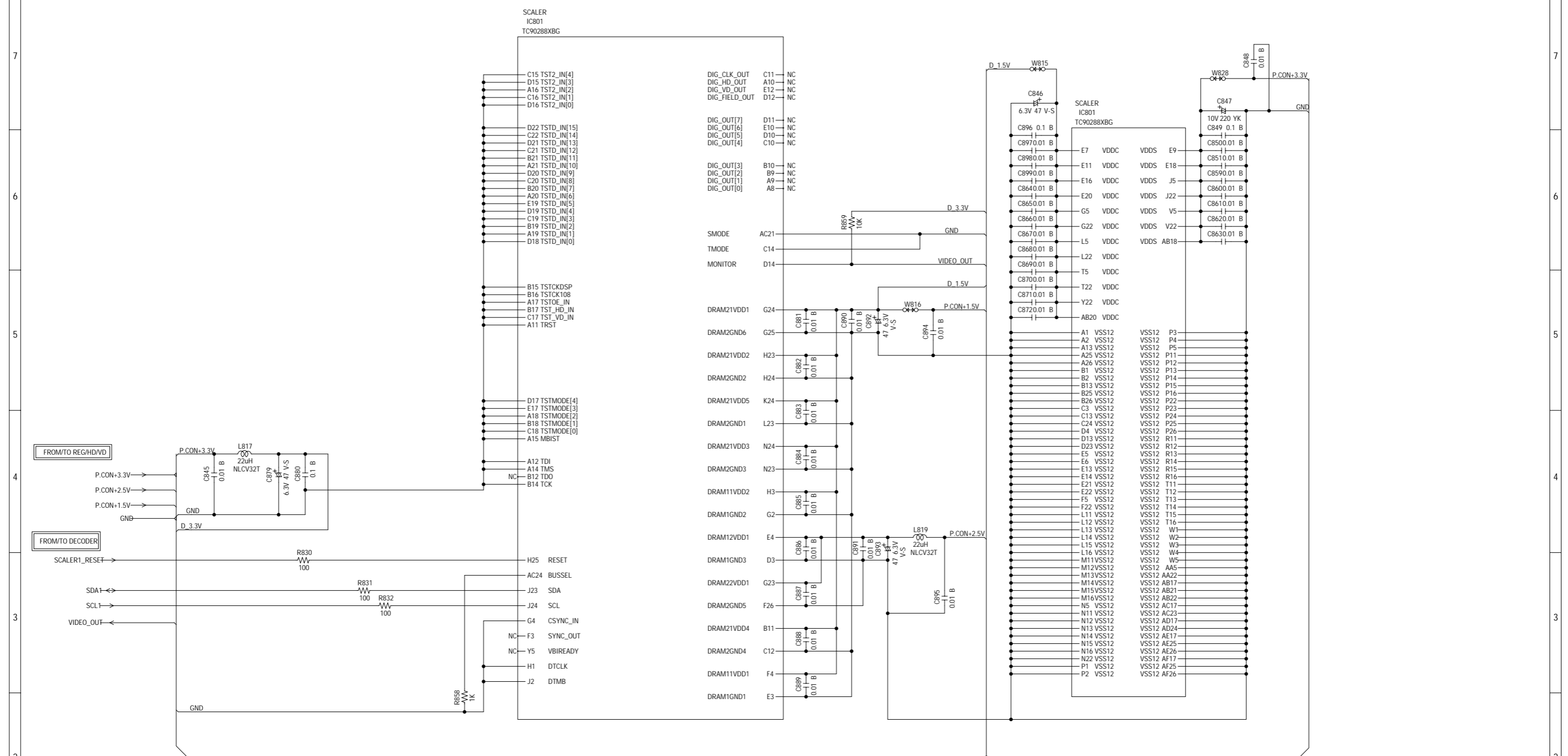
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

PCB340 CED016

# SCALER1(2/2) SCHEMATIC DIAGRAM

(LCD PCB)

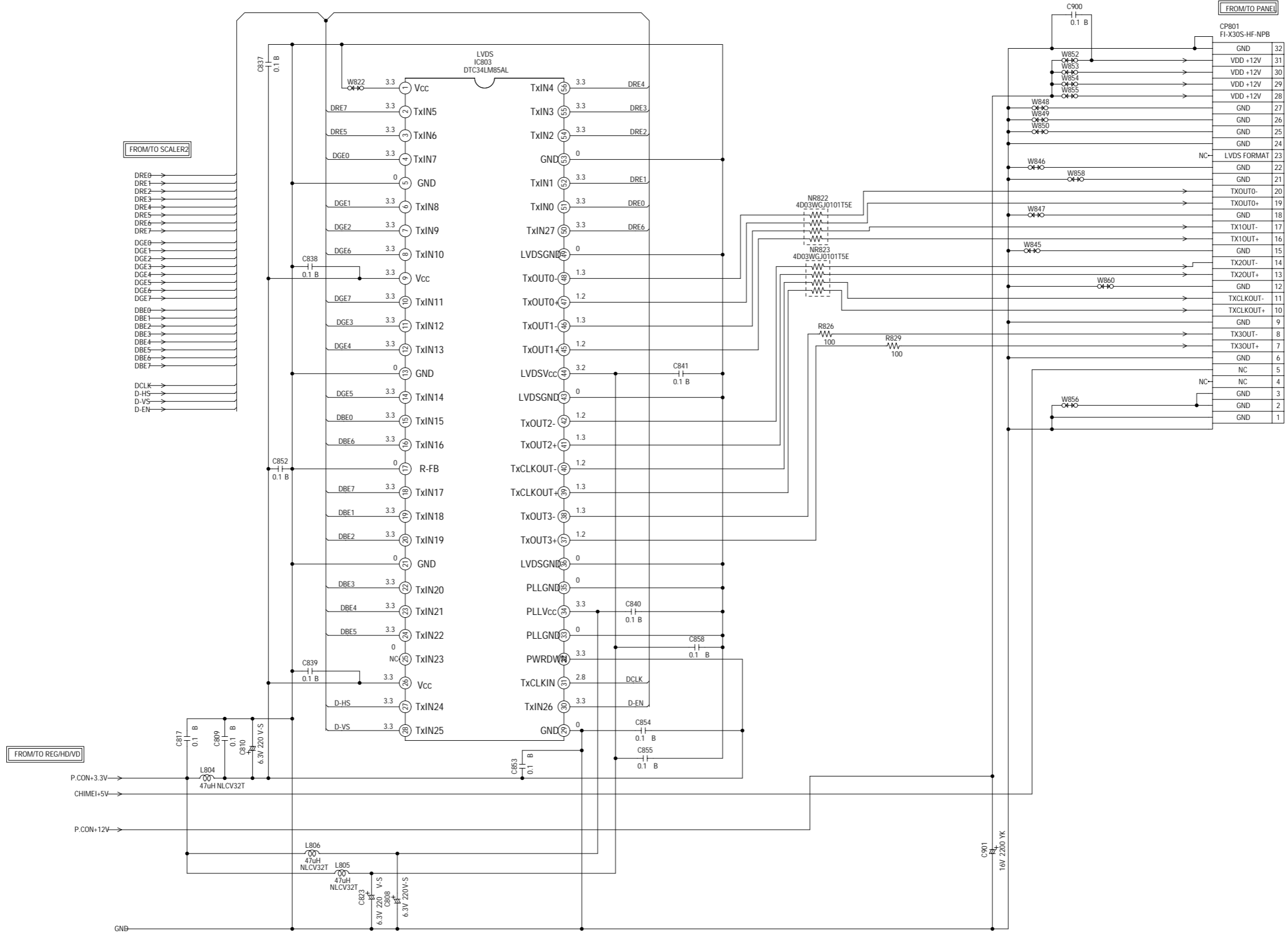


NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

PCB340  
CED016

# LVDS SCHEMATIC DIAGRAM (LCD 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.

PCB340  
CED014

# ADC SCHEMATIC DIAGRAM

(LCD PCB)

FROM/TO DECODER

ADC\_SCL  
ADC\_SDA

FROM/TO BUS TRANSCEIVER

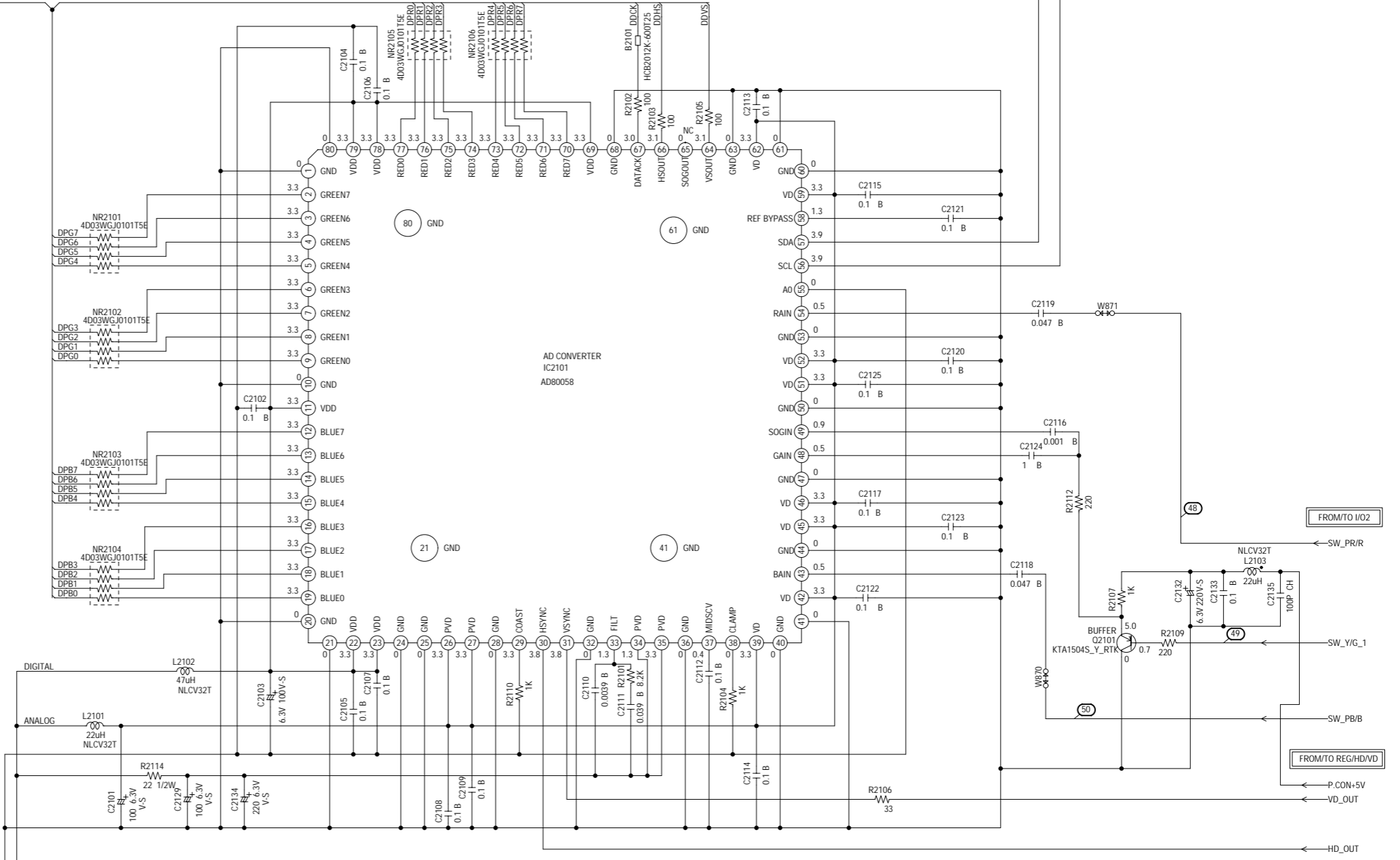
DDHS  
DDVS  
DDCK  
DPG7  
DPG6  
DPG5  
DPG4  
DPG3  
DPG2  
DPG1  
DPG0  
DPR7  
DPR6  
DPR5  
DPR4  
DPR3  
DPR2  
DPR1  
DPR0  
DPB7  
DPB6  
DPB5  
DPB4  
DPB3  
DPB2  
DPB1  
DPB0

FROM/TO SCALER(1/2)

DDHS  
DDVS  
DDCK  
DPG7  
DPG6  
DPG5  
DPG4  
DPG3  
DPG2  
DPG1  
DPG0  
DPR7  
DPR6  
DPR5  
DPR4  
DPR3  
DPR2  
DPR1  
DPR0

FROM/TO REG/HD/VD

P.CON+3.3V  
GND



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

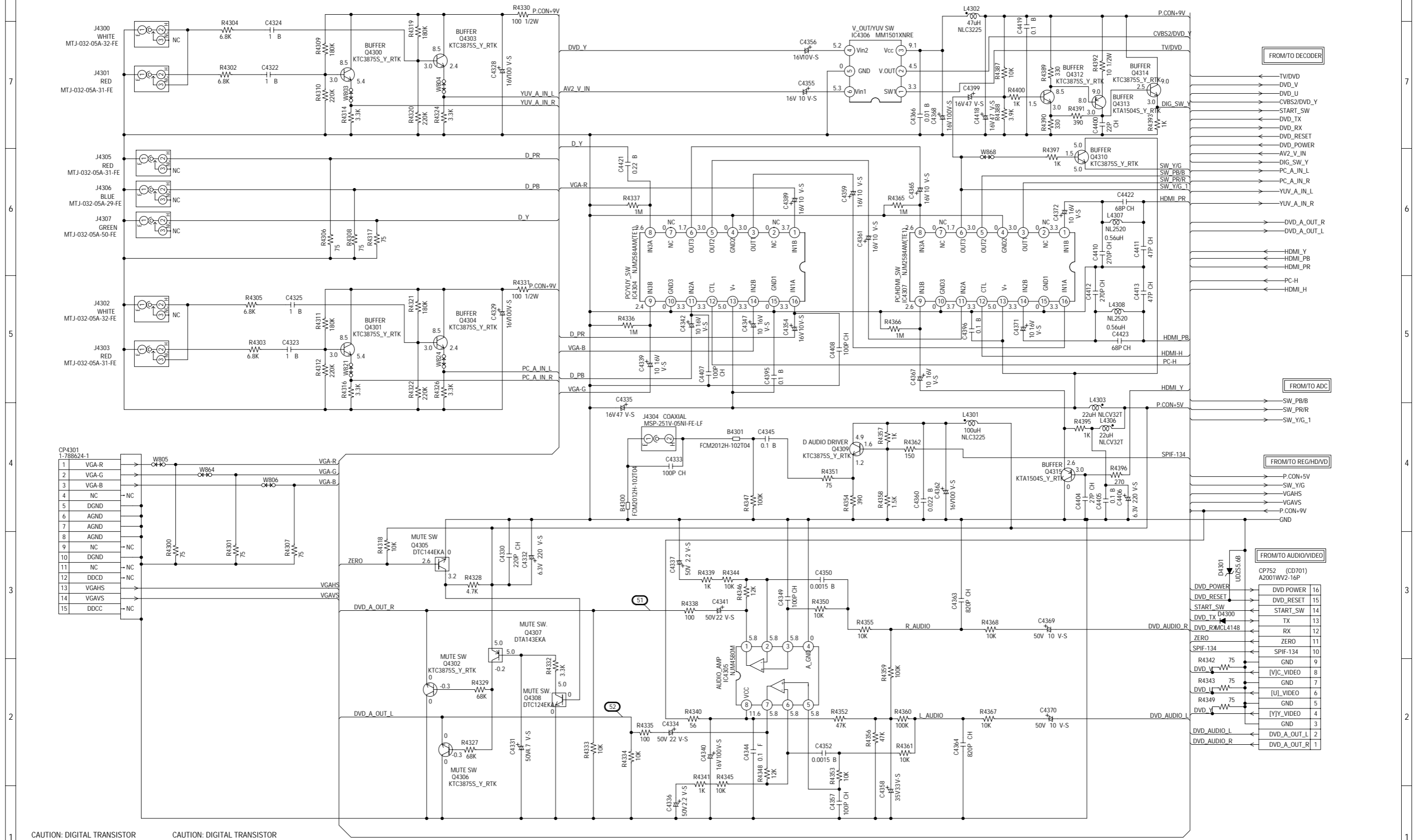
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

PCB340  
CED016



# IN/OUT2 SCHEMATIC DIAGRAM

## (LCD PCB)



FROM/TO DECODER

FROM/TO ADC

FROM/TO REG/HD/VD

FROM/TO AUDIO/VIDEO

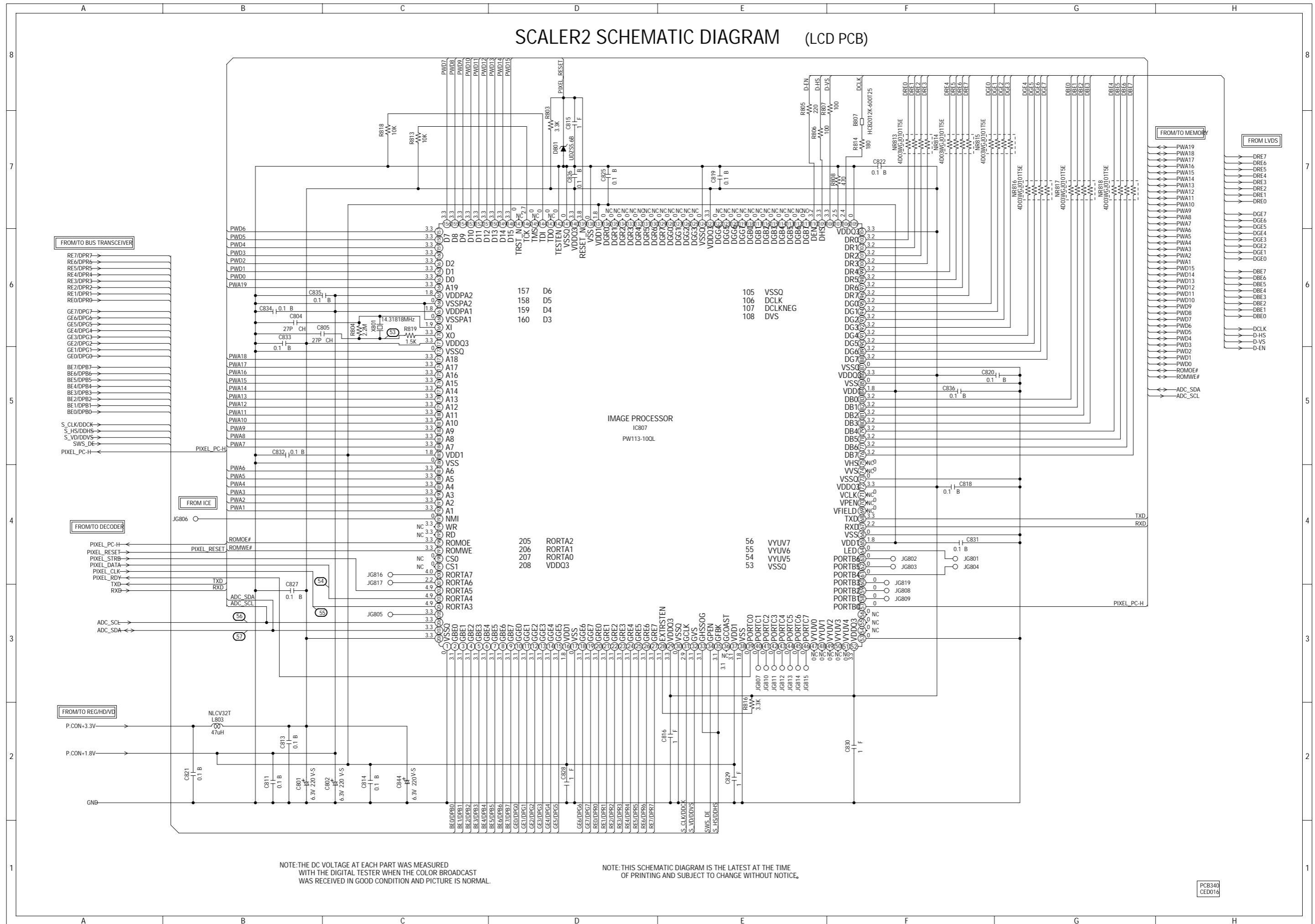
CAUTION: DIGITAL TRANSISTOR

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.

PCB340 CED016

# SCALER2 SCHEMATIC DIAGRAM (LCD PCB)



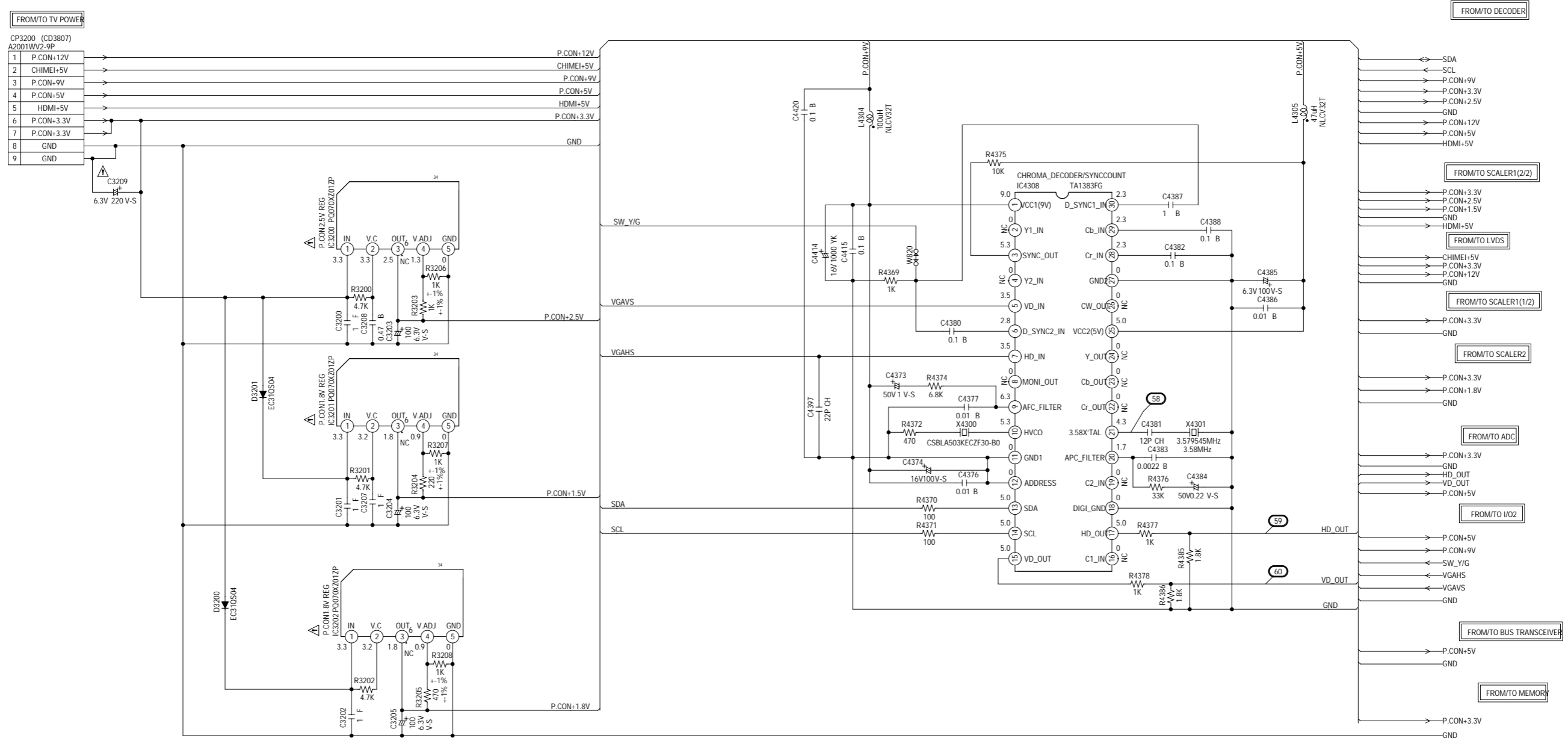
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

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

PCB340  
CED014

# REG/HD/VD SCHEMATIC DIAGRAM

(LCD 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.

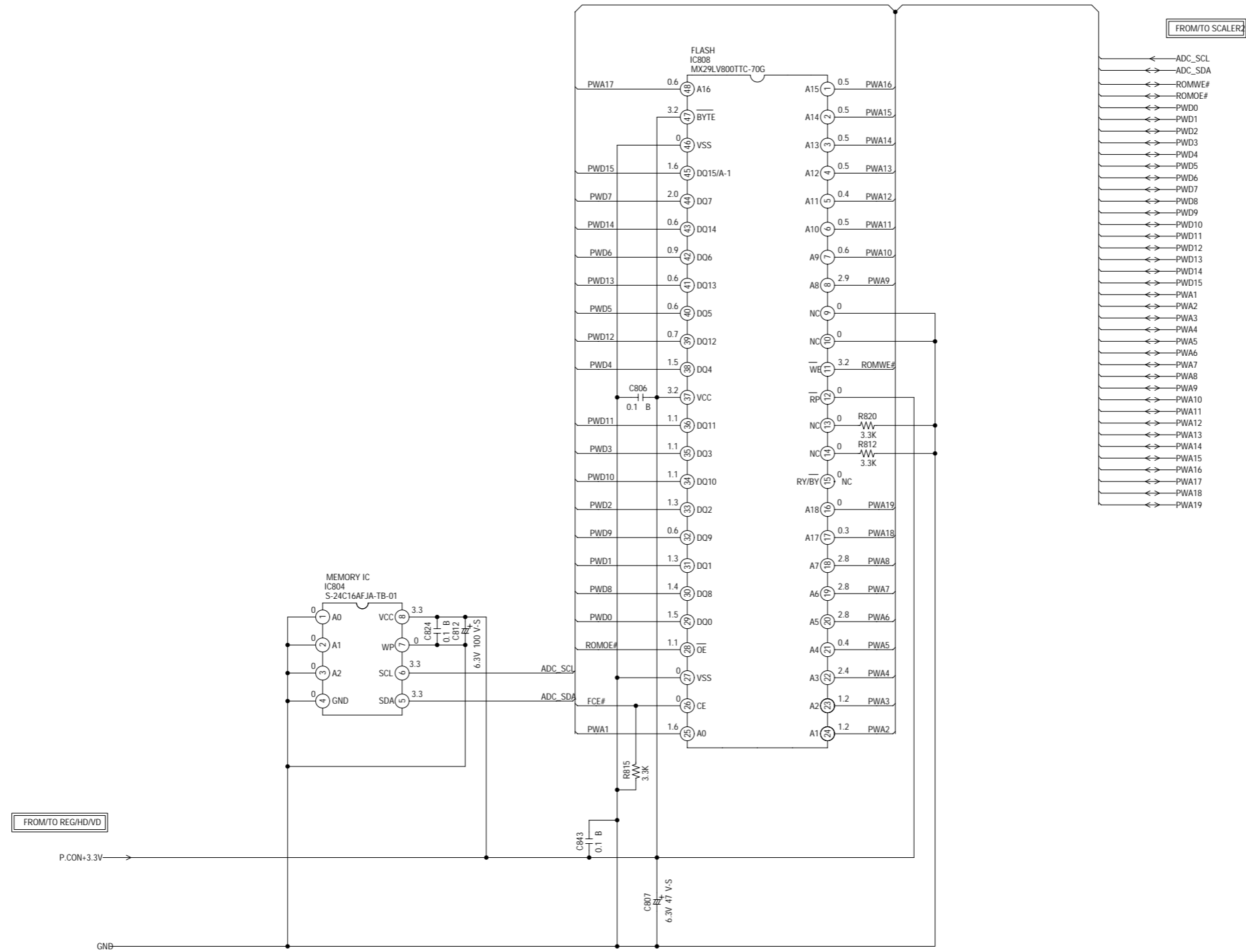
ATTENTION: LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

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

PCB340  
CED016

# MEMORY SCHEMATIC DIAGRAM

(LCD PCB)



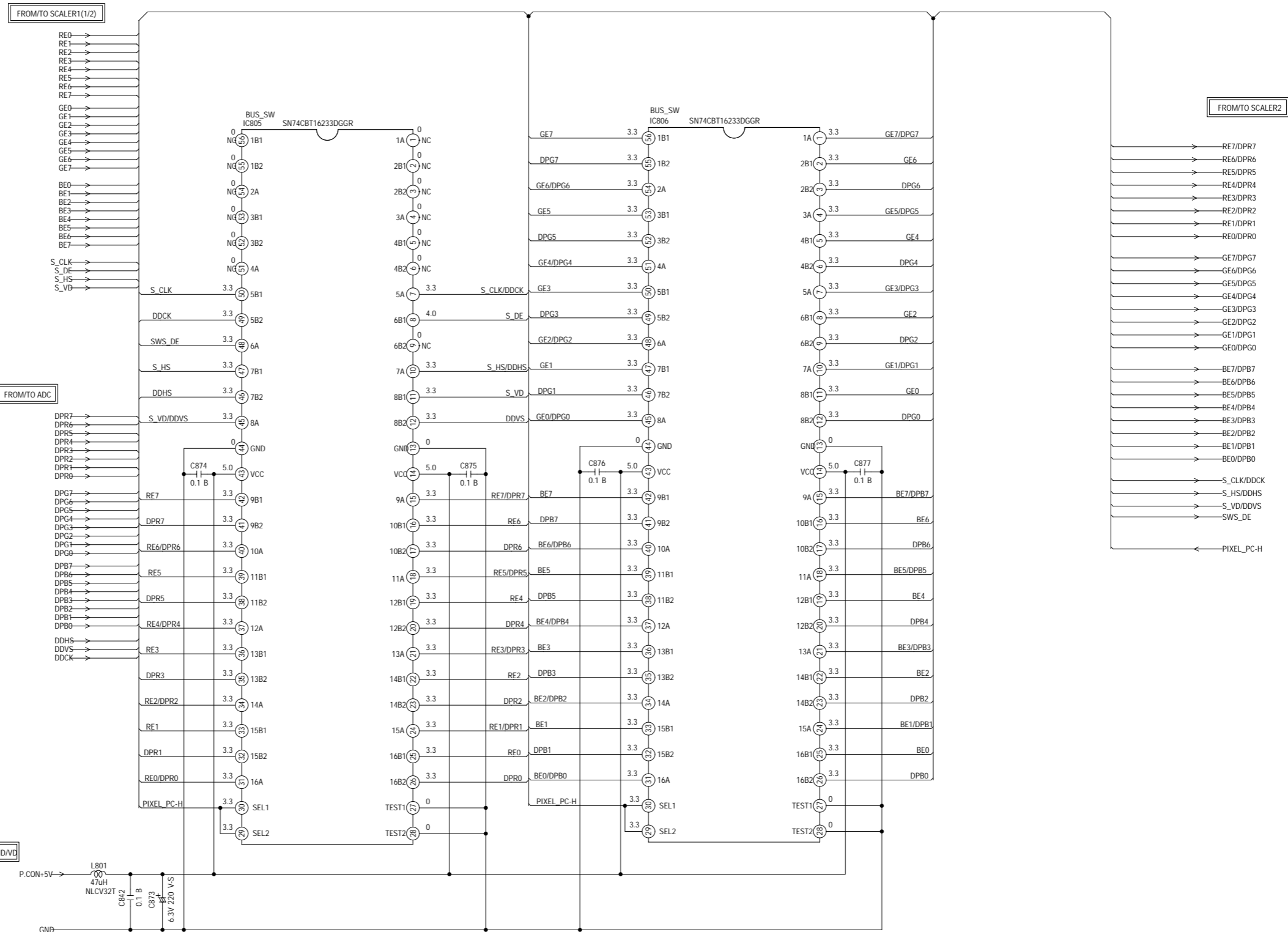
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

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

PCB340  
CED016

# BUS TRANSCEIVER SCHEMATIC DIAGRAM

(LCD PCB)

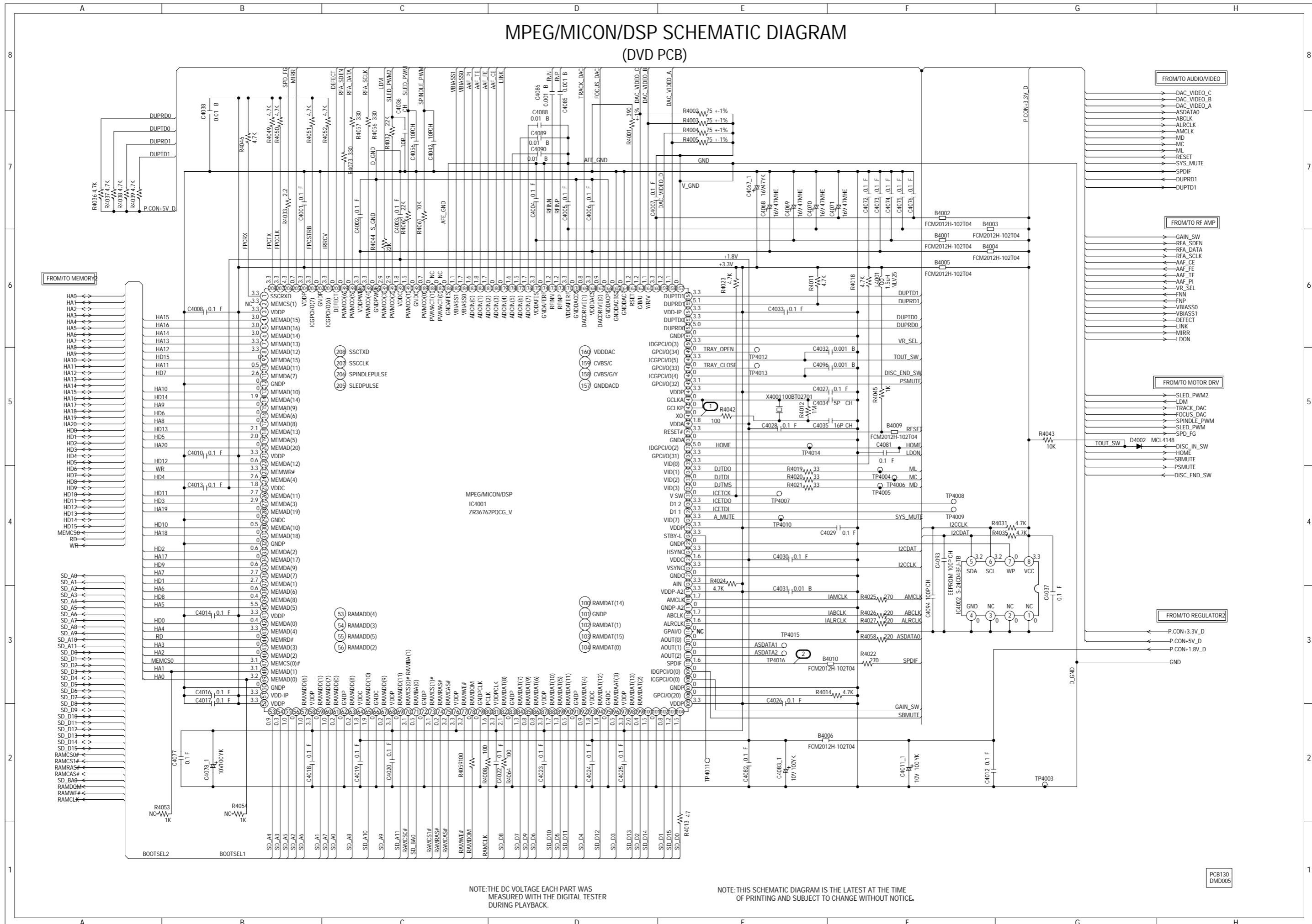


NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

PCB340  
CED016

# MPEG/MICON/DSP SCHEMATIC DIAGRAM (DVD PCB)

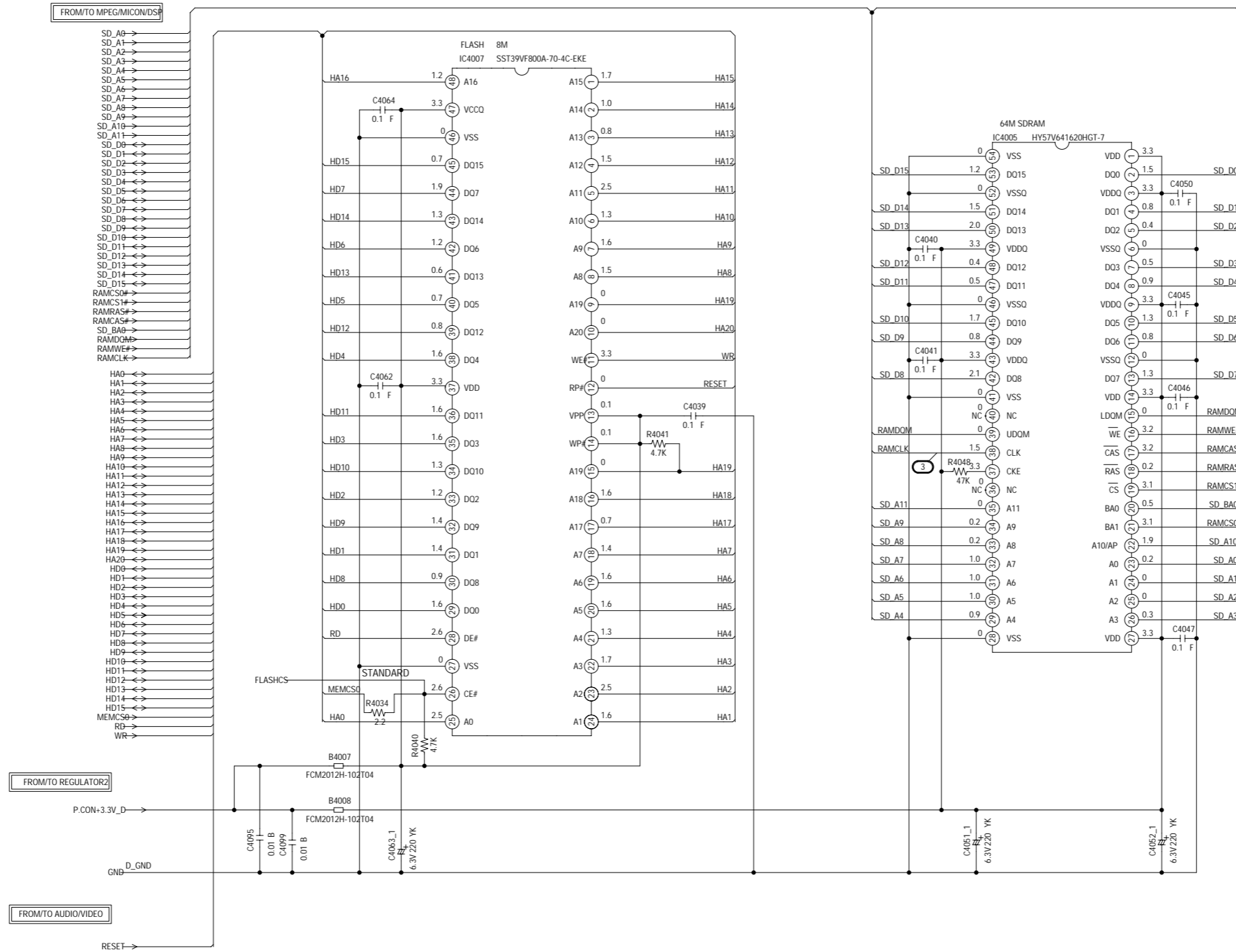


NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

PCB130  
DMD005

# MEMORY2 SCHEMATIC DIAGRAM (DVD PCB)

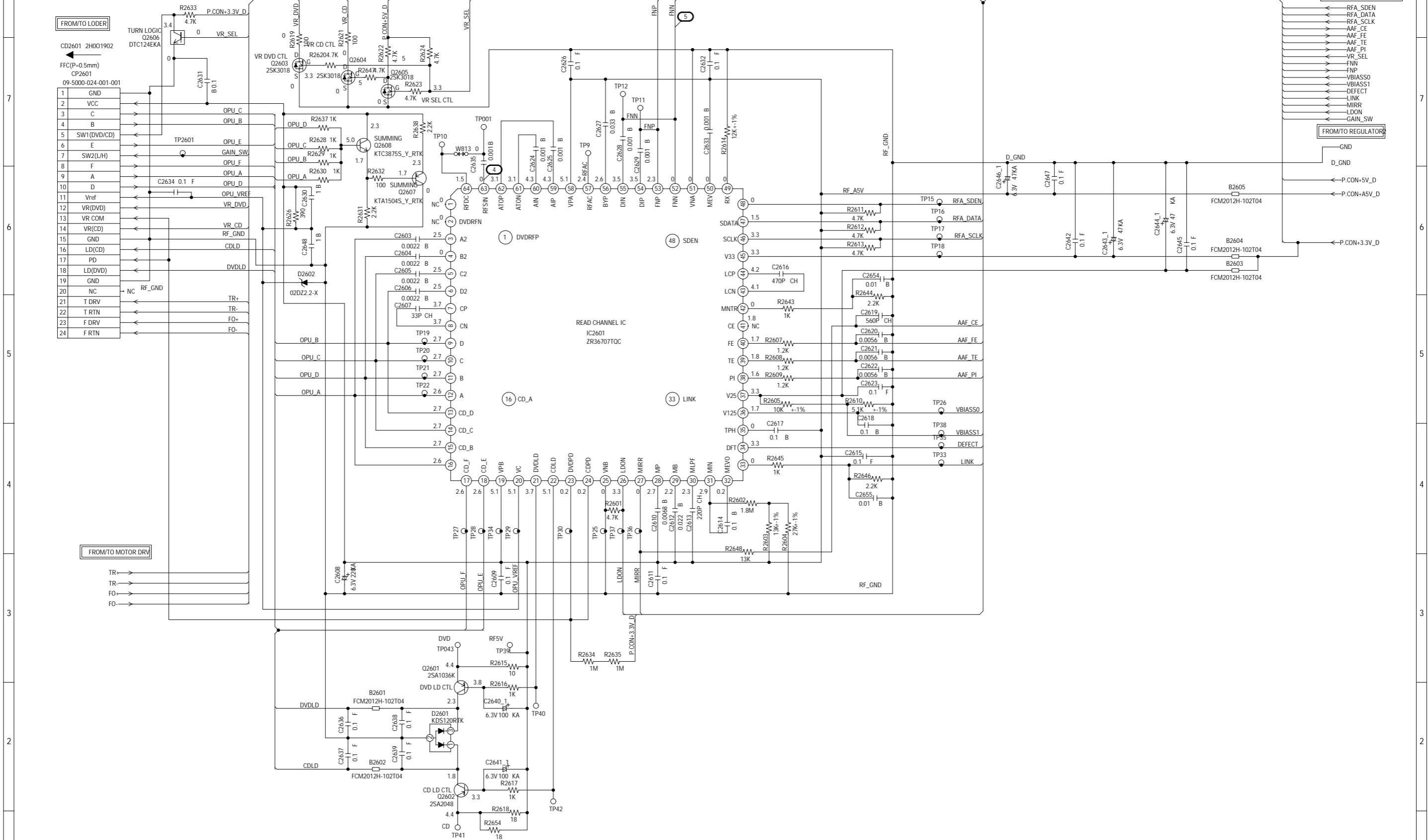


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

PCB130  
DMD005

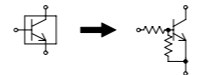
# RF AMP SCHEMATIC DIAGRAM (DVD PCB)



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

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

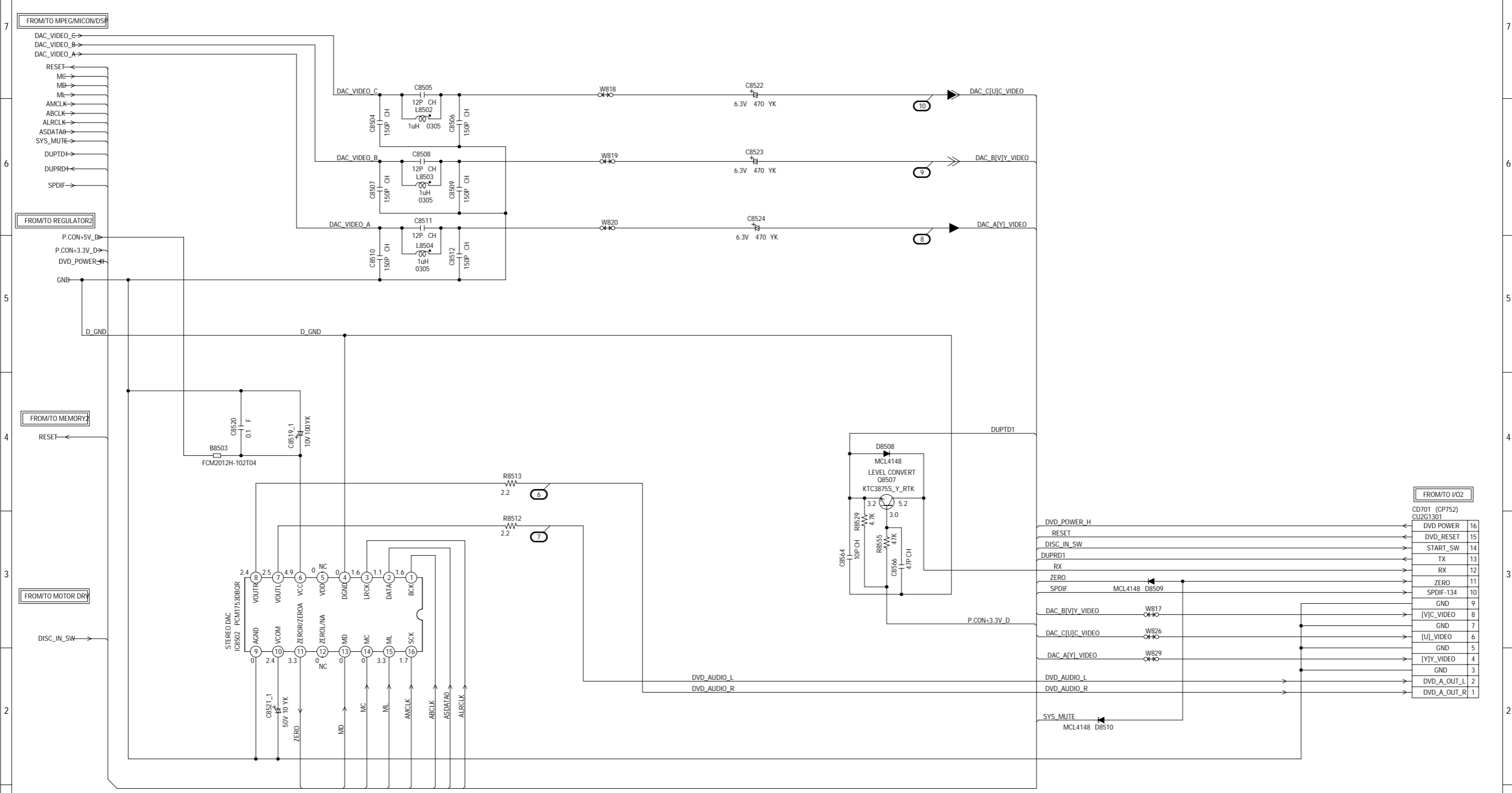
CAUTION: DIGITAL TRANSISTOR



PCB130  
DMD005



# AUDIO/VIDEO SCHEMATIC DIAGRAM (DVD PCB)



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

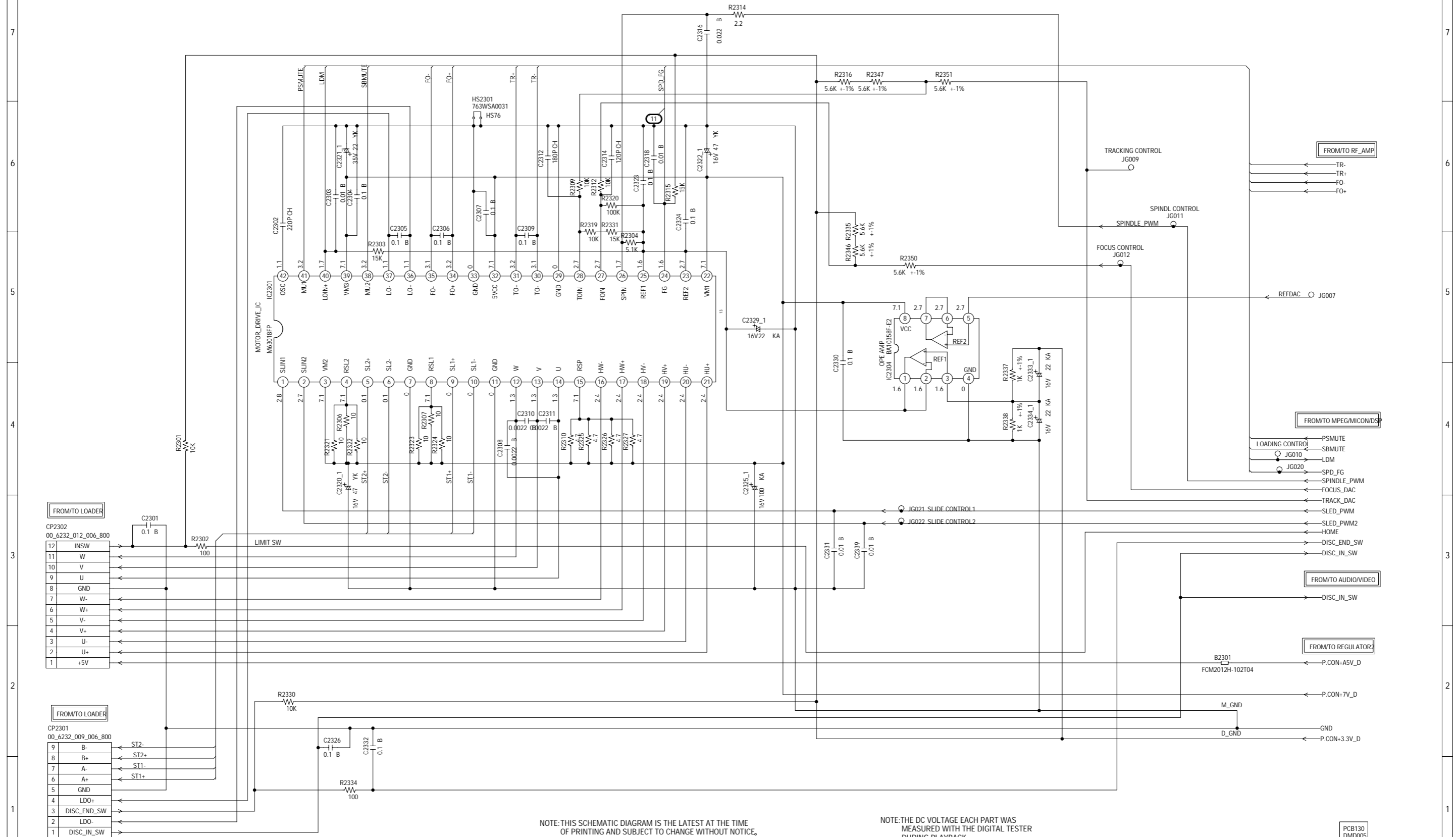
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

FROM/TO I/O2	
CD701 (CP752)	DVD_POWER 16
CU2G1301	DVD_RESET 15
	START_SW 14
	TX 13
	RX 12
	ZERO 11
	SPDIF-134 10
	GND 9
	[V]C_VIDEO 8
	GND 7
	[U]_VIDEO 6
	GND 5
	[Y]_VIDEO 4
	GND 3
	DVD_A_OUT_L 2
	DVD_A_OUT_R 1

PCB130  
DMD005

# MOTOR DRIVE SCHEMATIC DIAGRAM

(DVD PCB)

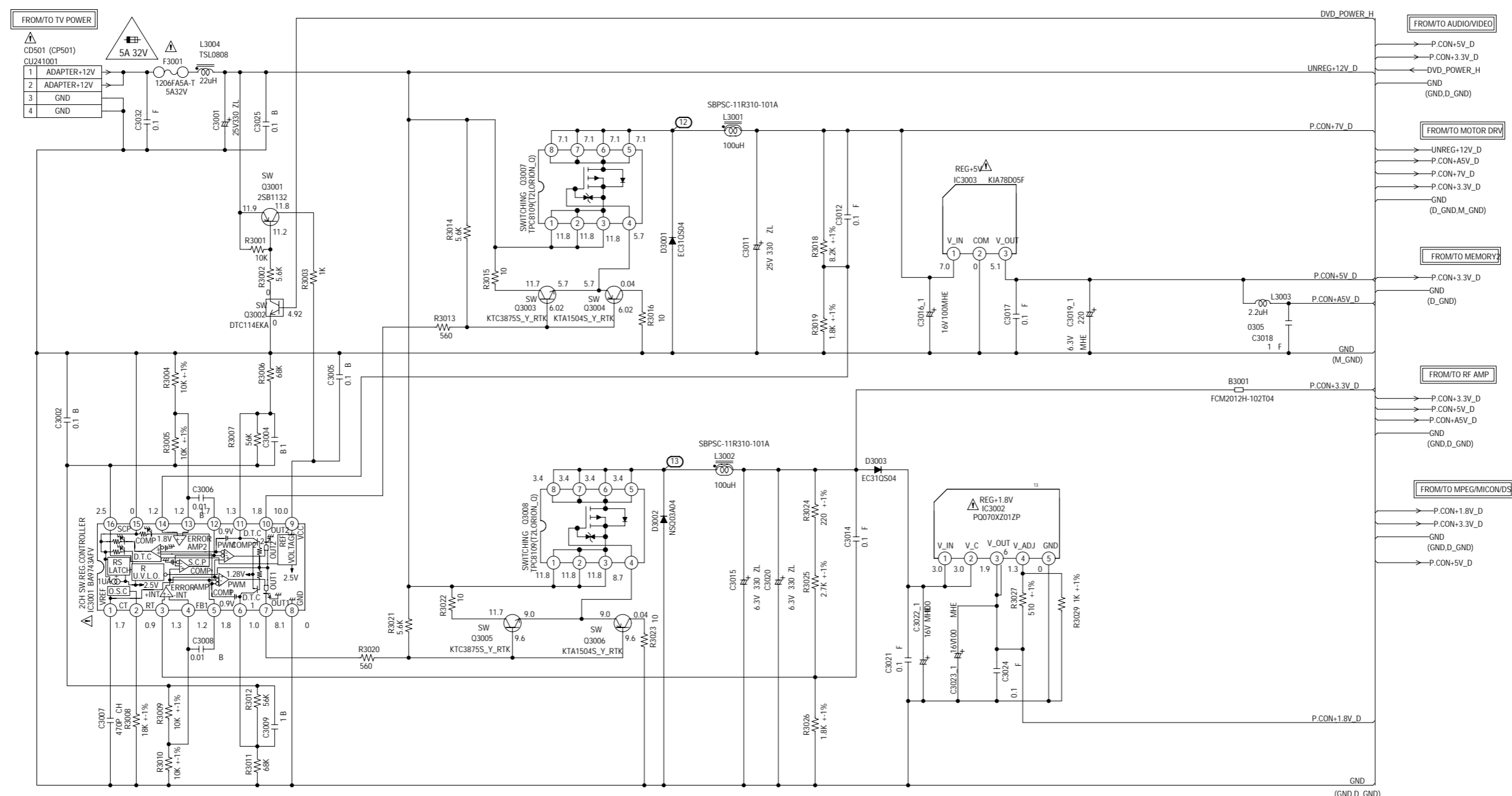


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

PCB130 DMD005

# REGULATOR2 SCHEMATIC DIAGRAM (DVD PCB)



**CAUTION** FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE 5A 32V (F3001)

**ATTENTION** POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 5A 32V (F3001)

**CAUTION** F3001 IS MANUFACTURED BY COOPER INDUSTRIES INC., TYPE 1206FA-T.

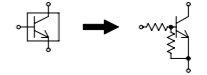
**CAUTION** SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

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

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

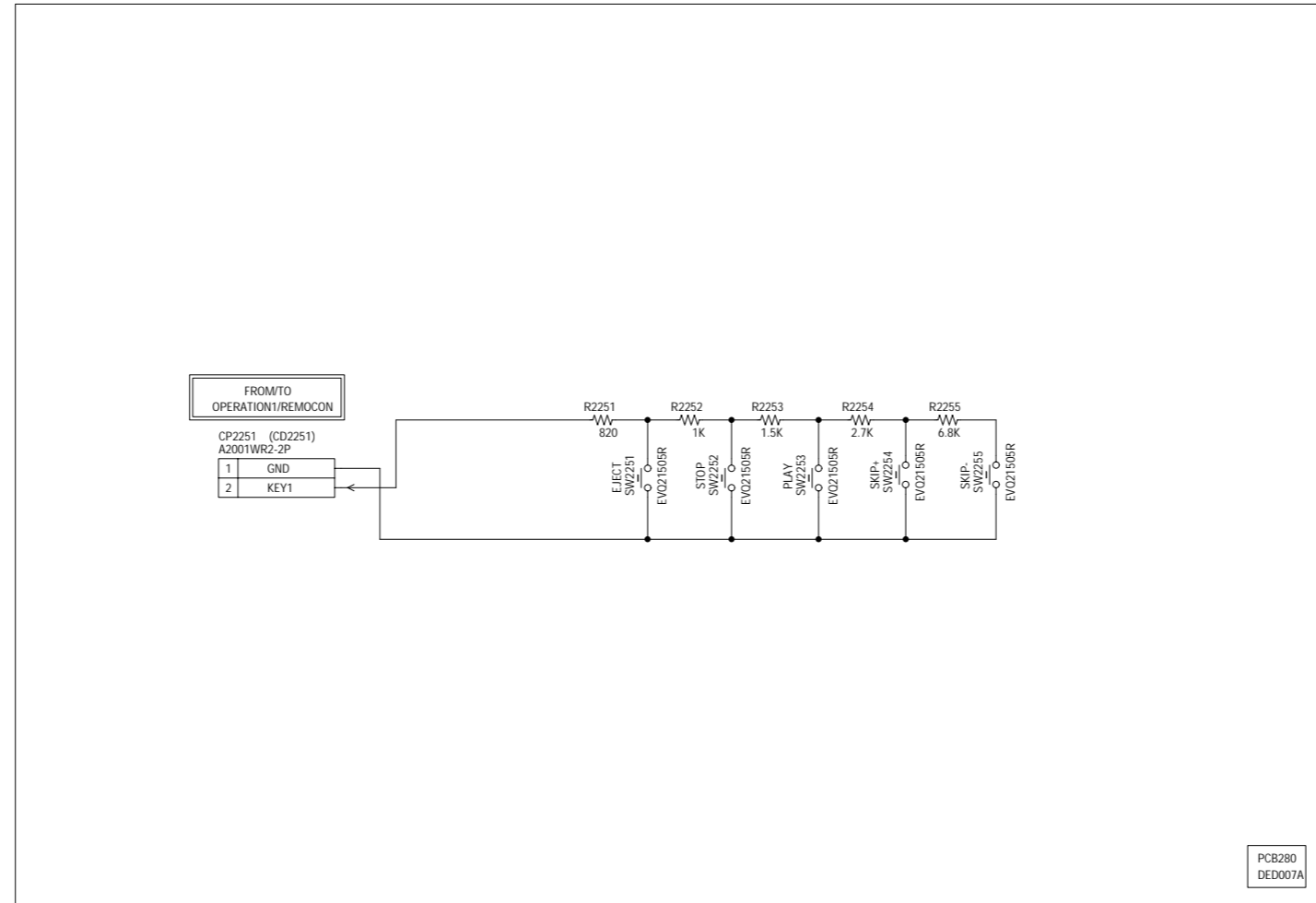
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION: DIGITAL TRANSISTOR



PCB130 DMD005

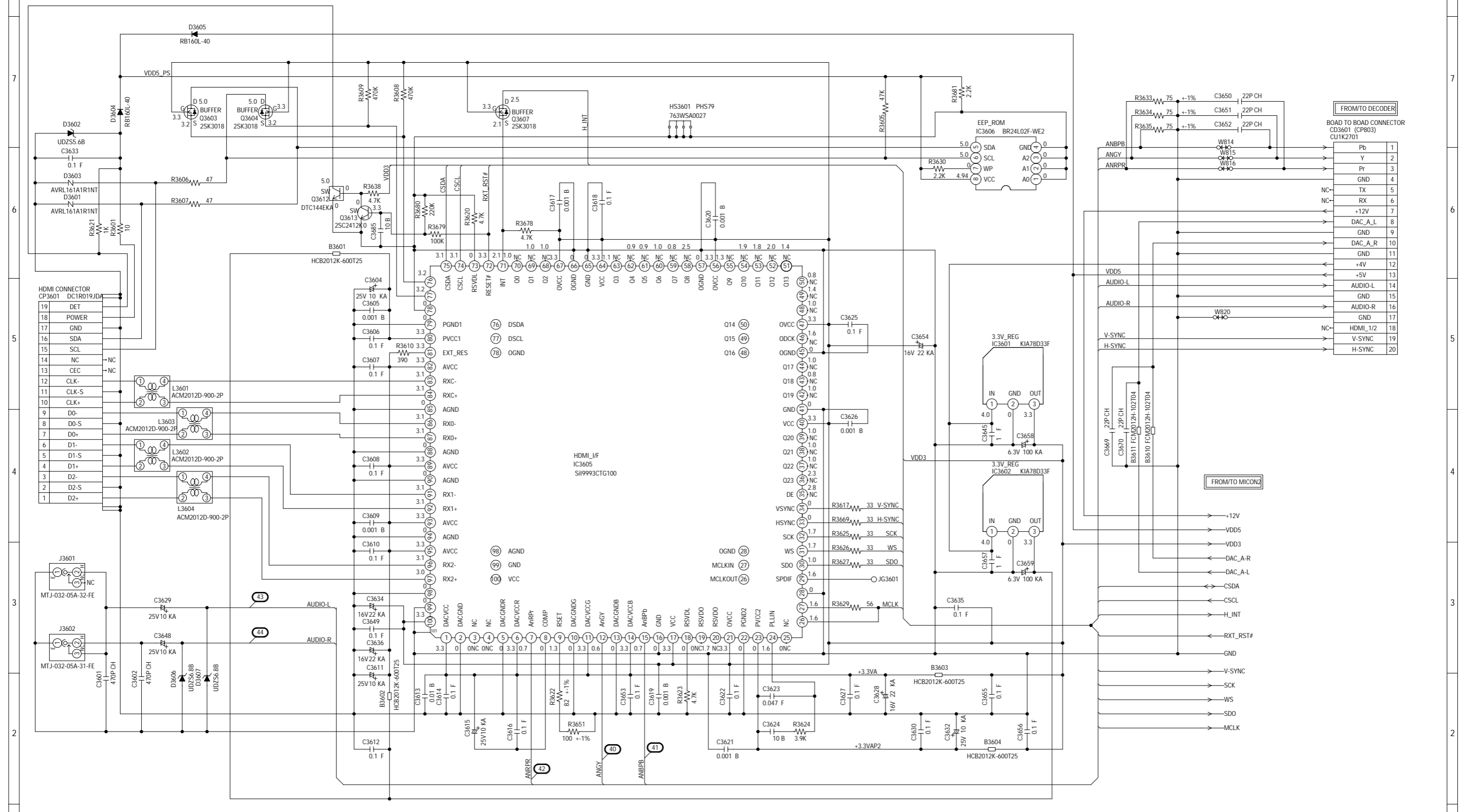
# OPERATION2 SCHEMATIC DIAGRAM (OPERATION 2 PCB)



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.

# INTERFACE SCHEMATIC DIAGRAM (HD-MI PCB)



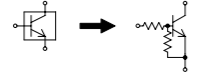
FROM TO DECODER

BOARD TO BOARD CONNECTOR  
CD3601 (CP803)  
CU1K2701

Pb	1
Y	2
Pr	3
GND	4
TX	5
RX	6
+12V	7
DAC_A_L	8
GND	9
DAC_A_R	10
GND	11
+4V	12
+5V	13
AUDIO-L	14
GND	15
AUDIO-R	16
GND	17
HDMI_1/2	18
V-SYNC	19
H-SYNC	20

FROM TO MICON2

CAUTION: DIGITAL TRANSISTOR



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

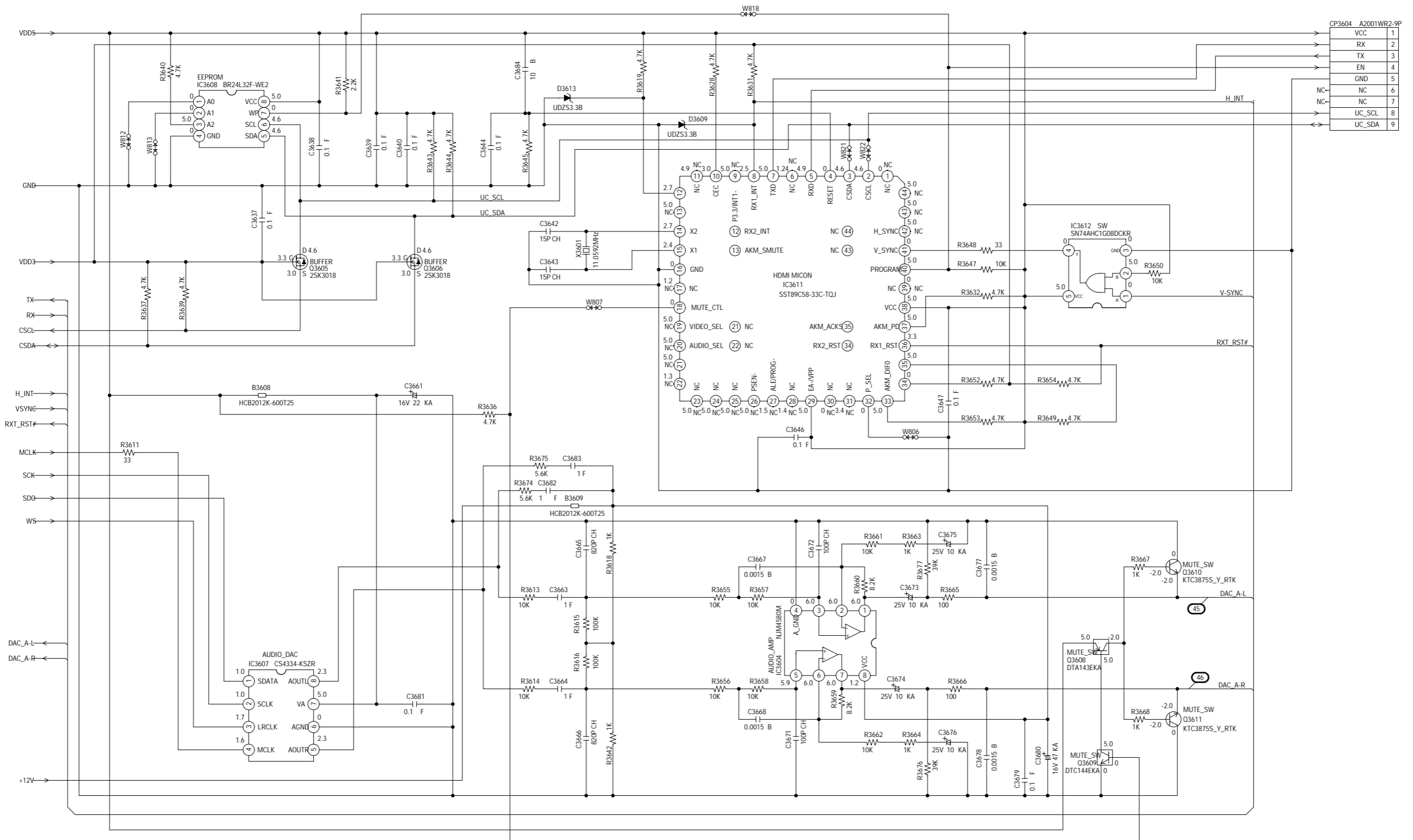
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCBDJ0  
CED011

# MICON2 SCHEMATIC DIAGRAM

(HD-MI PCB)

FROM/TO INTERFACE



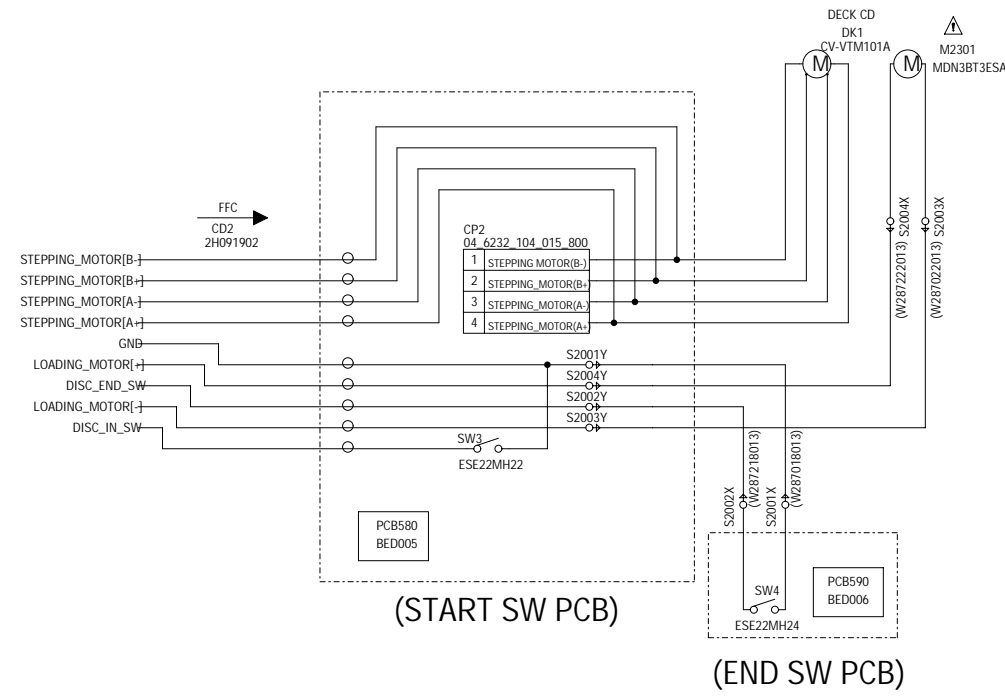
CAUTION: DIGITAL TRANSISTOR

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.

PCBDJ0 CED011

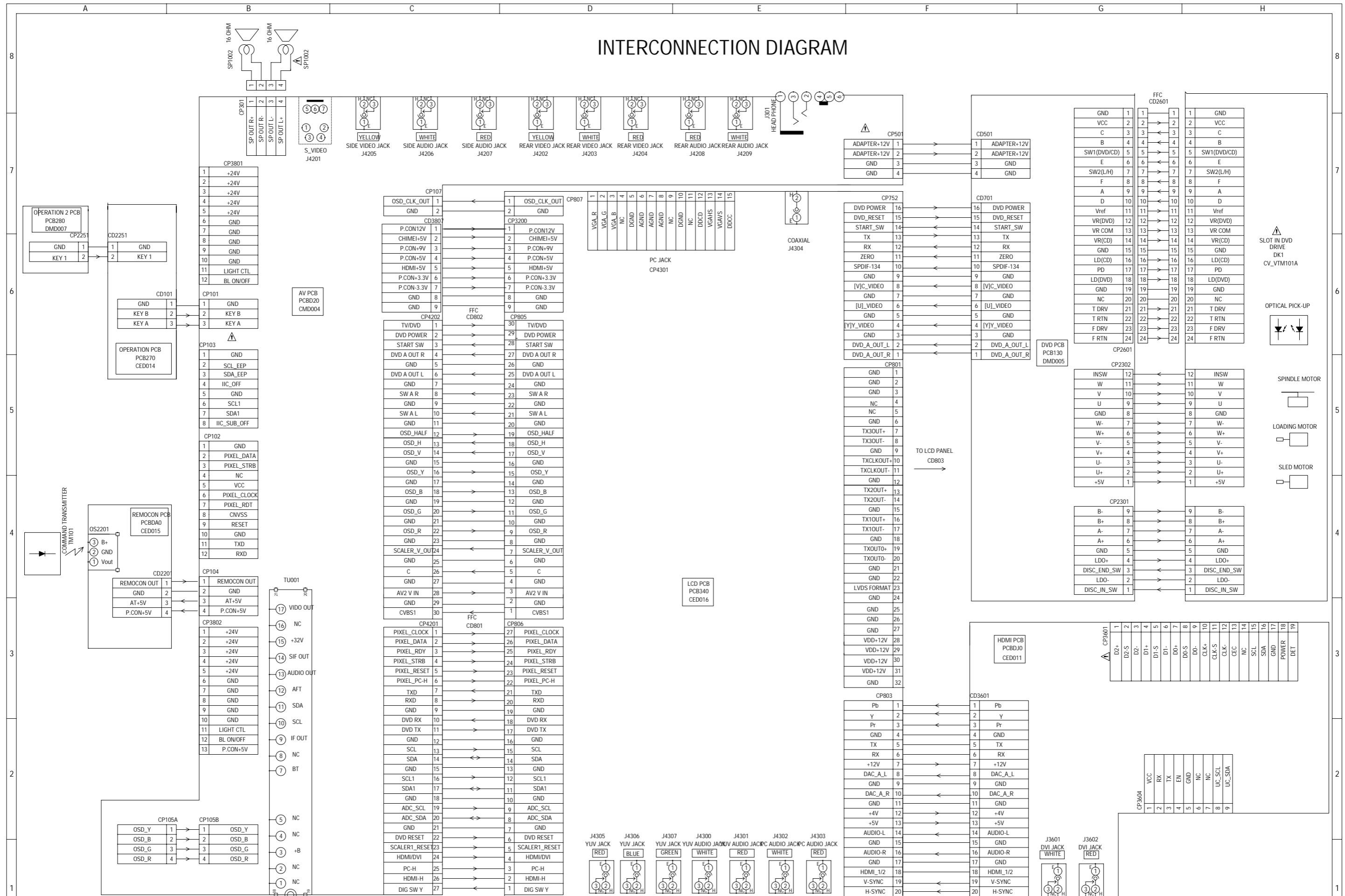
# START SW/END SW SCHEMATIC DIAGRAM



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

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

# INTERCONNECTION DIAGRAM



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

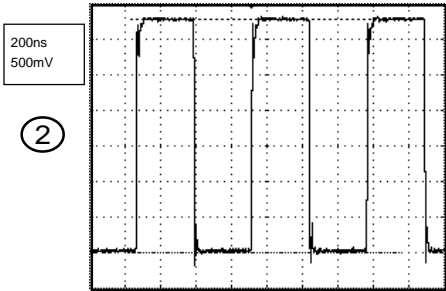
**ATTENTION** LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIÈCES.

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

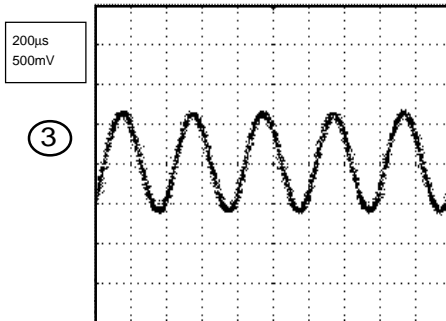


# WAVEFORMS

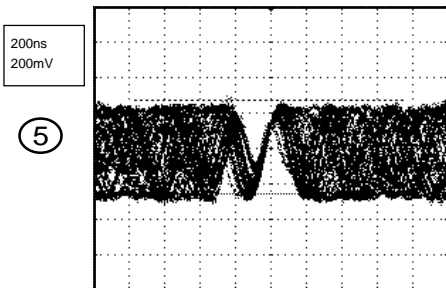
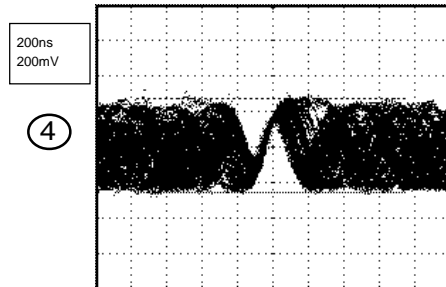
## MPEG/MICON/DSP



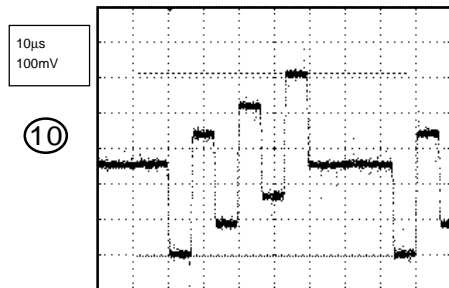
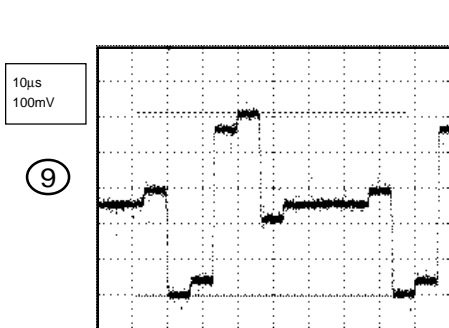
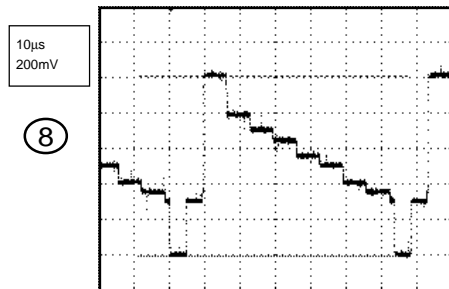
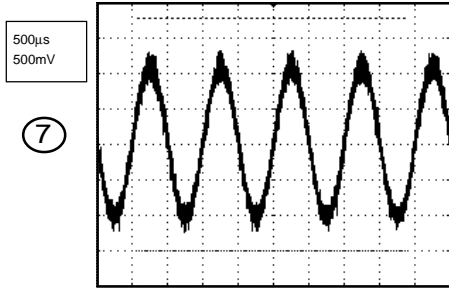
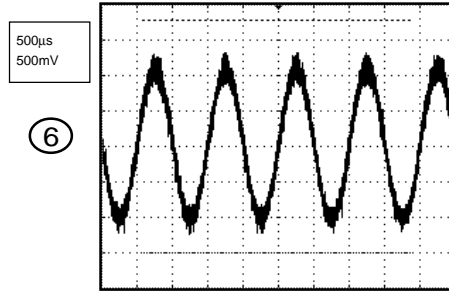
## MEMORY 2



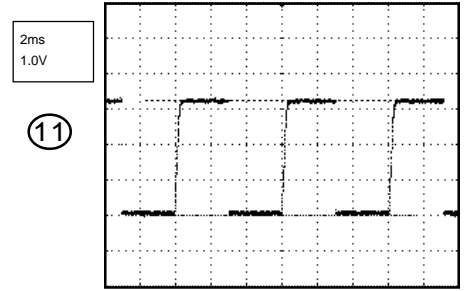
## RF\_AMP



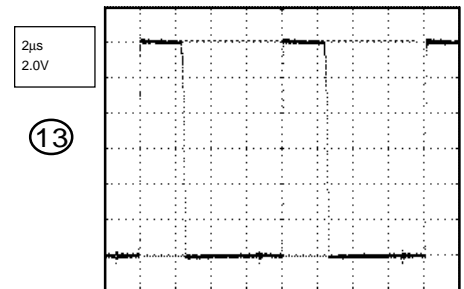
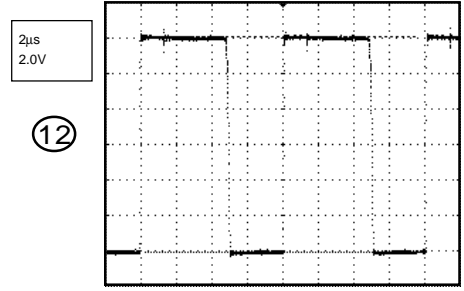
## AUDIO/VIDEO



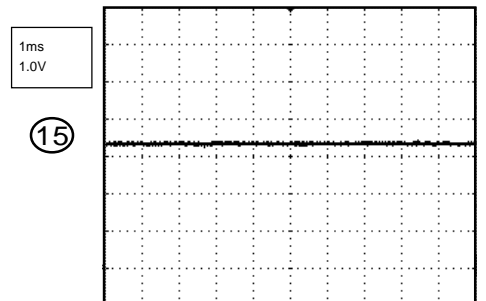
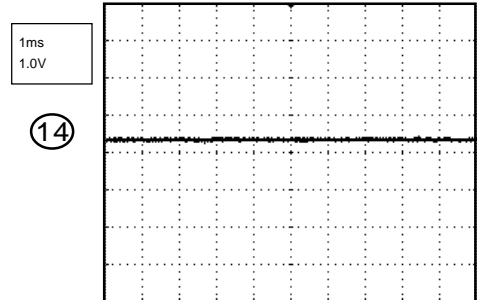
## MOTOR DRIVE



## REGULATOR 2

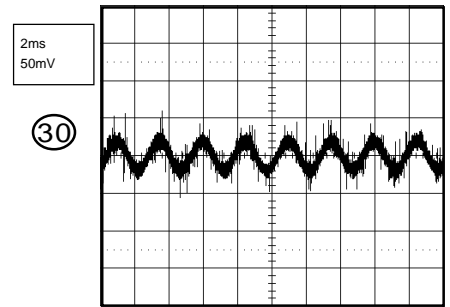
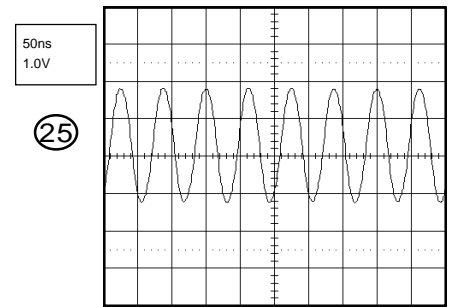
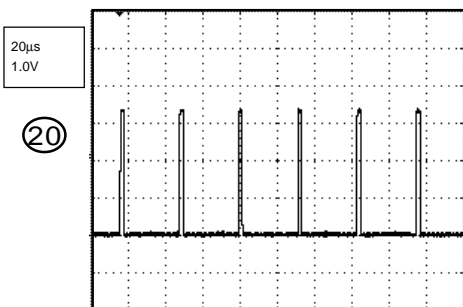
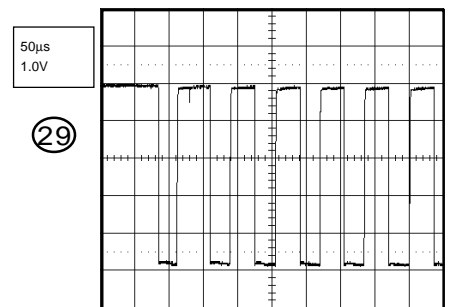
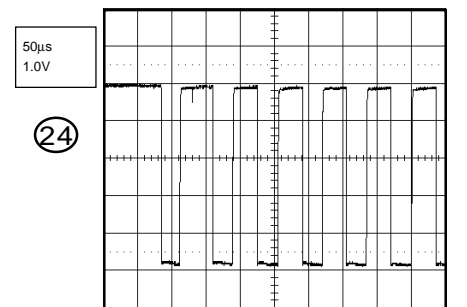
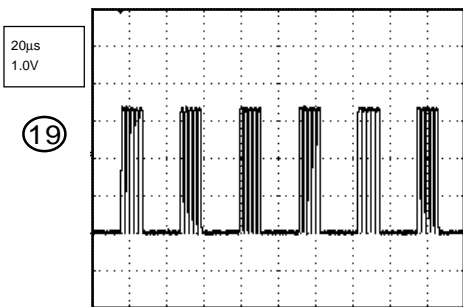
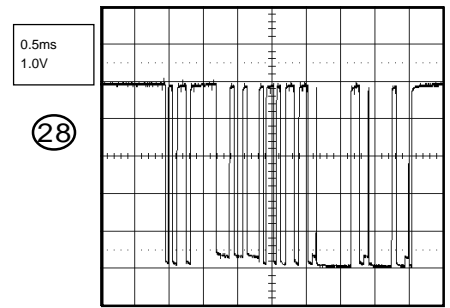
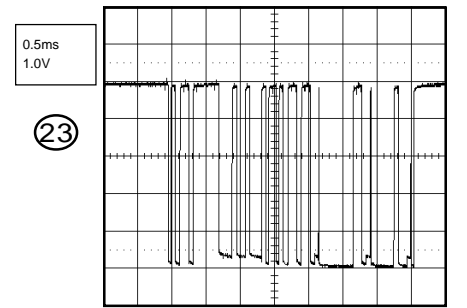
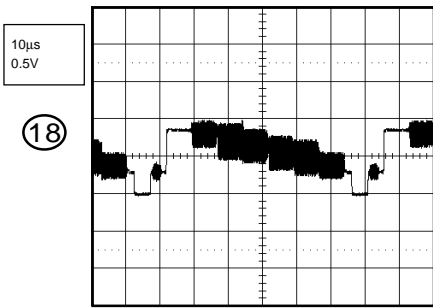
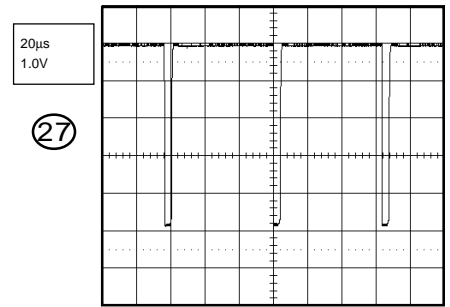
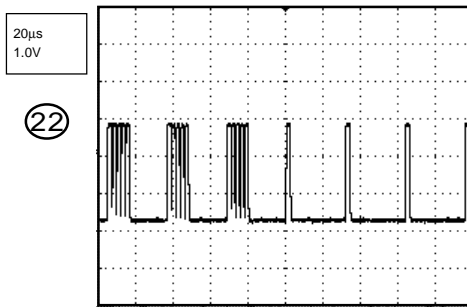
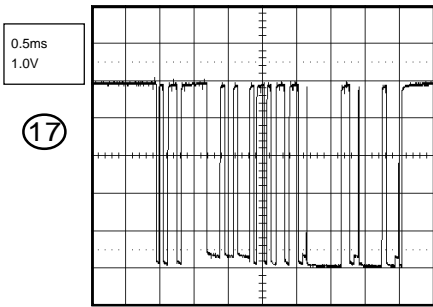
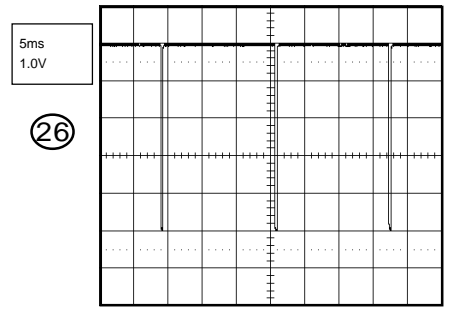
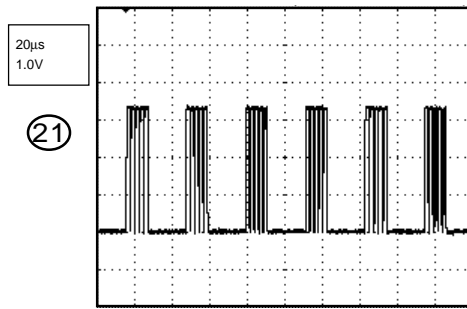
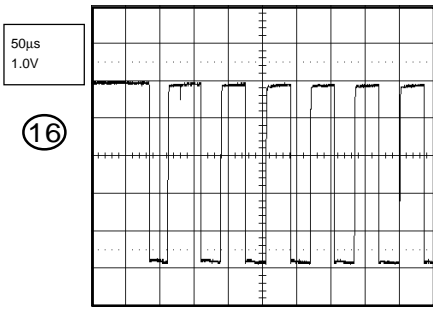


## TUNER/MICON



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

# WAVEFORMS

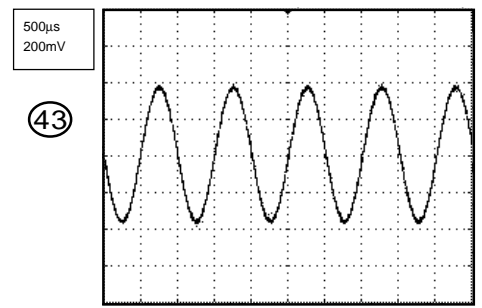
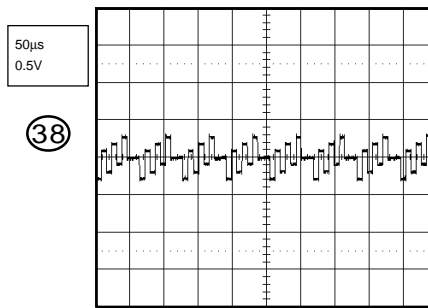
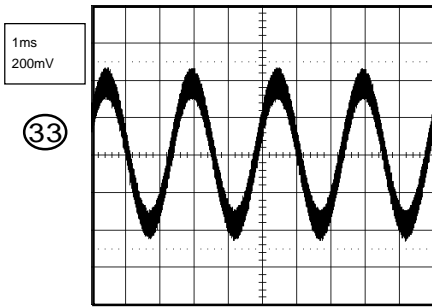
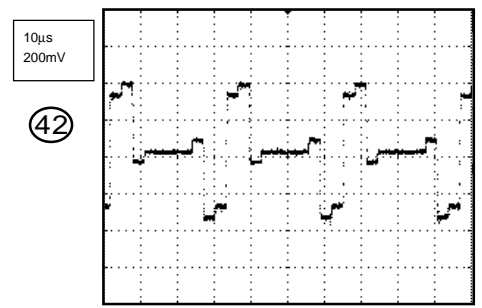
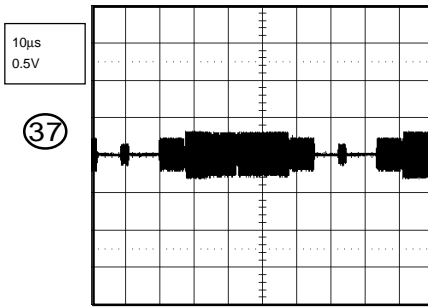
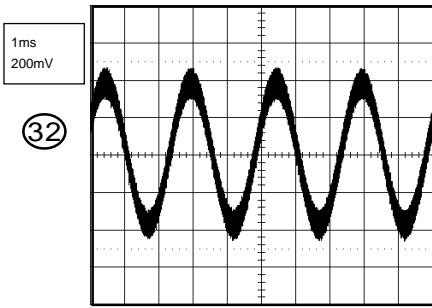
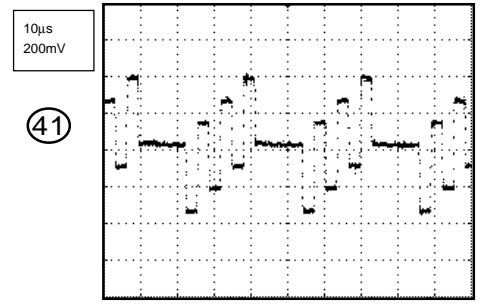
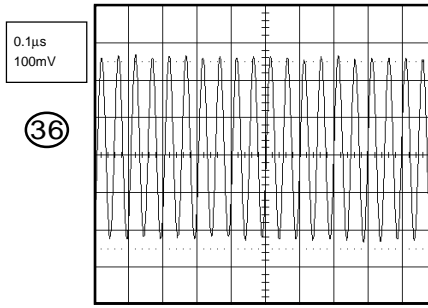
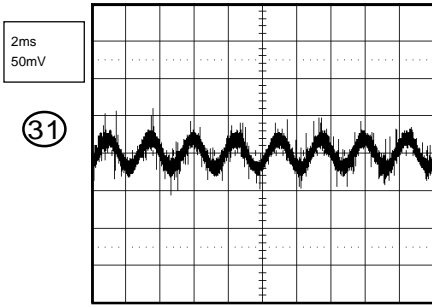


## SUB MICON

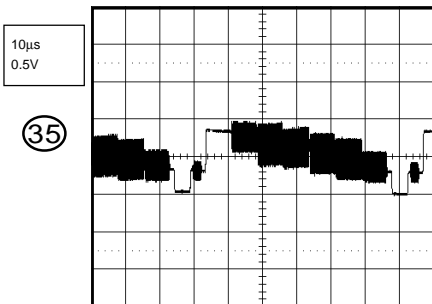
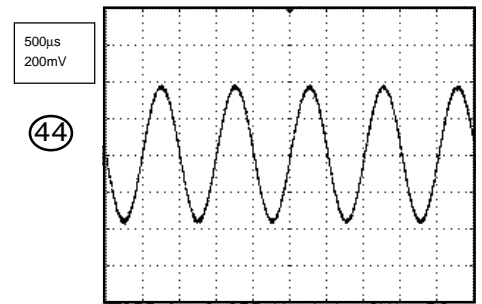
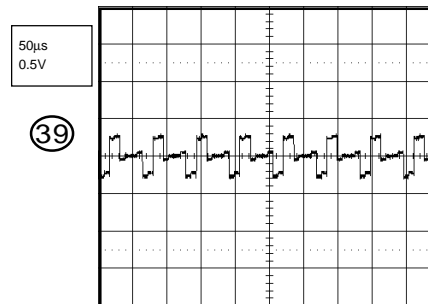
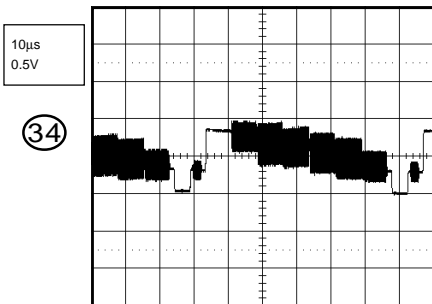
## SOUND AMP

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

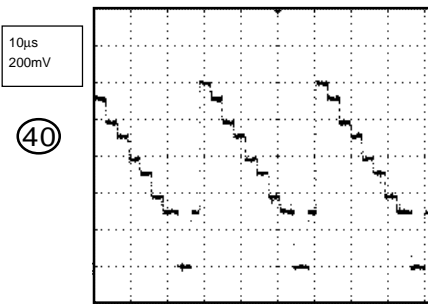
# WAVEFORMS



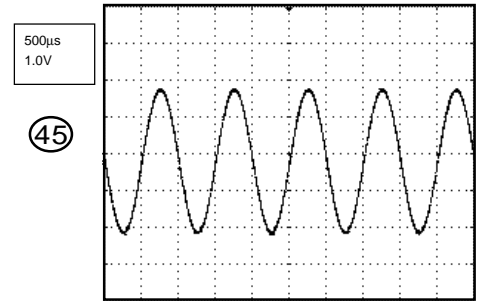
## DECODER



## INTERFACE



## MICON2



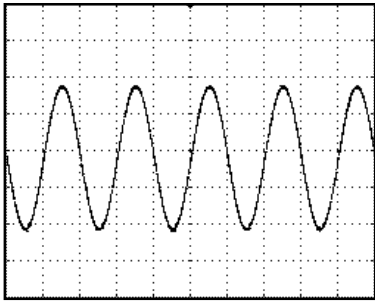
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

# WAVEFORMS

## IN/OUT 2

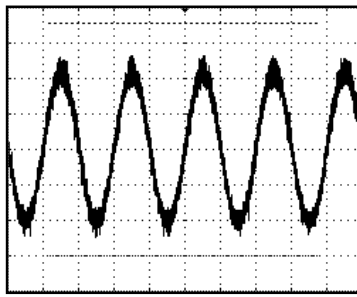
500 $\mu$ s  
1.0V

46



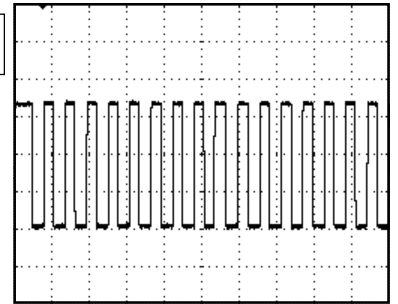
500 $\mu$ s  
500mV

51



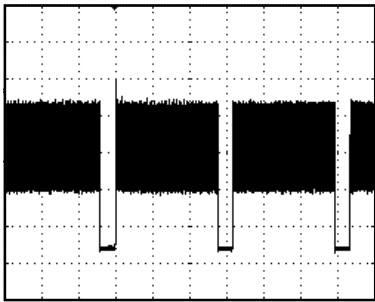
20 $\mu$ s  
1.0V

56



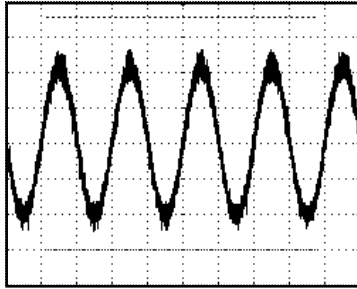
10 $\mu$ s  
500mV

47



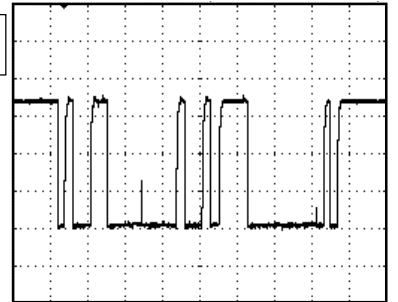
500 $\mu$ s  
500mV

52



50 $\mu$ s  
1.0V

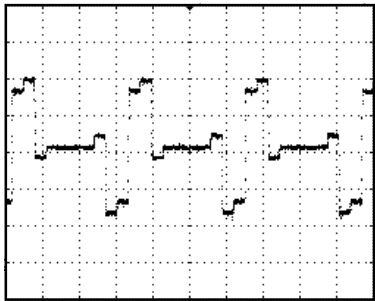
57



## ADC

10 $\mu$ s  
200mV

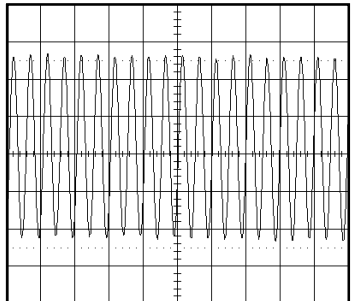
48



## SCALER 2

0.1 $\mu$ s  
100mV

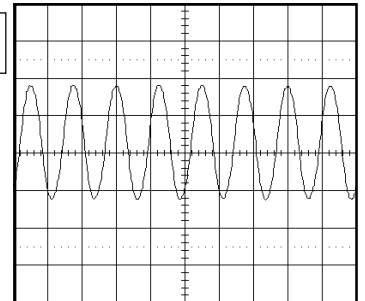
53



## REG/HD/VD

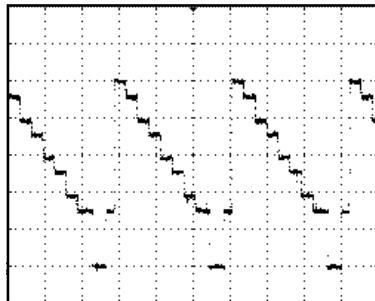
50ns  
1.0V

58



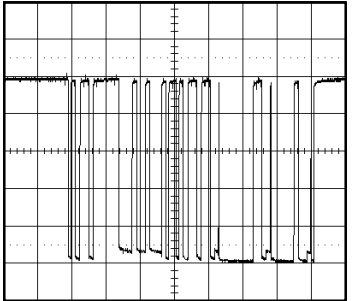
10 $\mu$ s  
200mV

49



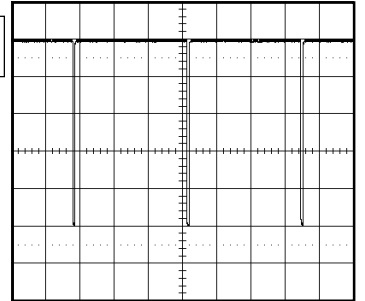
0.5ms  
1.0V

54



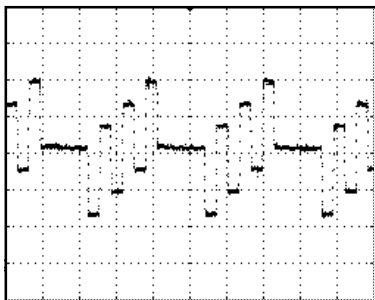
5ms  
1.0V

59



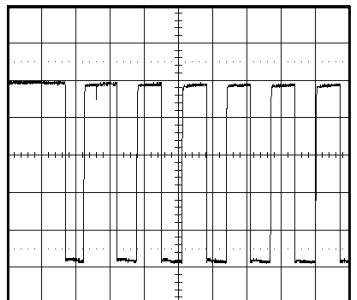
10 $\mu$ s  
200mV

50



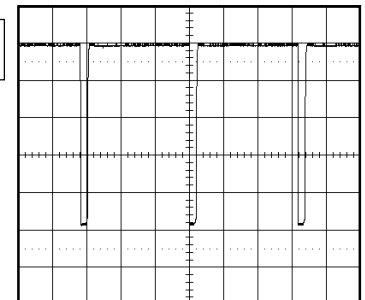
50 $\mu$ s  
1.0V

55

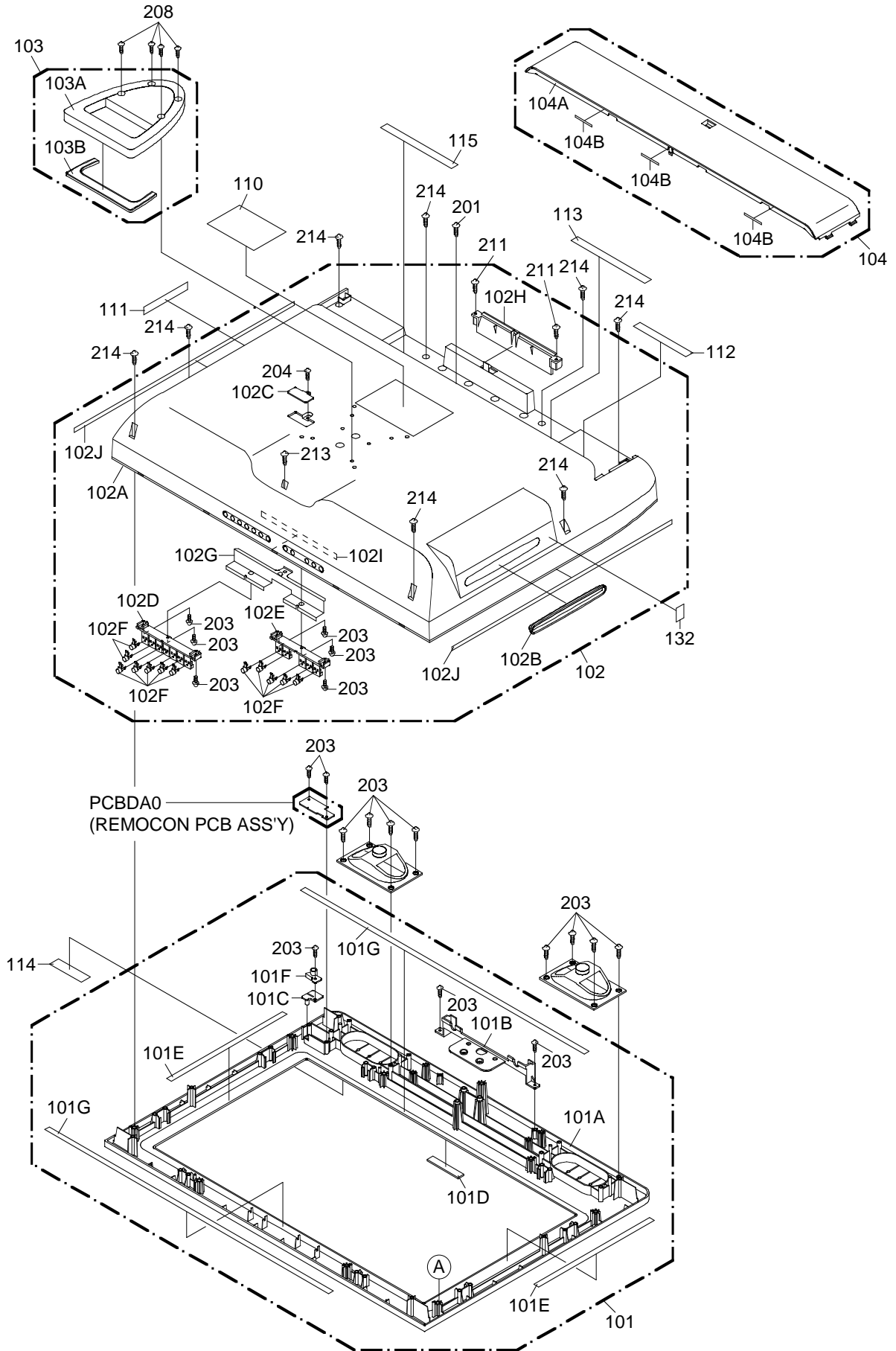


20 $\mu$ s  
1.0V

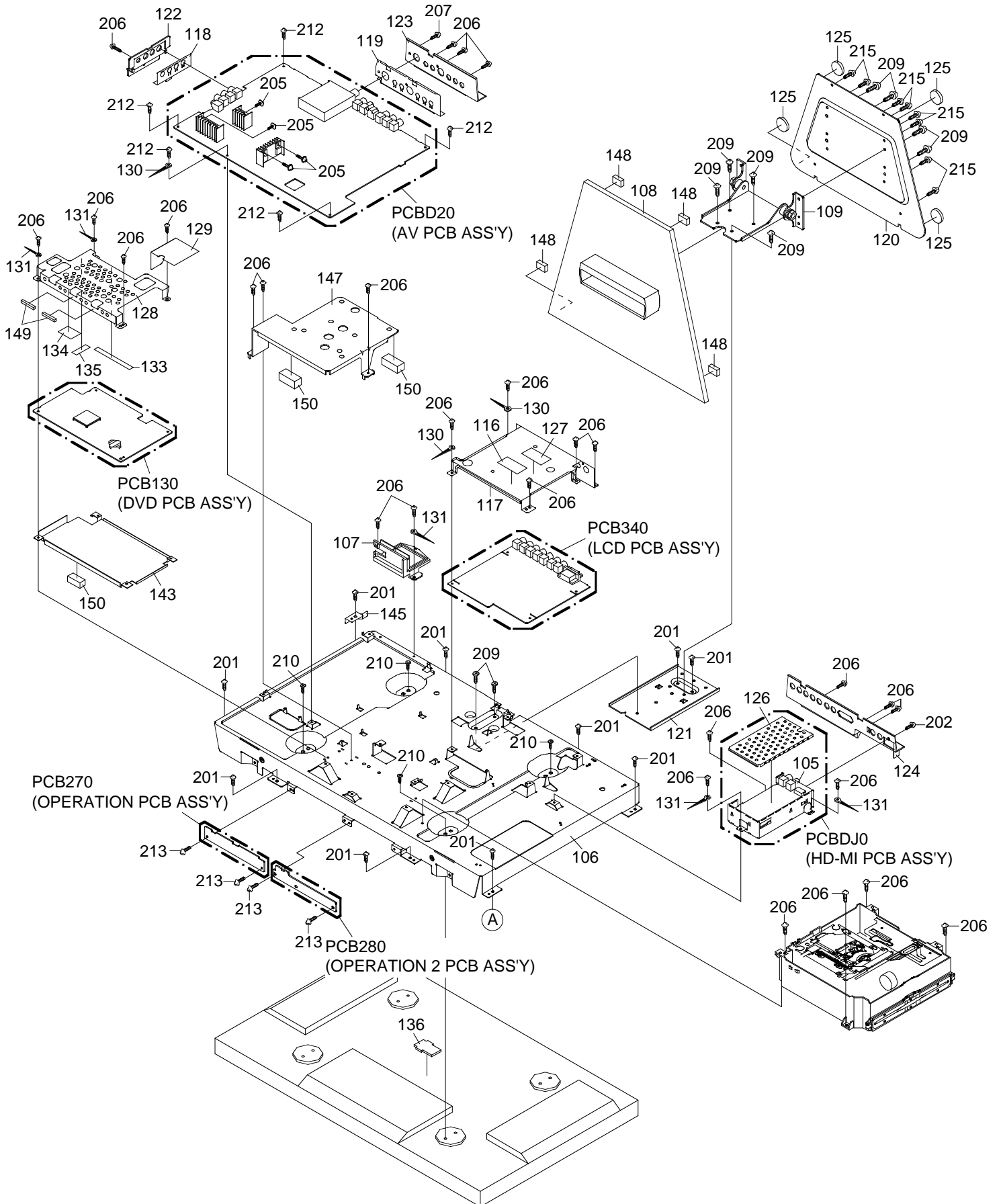
60



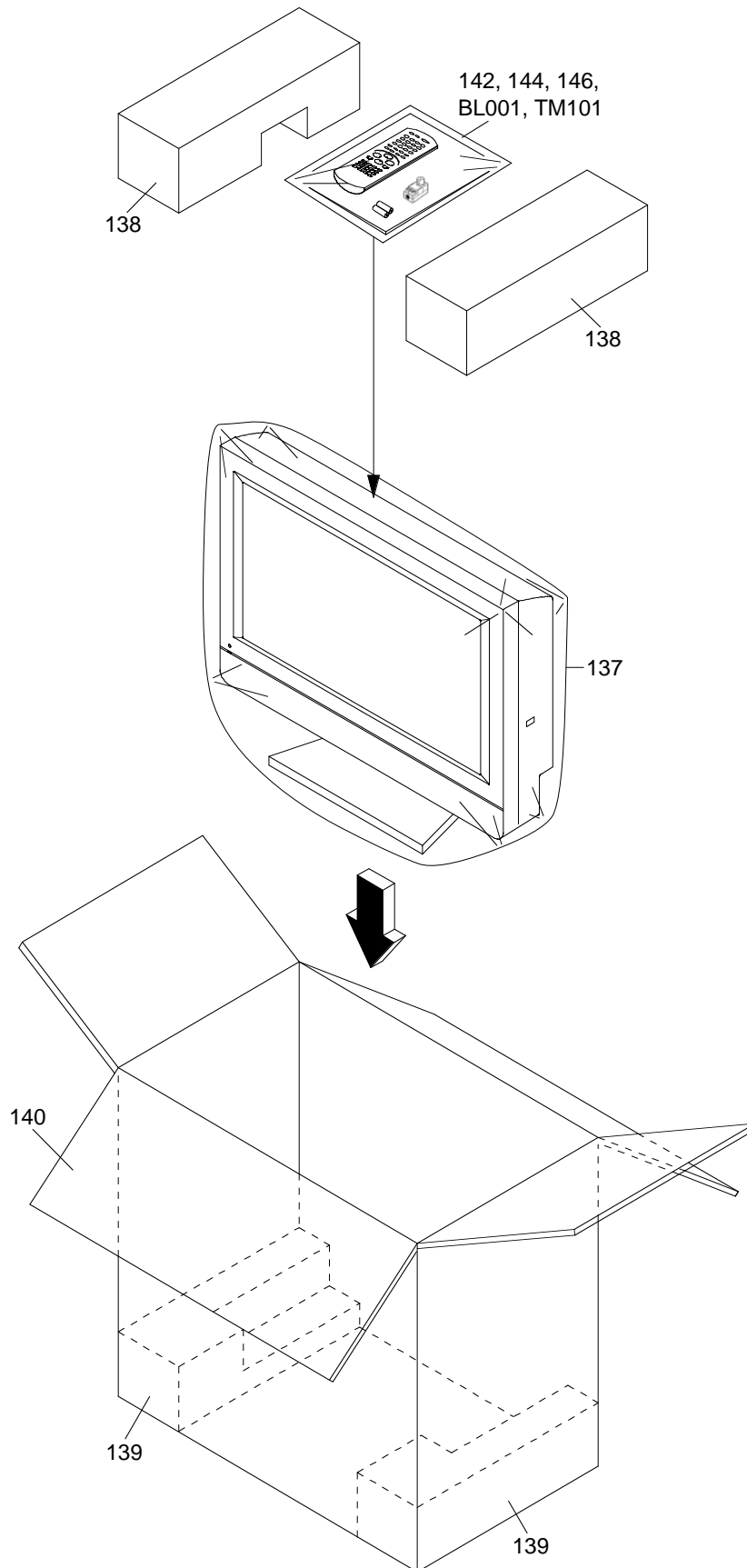
# MECHANICAL EXPLODED VIEW



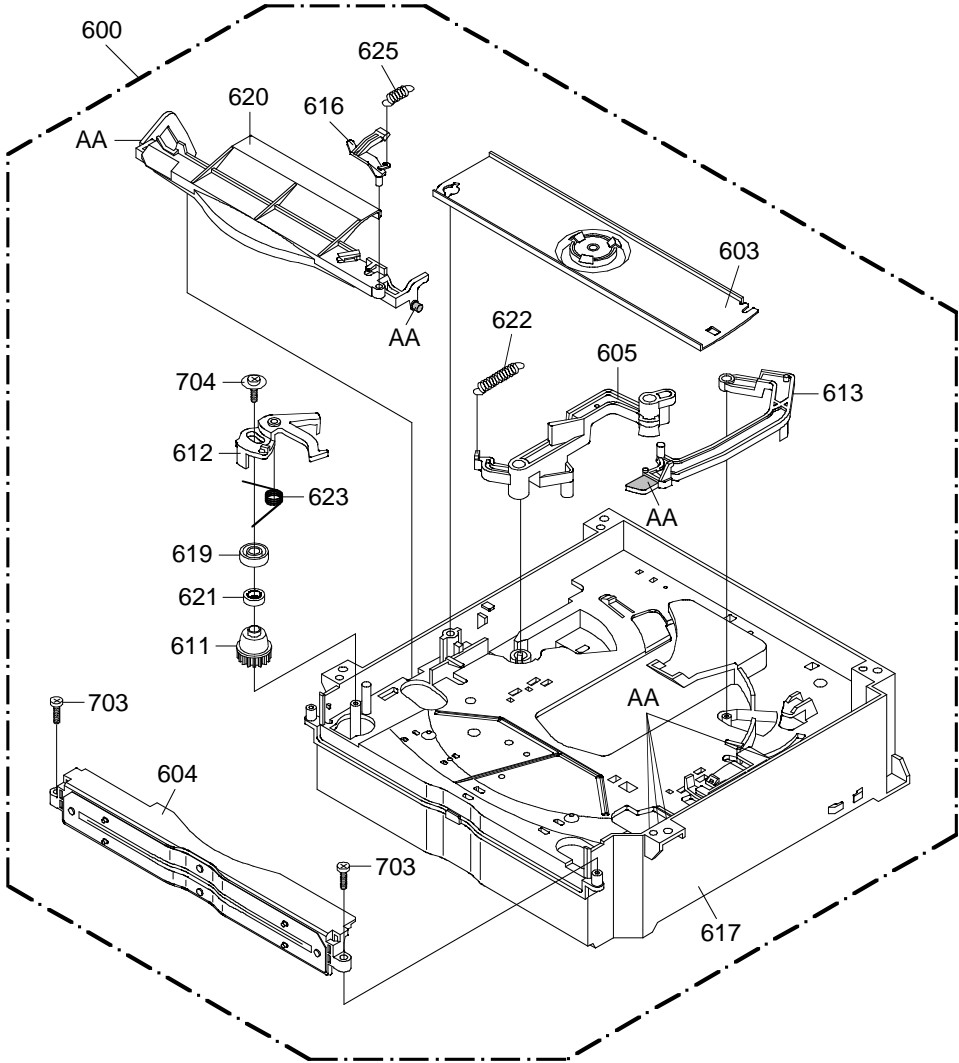
# MECHANICAL EXPLODED VIEW



# MECHANICAL EXPLODED VIEW (PACKING DIAGRAM)



# DVD DECK EXPLODED VIEW (TOP VIEW)

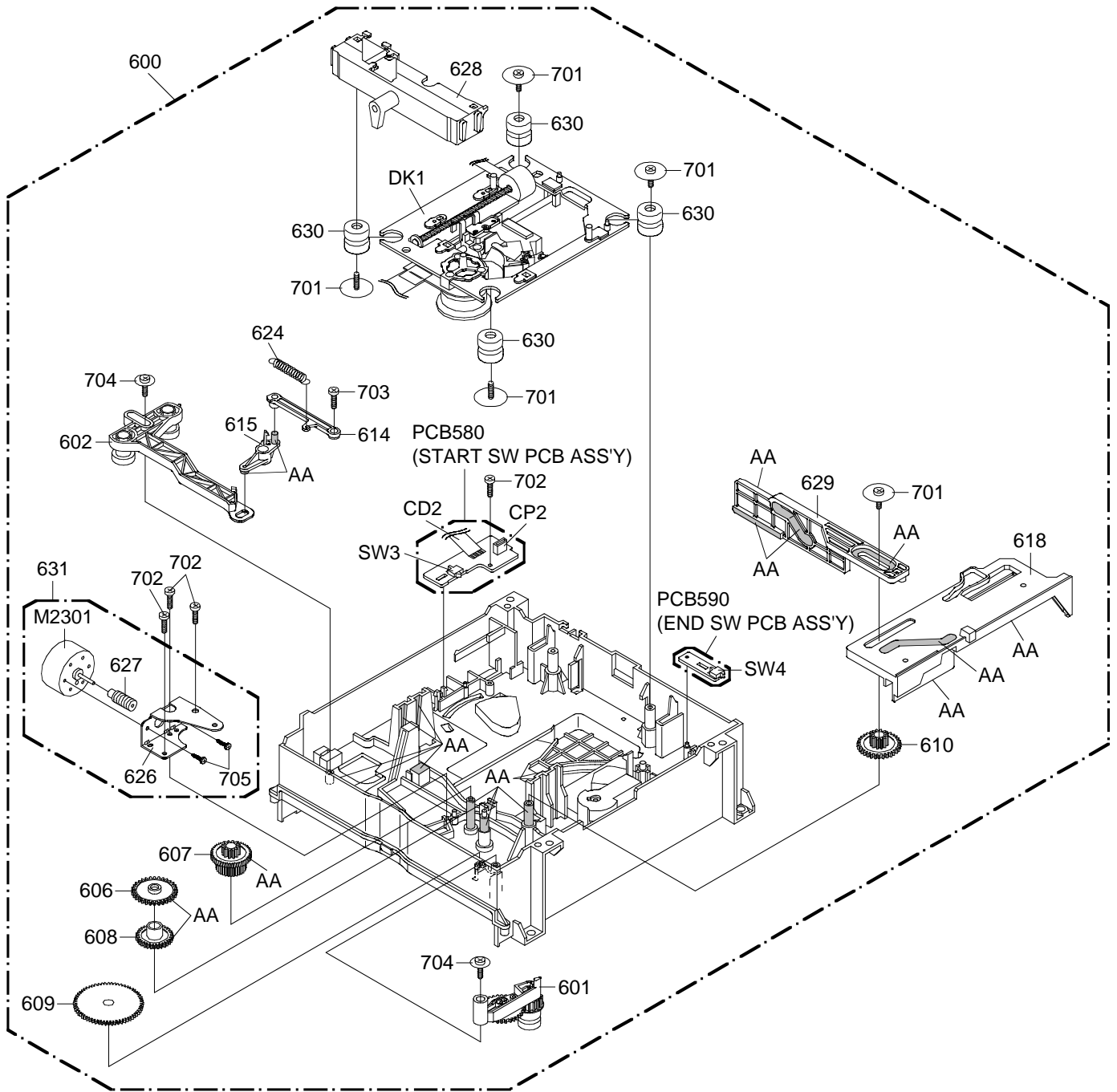


CLASS	MARK
GREASE	AA

**NOTE:** Applying positions AA for the grease are displayed for this section. Check if the correct grease is applied for each position.



# DVD DECK EXPLODED VIEW (BOTTOM VIEW)



CLASS	MARK
GREASE	AA

**NOTE:** Applying positions AA for the grease are displayed for this section. Check if the correct grease is applied for each position.

# MECHANICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description	
101	AE005307	7A7010041A	FRONT CABI ASS'Y	
101A	AE005308	701WPJ1286	CABINET,FRONT	
101B	AE005450	702WPB0065	COVER,HINGE	
101C	AE005102	713WPA0343	GLASS,LED	
101D	AD302008	7235490036	BADGE,BRAND	
101E	AE005451	800WQ0A049	FELT SHEET	
101F	AE005310	761WPA0350	HOLDER,LED	
101G	AE005452	800WQ00086	FELT SHEET	9x540xT=0.3
102	AE005311	7A7020018A	REAR CABI ASS'Y	
102A	AE005312	702WPJ0030	CABINET,BACK	
102B	AE005313	704WPE0001	SLOT,DVD	
102C	AE005314	706WPB0004	COVER,CONNECTOR	
102D	AE005106	735WPA0829	BUTTON,FRAME(TV)	
102E	AE005315	735WPA0830	BUTTON,FRAME(DVD)	
102F	AE005107	737WPE0013	BUTTON,CAP	
102G	AE005316	752WSA0446	SHIELD,BUTTON-DVD	
102H	AE005518	702WPB0062	COVER,HINGE 2	
102I	AE002928	800WQ00066	FELT SHEET	
102J	AE005456	800WQ00087	FELT SHEET	9x380xT=0.3
103	AE005108	7A7050004A	HANDLE ASS'Y	
103A	AE005109	705WPB0022	HANDLE 1	
103B	AE005110	705WPB0023	HANDLE 2	
104	AE005519	7A7020030A	COVER,BACK ASS'Y	
104A	AE005327	702WPB0061	COVER,BACK	
104B	AE005467	800WQ00088	FELT SHEET	2x20xT0.3
105	AE005111	752WSA0426	SHIELD,HDMI	
106	AE005320	761WSA0176	COVER,LCD	
107	AE005113	701WPB0207	HOLDER,AC-CORD	
108	AE005457	704WPB0006	STAND	
109	AE005115	706JSA0011	HINGE ASS'Y	
110	AE005321	7225490165	SHEET,RATING	
111	AE005322	7230007867	SHEET,JACK(SIDE)	
112	AE005323	7230007864	SHEET,JACK 1	
113	AE005324	7230007865	SHEET,JACK 2	
114	AE005325	7230007829	POP LABEL	
115	AE005326	7230007866	SHEET,JACK 3	
116	AE005122	726000A073	SHEET,CAUTION	
117	AE005123	752WSA0425	SHIELD,LCD	
118	AE005124	752WSA0427	SHIELD,JACK(SIDE)	
119	AE005125	752WSA0428	SHIELD,JACK1	
120	AE005126	761WSA0184	ANGLE,STAND	
121	AE005127	761WSA0185	ANGLE,HINGE	
122	AE005128	771WPB0023	PLATE,JACK(SIDE)	
123	AE005129	771WPB0024	PLATE,JACK 1	
124	AE005130	771WPB0025	PLATE,JACK 2	
125	AE004521	800WFA0063	CUSHION,LEG	
126	AE004831	752WSA0413	HDMI SHIELD,COVER	
127	AE005383	7220001115	SHEET,CSA WARNING	
128	AE004529	752WSA0424	SHIELD,DVD	
129	AE005328	752WSA0435	SHIELD,FFC	
130	AD301370	899EFBA002	WIRING-CLIP	
131	BZ710039	8995034000	CORD CLIP UL CO.	
132	AE000156	7235630001	SHEET,DVD	
133	AE005329	7250000590	SHEET,PC 1	
134	AE005330	7250000591	SHEET,PC 2	
135	AE005331	7250000592	SHEET,PC 3	
136	AE005056	800WFOA008	CUSHION	
137	AD302402	791WHA0061	LAMIFILM BAG	
138	AE005333	792WHA0577	PACKAGE, TOP	
139	AE005334	792WHA0578	PACKAGE,BOTTOM	

# MECHANICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description	
140	AE005335	793WCD1574	GIFT BOX	
141	AE005336	A5P001D975	INSTRUCTION BOOK KIT	
142	AE003390	JA4UD200	POLYBAG,INSTRUCTION(REDCAUTION)	
143	AE005520	752WSA0449	SHIELD,DVD 2	
144	AE004971	J3R40129A	INFORMATION SHEET	
145	AE005464	752WSA0452	SHIELD,REMOCON	
146	AE005337	J5P00121A	INSTRUCTION BOOK	
147	AE005318	761WSA0208	ANGLE,HANDLE	
148	AE005463	800WFA0065	CUSHION,LEG	
149	AE005521	8965TS0415	CUSHION 65TS4-2	15x50x16
150	AE005386	8965TS2020	CUSHION 65TS10.5-20	20x15x12
201	AE004847	8117540A6U	SCREW,TAP TITE(B0) TRUSS	4x16
202	AE005214	810213080U	SCREW,PAN	M3x8
203	AE003528	8110630A0U	SCREW,TAP TITE(P) BRAZIER	3x10
204	AE003529	811063080U	SCREW,TAP TITE(P) BRAZIER	3x8
205	AE003524	8109I30A0U	SCREW,TAP TITE(B) WH7	3x10
206	AE004849	8109230A0U	SCREW,TAP TITE(B) BIND	3x10
207	AE005138	810763060U	SCREW,TAP TITE(S) BRAZIER	3x6
208	AE005471	8102240A2U	SCREW,BIND	M4x12
209	AE005338	810A140A0U	SCREW,WASHER(A)	M4x10
210	AE005141	810A14060U	SCREW,WASHER(A)	M4x6
211	AE003530	811022680U	SCREW,TAP TITE(P) BIND	2.6x8
212	AE005473	8109D30A0U	SCREW,TAP TITE(B) WH8	3x10
213	AE005474	810923070U	SCREW,TAP TITE(B) R BIND	3x7
214	AE005470	8110230A4U	SCREW,TAP TITE(P) BIND	3x14
215	AE005475	8110K30A0U	SCREW,TAP TITE(P) LAMIHEAD	3x10

# MECHANICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description	
101	AE005307	7A7010041A	FRONT CABI ASS'Y	
101A	AE005308	701WPJ1286	CABINET,FRONT	
101B	AE005450	702WPB0065	COVER,HINGE	
101C	AE005102	713WPA0343	GLASS,LED	
101D	AD302008	7235490036	BADGE,BRAND	
101E	AE005451	800WQ0A049	FELT SHEET	
101F	AE005310	761WPA0350	HOLDER,LED	
101G	AE005452	800WQ00086	FELT SHEET	9x540xT=0.3
102	AE005311	7A7020018A	REAR CABI ASS'Y	
102A	AE005312	702WPJ0030	CABINET,BACK	
102B	AE005313	704WPE0001	SLOT,DVD	
102C	AE005314	706WPB0004	COVER,CONNECTOR	
102D	AE005106	735WPA0829	BUTTON,FRAME(TV)	
102E	AE005315	735WPA0830	BUTTON,FRAME(DVD)	
102F	AE005107	737WPE0013	BUTTON,CAP	
102G	AE005316	752WSA0446	SHIELD,BUTTON-DVD	
102H	AE005518	702WPB0062	COVER,HINGE 2	
102I	AE002928	800WQ00066	FELT SHEET	
102J	AE005456	800WQ00087	FELT SHEET	9x380xT=0.3
103	AE005108	7A7050004A	HANDLE ASS'Y	
103A	AE005109	705WPB0022	HANDLE 1	
103B	AE005110	705WPB0023	HANDLE 2	
104	AE005519	7A7020030A	COVER,BACK ASS'Y	
104A	AE005327	702WPB0061	COVER,BACK	
104B	AE005467	800WQ00088	FELT SHEET	2x20xT0.3
105	AE005111	752WSA0426	SHIELD,HDMI	
106	AE005320	761WSA0176	COVER,LCD	
107	AE005113	701WPB0207	HOLDER,AC-CORD	
108	AE005457	704WPB0006	STAND	
109	AE005115	706JSA0011	HINGE ASS'Y	
110	AE005321	7225490165	SHEET,RATING	
111	AE005322	7230007867	SHEET,JACK(SIDE)	
112	AE005323	7230007864	SHEET,JACK 1	
113	AE005324	7230007865	SHEET,JACK 2	
114	AE005325	7230007829	POP LABEL	
115	AE005326	7230007866	SHEET,JACK 3	
116	AE005122	726000A073	SHEET,CAUTION	
117	AE005123	752WSA0425	SHIELD,LCD	
118	AE005124	752WSA0427	SHIELD,JACK(SIDE)	
119	AE005125	752WSA0428	SHIELD,JACK1	
120	AE005126	761WSA0184	ANGLE,STAND	
121	AE005127	761WSA0185	ANGLE,HINGE	
122	AE005128	771WPB0023	PLATE,JACK(SIDE)	
123	AE005129	771WPB0024	PLATE,JACK 1	
124	AE005130	771WPB0025	PLATE,JACK 2	
125	AE004521	800WFA0063	CUSHION,LEG	
126	AE004831	752WSA0413	HDMI SHIELD,COVER	
127	AE005383	7220001115	SHEET,CSA WARNING	
128	AE004529	752WSA0424	SHIELD,DVD	
129	AE005328	752WSA0435	SHIELD,FFC	
130	AD301370	899EFBA002	WIRING-CLIP	
131	BZ710039	8995034000	CORD CLIP UL CO.	
132	AE000156	7235630001	SHEET,DVD	
133	AE005329	7250000590	SHEET,PC 1	
134	AE005330	7250000591	SHEET,PC 2	
135	AE005331	7250000592	SHEET,PC 3	
136	AE005056	800WFOA008	CUSHION	
137	AD302402	791WHA0061	LAMIFILM BAG	
138	AE005333	792WHA0577	PACKAGE, TOP	
139	AE005334	792WHA0578	PACKAGE,BOTTOM	

# MECHANICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description	
140	AE005335	793WCD1574	GIFT BOX	
141	AE005522	A5P002D975	INSTRUCTION BOOK KIT	
142	AE003390	JA4UD200	POLYBAG,INSTRUCTION(REDCAUTION)	
143	AE005520	752WSA0449	SHIELD,DVD 2	
144	AE004971	J3R40129A	INFORMATION SHEET	
145	AE005464	752WSA0452	SHIELD,REMOCON	
146	AE005523	J5P00221A	INSTRUCTION BOOK	
147	AE005318	761WSA0208	ANGLE,HANDLE	
148	AE005463	800WFA0065	CUSHION,LEG	
149	AE005521	8965TS0415	CUSHION 65TS4-2	15x50x16
150	AE005386	8965TS2020	CUSHION 65TS10.5-20	20x15x12
201	AE004847	8117540A6U	SCREW,TAP TITE(B0) TRUSS	4x16
202	AE005214	810213080U	SCREW,PAN	M3x8
203	AE003528	8110630A0U	SCREW,TAP TITE(P) BRAZIER	3x10
204	AE003529	811063080U	SCREW,TAP TITE(P) BRAZIER	3x8
205	AE003524	8109I30A0U	SCREW,TAP TITE(B) WH7	3x10
206	AE004849	8109230A0U	SCREW,TAP TITE(B) BIND	3x10
207	AE005138	810763060U	SCREW,TAP TITE(S) BRAZIER	3x6
208	AE005471	8102240A2U	SCREW,BIND	M4x12
209	AE005338	810A140A0U	SCREW,WASHER(A)	M4x10
210	AE005141	810A14060U	SCREW,WASHER(A)	M4x6
211	AE003530	811022680U	SCREW,TAP TITE(P) BIND	2.6x8
212	AE005473	8109D30A0U	SCREW,TAP TITE(B) WH8	3x10
213	AE005474	810923070U	SCREW,TAP TITE(B) R BIND	3x7
214	AE005470	8110230A4U	SCREW,TAP TITE(P) BIND	3x14
215	AE005475	8110K30A0U	SCREW,TAP TITE(P) LAMIHEAD	3x10

# DVD DECK REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description	
△ 600	AE004551	A5N002C650S	DVD MECHA ASS'Y	A5N002C650S
601	AE004552	92AAA0005A	ARM ROLLER ASS'Y	
602	AE004553	92AAA0006A	LINK,R ASS'Y	
603	AE004554	92AAA0007A	CLAMPER ASS'Y	
604	AE004555	92AAA0009A	MOUTH ASS'Y	
605	AE004556	92P100041A	ARM, DISC GUIDE	
606	AE004557	92P100044A	GEAR, MID RACK	
607	AE004558	92P100045A	GEAR, TERMINAL	
608	AE004559	92P100046A	GEAR, MID ROLLER 1	
609	AE004560	92P100047A	GEAR, MID ROLLER 2	
610	AE004561	92P100049A	GEAR, RACK	
611	AE004562	92P100050A	GEAR, ROLLER	
612	AE004563	92P100052A	LEVER, DISC L	
613	AE004564	92P100053A	LEVER, DISC R	
614	AE004565	92P100054A	LINK, L	
615	AE004566	92P100055A	LINK, MID	
616	AE004567	92P100057A	LOCKER, STOPPER	
617	AE004568	92P100058A	CHASSIS, MAIN CUT	
618	AE004569	92P100060A	RACK, LOADING	
619	AE004570	92P100062A	ROLLER, UPPER	
620	AE004571	92P100064A	STOPPER, DISC	
621	AE004572	92P200011A	RUBBER,ROLLER	
622	AE004573	92P300010A	SPRING,GUIDE ARM	
623	AE004574	92P300011A	SPRING,LEVER DISC L	
624	AE004575	92P300012A	SPRING,LINK	
625	AE004576	92P300013A	SPRING,STOPPER	
626	AE004577	92P000006A	BRACKET, LOADING MOTOR	
627	AE004578	92P100066A	WORM, LOADING	
628	AE004579	92P100051A	HOLDER, TRAVERSE UNIT	
629	AE004580	92P100061A	ROD, TRAVERSE UNIT	
630	AE004581	92P200010A	INSULATOR	
631	AE005344	A5M701A600	LOADING MOTOR ASS'Y	
701	AE002857	8110E26804	SCREW,TAP TITE(P) WH10	M2.6x8
702	AE004582	8109220604	SCREW,TAP TITE(B) BIND	2x6
703	AE004583	8109220404	SCREW,TAP TITE(B) BIND	2x4
704	AE004584	8109I20604	SCREW,TAP TITE(B) WH7	2x6
705	AE004585	8102117184	SCREW,PAN	M1.7x1.8
CD2	AE004586	122H091902	CORD JUMPER	2H091902
CP2	AE004587	069EV4T050	CONNECTOR PCB SIDE	04_6232_104_015
DK1	AE004588	169Z00028A	DECK CD	CV-VTM101A
△ M2301	AE004589	1596998002	MOTOR	MDN3BT3ESA
PCB580	AE004590	A5N002C580	PCB ASS'Y	BED005A
PCB590	AE004591	A5N002C590	PCB ASS'Y	BED006A
SW3	AE001158	0500101036	PUSH SWITCH	ESE22MH22
SW4	AE003565	0500101037	PUSH SWITCH	ESE22MH24

# DVD DECK REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description	
△ 600	AE004551	A5N002C650S	DVD MECHA ASS'Y	A5N002C650S
601	AE004552	92AAA0005A	ARM ROLLER ASS'Y	
602	AE004553	92AAA0006A	LINK,R ASS'Y	
603	AE004554	92AAA0007A	CLAMPER ASS'Y	
604	AE004555	92AAA0009A	MOUTH ASS'Y	
605	AE004556	92P100041A	ARM, DISC GUIDE	
606	AE004557	92P100044A	GEAR, MID RACK	
607	AE004558	92P100045A	GEAR, TERMINAL	
608	AE004559	92P100046A	GEAR, MID ROLLER 1	
609	AE004560	92P100047A	GEAR, MID ROLLER 2	
610	AE004561	92P100049A	GEAR, RACK	
611	AE004562	92P100050A	GEAR, ROLLER	
612	AE004563	92P100052A	LEVER, DISC L	
613	AE004564	92P100053A	LEVER, DISC R	
614	AE004565	92P100054A	LINK, L	
615	AE004566	92P100055A	LINK, MID	
616	AE004567	92P100057A	LOCKER, STOPPER	
617	AE004568	92P100058A	CHASSIS, MAIN CUT	
618	AE004569	92P100060A	RACK, LOADING	
619	AE004570	92P100062A	ROLLER, UPPER	
620	AE004571	92P100064A	STOPPER, DISC	
621	AE004572	92P200011A	RUBBER,ROLLER	
622	AE004573	92P300010A	SPRING,GUIDE ARM	
623	AE004574	92P300011A	SPRING,LEVER DISC L	
624	AE004575	92P300012A	SPRING,LINK	
625	AE004576	92P300013A	SPRING,STOPPER	
626	AE004577	92P000006A	BRACKET, LOADING MOTOR	
627	AE004578	92P100066A	WORM, LOADING	
628	AE004579	92P100051A	HOLDER, TRAVERSE UNIT	
629	AE004580	92P100061A	ROD, TRAVERSE UNIT	
630	AE004581	92P200010A	INSULATOR	
631	AE005344	A5M701A600	LOADING MOTOR ASS'Y	
701	AE002857	8110E26804	SCREW,TAP TITE(P) WH10	M2.6x8
702	AE004582	8109220604	SCREW,TAP TITE(B) BIND	2x6
703	AE004583	8109220404	SCREW,TAP TITE(B) BIND	2x4
704	AE004584	8109I20604	SCREW,TAP TITE(B) WH7	2x6
705	AE004585	8102117184	SCREW,PAN	M1.7x1.8
CD2	AE004586	122H091902	CORD JUMPER	2H091902
CP2	AE004587	069EV4T050	CONNECTOR PCB SIDE	04_6232_104_015
DK1	AE004588	169Z00028A	DECK CD	CV-VTM101A
△ M2301	AE004589	1596998002	MOTOR	MDN3BT3ESA
PCB580	AE004590	A5N002C580	PCB ASS'Y	BED005A
PCB590	AE004591	A5N002C590	PCB ASS'Y	BED006A
SW3	AE001158	0500101036	PUSH SWITCH	ESE22MH22
SW4	AE003565	0500101037	PUSH SWITCH	ESE22MH24

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>RESISTORS</b>			
△ R332	AE003270	R3X28B2R7J	R,METAL OXIDE 2.7 OHM 3W
△ R333	AE003270	R3X28B2R7J	R,METAL OXIDE 2.7 OHM 3W
△ R3808	BZ210206	R002T2155J	RC 1.5M OHM 1/2W
△ R3813	BZ210080	R0G3K2275K	RC 2.7M OHM 1/2W
△ R3816	AD301596	R5X2AE010J	R,CEMENT 1R0J 1 OHM 7W
△ R3819	BZ210251	R3X181R47J	R,METAL OXIDE 0.47 OHM 1W
△ R3821	AD301143	R3X181R27J	R,METAL OXIDE 0.27 OHM 1W
△ R3823	BZ210190	R63581R22J	R,FUSE 0.22 OHM 1W
△ R3826	AE001883	R3X28A104J	R,METAL OXIDE 100K OHM 2W
△ R3838	AE001883	R3X28A104J	R,METAL OXIDE 100K OHM 2W
△ R3839	AE001883	R3X28A104J	R,METAL OXIDE 100K OHM 2W
△ R3840	BZ210190	R63581R22J	R,FUSE 0.22 OHM 1W
△ R3842	BZ210190	R63581R22J	R,FUSE 0.22 OHM 1W
△ R3844	AD301203	R002T4101J	RC 100 OHM 1/4W
△ R3845	BZ210135	R002T4221J	RC 220 OHM 1/4W
△ R3846	BZ210059	R3X1812R2J	R,METAL OXIDE 2.2 OHM 1W
△ R3865	AE001255	R65584150J	R,FUSE 15 OHM 1/4W
R3869	BZ210122	R002T4472J	RC 4.7K OHM 1/4W
<b>CAPACITORS</b>			
△ C144	AD301434	E02LU4101M	CE 100 UF 35V
△ C147	AE000336	E02LU1101M	CE 100 UF 10V
△ C173	AE000466	E02LU1221M	CE 220 UF 10V
△ C176	AE000466	E02LU1221M	CE 220 UF 10V
C194	BZ110255	CQGTB0415K	CC 0.1 UF 50V B
C196	BZ110098	CHGTB0413K	CC 0.001 UF 50V B
C197	AE005443	CQGTCH4W1J	CC 82 PF 50V CH
C198	BZ110243	CQGTB0414K	CC 0.01 UF 50V B
C199	AE005443	CQGTCH4W1J	CC 82 PF 50V CH
C200	BZ110098	CHGTB0413K	CC 0.001 UF 50V B
C364	BZ110032	E5EZF3102M	CE 1000 UF 25V
C365	BZ110032	E5EZF3102M	CE 1000 UF 25V
C847	AE000466	E02LU1221M	CE 220 UF 10V
C901	BZ110135	E02L02222M	CE 2200 UF 16V
△ C3209	AE005444	E61UM0221D	CE 220 UF 6.3V
△ C3801	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△ C3802	AE003965	P2122B334M	CMP 0.33 UF 275V ECQUL
△ C3804	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△ C3805	AE005176	E62XHC331M	CE 2*25 330 UF 200V
△ C3808	AD301026	CD39E0M13M	CC 0.001 UF 250V
C3813	BZ110172	C03LOR7U2K	CC 680 PF 2KV R
C3815	BZ110172	C03LOR7U2K	CC 680 PF 2KV R
△ C3816	AE003902	E62RFC470M	CE 47 UF 200V
△ C3817	AD301021	E02LF0222M	CE 2200 UF 6.3V
C3818	AE002229	P411F4393J	CMPP 0.039 UF 400V ECWF
△ C3820	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△ C3832	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△ C3834	AE005174	E61FF1222D	CE 2200 UF 10V
△ C3835	AE005445	E62FT3471M	CE 470 UF 25V
△ C3836	AE005445	E62FT3471M	CE 470 UF 25V
C3837	AE000029	C0PLRR7H2K	CC 220 PF 2KV R
△ C3838	AE005175	E61FF4102D	CE 1000 UF 35V
△ C3839	AE005175	E61FF4102D	CE 1000 UF 35V
△ C3840	AD301349	E02LU3470M	CE 47 UF 25V
△ C3841	AE000466	E02LU1221M	CE 220 UF 10V
△ C3843	AD301317	E02LT4221M	CE 220 UF 35V
△ C3844	BZ110197	E02LU5470M	CE 47 UF 50V
△ C3845	BZ110035	P2122B104M	CMP 0.1 UF 275V ECQUL
△ C3847	BZ110227	CD39E0ML3M	CC 0.0033UF 250V
C3848	BZ110219	C0PLRR7Q2K	CC 470 PF 2KV R
△ C3854	AD301026	CD39E0M13M	CC 0.001 UF 250V
C3856	BZ110219	C0PLRR7Q2K	CC 470 PF 2KV R
△ C3860	AE005176	E62XHC331M	CE 2*25 330 UF 200V
C4414	BZ110250	E02L02102M	CE 1000 UF 16V
<b>DIODES</b>			
D103	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D104	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D105	AD300732	D28XQS04N0	DIODE,SCHOTTKY 11EQS04N-TA2B5
D108	AD300732	D28XQS04N0	DIODE,SCHOTTKY 11EQS04N-TA2B5
D109	BZ410021	D97U05R61B	DIODE,ZENER MTZJ5.6B T-77
D110	BZ410021	D97U05R61B	DIODE,ZENER MTZJ5.6B T-77
D115	AD300732	D28XQS04N0	DIODE,SCHOTTKY 11EQS04N-TA2B5



# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
		<b>DIODES</b>	
D302	AD300070	D97U01201B	DIODE,ZENER MTZJ12B T-77
D305	BZ410010	D28T21DQN9	DIODE,SCHOTTKY 21DQ09N-TA2B1
D306	BZ410010	D28T21DQN9	DIODE,SCHOTTKY 21DQ09N-TA2B1
D308	BZ410073	D28TEQS040	DIODE,SCHOTTKY 11EQS04TA1B2
D801	AE004795	DE7RB5R62B	DIODE,ZENER UDZS5.6B TE-17
D2202	BZ410087	0021E2Q140	LED LTL-1CHEE-002A
D2601	BZ410121	DDARDS1200	DIODE,SILICON KDS120RTK
D2602	AE004646	DE5RB2R21X	DIODE,ZENER 02DZ2.2-X(TH3ORION)
D3001	AE004643	D28R1QS040	DIODE EC31QS04-TE12L
D3002	AE004642	D28R03A040	DIODE,SCHOTTKY NSQ03A04-TE16L
D3003	AE004643	D28R1QS040	DIODE EC31QS04-TE12L
D3200	AE004643	D28R1QS040	DIODE EC31QS04-TE12L
D3201	AE004643	D28R1QS040	DIODE EC31QS04-TE12L
D3601	AE004937	D77R1A1R10	DIODE,VARISTA AVRL161A1R1NT
D3602	AE004795	DE7RB5R62B	DIODE,ZENER UDZS5.6B TE-17
D3603	AE004937	D77R1A1R10	DIODE,VARISTA AVRL161A1R1NT
D3604	AE004793	DD7R60L400	DIODE,SCHOTTKY RB160L-40-TE25
D3605	AE004793	DD7R60L400	DIODE,SCHOTTKY RB160L-40-TE25
D3606	AE004796	DE7RB6R82B	DIODE,ZENER UDZS6.8B TE-17
D3607	AE004796	DE7RB6R82B	DIODE,ZENER UDZS6.8B TE-17
D3609	AE004794	DE7RB3R32B	DIODE,ZENER UDZS3.3B TE-17
D3613	AE004794	DE7RB3R32B	DIODE,ZENER UDZS3.3B TE-17
D3801	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
▲D3802	BZ410062	D2WTRM11C0	DIODE,SILICON RM11C-EIC
▲D3803	BZ410062	D2WTRM11C0	DIODE,SILICON RM11C-EIC
▲D3804	BZ410062	D2WTRM11C0	DIODE,SILICON RM11C-EIC
▲D3805	BZ410062	D2WTRM11C0	DIODE,SILICON RM11C-EIC
▲D3806	BZ410031	D6CE24110A	DIODE,VARISTA ENE241D-10A-Q6
D3807	BZ410064	D97U03R91B	DIODE,ZENER MTZJ3.9B T-77
D3808	BZ410021	D97U05R61B	DIODE,ZENER MTZJ5.6B T-77
D3809	BZ410011	D28TELS2N2	DIODE,RECTIFIER 10ELS2N-TA1B2
▲D3810	BZ410085	D2WXN40050	DIODE,SILICON 1N4005-EIC
▲D3811	BZ410085	D2WXN40050	DIODE,SILICON 1N4005-EIC
▲D3812	BZ410085	D2WXN40050	DIODE,SILICON 1N4005-EIC
▲D3813	BZ410085	D2WXN40050	DIODE,SILICON 1N4005-EIC
D3814	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D3815	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D3816	BZ410011	D28TELS2N2	DIODE,RECTIFIER 10ELS2N-TA1B2
D3817	BZ410103	D2WXGP10J0	DIODE,RECTIFIER RGP10J-EIC
▲D3818	BZ410115	D2LKB340L0	DIODE,SCHOTTKY SB340L-6737
D3819	AD300070	D97U01201B	DIODE,ZENER MTZJ12B T-77
D3820	BZ410094	D97U01501B	DIODE,ZENER MTZJ15B T-77
D3821	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D3822	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D3823	BZ410011	D28TELS2N2	DIODE RECTIFIER 10ELS2N-TA1B2
D3824	BZ410021	D97U05R61B	DIODE,ZENER MTZJ5.6B T-77
D3825	BZ410011	D28TELS2N2	DIODE,RECTIFIER 10ELS2N-TA1B2
D3826	BZ410011	D28TELS2N2	DIODE,RECTIFIER 10ELS2N-TA1B2
▲D3827	AE005173	D2BAMX22S0	DIODE,SCHOTTKY FMX-22S
▲D3828	AD301980	D2CF2016L0	DIODE,SILICON FE201-6L49
▲D3829	AE001064	D28F31DQ09	DIODE,SCHOTTKY 31DQ09-FC
▲D3830	AE005172	D27A85T400	DIODE,SCHOTTKY RB085T-40
D3831	BZ410010	D28T21DQN9	DIODE,SCHOTTKY 21DQ09N-TA2B1
▲D3832	AD300075	D28TELS6N6	DIODE,RECTIFIER 10ELS6N-TA1B2
D3833	BZ410037	D97U03301B	DIODE,ZENER MTZJ33B T-77
D3834	BZ410113	D97U02201B	DIODE,ZENER MTZJ22B T-77
D3835	AE002133	D2BXARS010	DIODE,SILICON SARS01-V1
D3836	AE002133	D2BXARS010	DIODE,SILICON SARS01-V1
D3837	BZ410113	D97U02201B	DIODE,ZENER MTZJ22B T-77
D3838	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
▲D3839	AE005173	D2BAMX22S0	DIODE,SCHOTTKY FMX-22S
D3840	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
▲D3841	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D3842	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D3843	BZ410084	D97U01101B	DIODE,ZENER MTZJ11B T-77
D3844	BZ410021	D97U05R61B	DIODE,ZENER MTZJ5.6B T-77
D3845	BZ410067	D97U02R21B	DIODE,ZENER MTZJ2.2B T-77
D3846	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D3847	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
▲D3848	AE003872	DOU002720M	DIODE,VARISTA DSS-272M-S00B
▲D3849	AE004936	D6E027110A	DIODE,VARISTA ENE271D-10A

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
D4002	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D4300	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D4301	AE004795	DE7RB5R62B	DIODE,ZENER UDZS5.6B TE-17
D8508	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D8509	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D8510	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
<b>ICS</b>			
IC101	AE005304	S5P001DF03	MEMORY DATA
IC102	AE005303	S5P001DF02	MEMORY DATA
IC103	79097849	I9UF032290	IC PST3229NR
IC104	AE005300	S5P001DE03	MEMORY DATA
IC105	79097849	I9UF032290	IC PST3229NR
IC199	AE005301	S5P001DE04	MEMORY DATA
IC301	AE005179	I19FF34410	IC MSP3441G-QA-C12
△IC302	AE005177	I03DP49010	IC LA4901
△IC303	AE005177	I03DP49010	IC LA4901
IC304	AE002505	I0QJP21510	IC NJM2151AV
IC801	AE004658	I55M002880	IC TC90288XBG
IC802	AE005182	I54F0LV080	IC HD74LV08ATELL
IC803	AE004660	IFKJ0LM850	IC DTC34LM85AL
IC804	AD301028	I5HF016AJ0	IC S-24C16AFJA-TB-01
IC805	AE005186	I5CF062330	IC SN74CBT16233DGGGR
IC806	AE005186	I5CF062330	IC SN74CBT16233DGGGR
IC807	AE005187	IFCK0113L0	IC PW113-10QL
IC808	AE005306	S5P001DF05	MEMORY DATA
IC2101	AE005188	IFDK000580	IC AD80058
IC2301	AE000100	I06F030180	IC M63018FP
IC2304	AD301770	I07E00358F	IC BA10358F-E2
IC2601	AE000841	ICQK067070	IC ZR36707TQC
△IC3001	AE004650	I07F097430	IC BA9743AFV-E2
△IC3002	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
△IC3003	AE004653	I1KF98D050	IC KIA78D05F
△IC3200	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
△IC3201	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
△IC3202	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
IC3601	AE004654	I1KF98D330	IC KIA78D33F
IC3602	AE004654	I1KF98D330	IC KIA78D33F
IC3604	AE001295	I0QJ045800	IC NJM4580M(TE1)
IC3605	AE004805	I5PF099930	IC SI9993CTG100
IC3606	AE005421	I57J0L02F0	IC BR24L02F-WE2
IC3607	AE004802	I1FF043340	IC CS4334-KSZR
IC3608	AE005298	S5P001DE01	MEMORY DATA
IC3611	AE005302	S5P001DF01	MEMORY DATA
IC3612	AE003923	I5CF01G080	IC SN74AHC1G08DCKR
△IC3801	AD302211	I1KJ9A431A	IC KIA431A-AT
△IC3802	AE002809	000220002W	PHOTO COUPLER PS2561AL1-1-V(W)
△IC3803	AE002809	000220002W	PHOTO COUPLER PS2561AL1-1-V(W)
△IC3804	AE005178	I0BD0159M0	IC STR-A6159M
△IC3805	AE002809	000220002W	PHOTO COUPLER PS2561AL1-1-V(W)
△IC3806	AD302211	I1KJ9A431A	IC KIA431A-AT
△IC3807	AE005181	I1KF98D090	IC KIA78D09F
△IC3808	AE005180	I1KA98R12A	IC KIA78R12API
IC4001	AE003586	ICQK06762V	IC ZR36762PQCG_V
IC4002	BZ611124	I5HJ004BF0	IC S-24C04BFJ-TB
IC4005	AE002726	IF3J00HGT7	IC HY57V641620HGT-7
IC4007	AE005305	S5P001DF04	MEMORY DATA
IC4202	BZ611139	I0QF02534V	IC NJM2534V(TE2)
IC4300	AD301988	I0UF015010	IC MM1501XNRE
IC4301	AD301988	I0UF015010	IC MM1501XNRE
IC4302	BZ611139	I0QF02534V	IC NJM2534V(TE2)
IC4303	BZ611139	I0QF02534V	IC NJM2534V(TE2)
IC4304	AE004651	I0QF025840	IC NJM2584AM(TE1)
IC4305	AE001295	I0QJ045800	IC NJM4580M(TE1)
IC4306	AD301988	I0UF015010	IC MM1501XNRE
IC4307	AE004651	I0QF025840	IC NJM2584AM(TE1)
IC4308	AE004800	I05FE13830	IC TA1383FG
IC4309	AE001069	I0UF015020	IC MM1502XNRE
IC8502	AE003584	I17F017530	IC PCM1753DBQR
<b>TRANSISTORS</b>			
Q101	BZ510021	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146
Q102	BZ510026	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146
Q103	BZ510026	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>TRANSISTORS</b>			
Q104	BZ510021	TNYJC05001	COMPOUND TRANSISTOR
Q105	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q106	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q107	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q108	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q109	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q110	BZ510108	TAAA1504SY	TRANSISTOR,SILICON
Q111	BZ510021	TNYJC05001	COMPOUND TRANSISTOR
Q112	BZ510026	TPYJC05001	COMPOUND TRANSISTOR
Q113	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q114	BZ510022	TNYJJ05001	COMPOUND TRANSISTOR
Q115	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q116	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q301	AE004662	T93A018020	TRANSISTOR,SILICON
Q302	AE004662	T93A018020	TRANSISTOR,SILICON
Q303	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q601	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q602	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q603	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q2101	BZ510108	TAAA1504SY	TRANSISTOR,SILICON
Q2601	BZ510112	T67J1036K0	TRANSISTOR,SILICON
Q2602	AE003592	T67J048TL0	TRANSISTOR,SILICON
Q2603	BZ510113	T27T030180	FET
Q2604	BZ510113	T27T030180	FET
Q2605	BZ510113	T27T030180	FET
Q2606	BZ510021	TNYJC05001	COMPOUND TRANSISTOR
Q2607	BZ510108	TAAA1504SY	TRANSISTOR,SILICON
Q2608	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q3001	AE004661	T77J011320	TRANSISTOR,SILICON
Q3002	BZ510020	TNYJB05001	COMPOUND TRANSISTOR
Q3003	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q3004	BZ510108	TAAA1504SY	TRANSISTOR,SILICON
Q3005	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q3006	BZ510108	TAAA1504SY	TRANSISTOR,SILICON
▲ Q3007	AE004663	TJ5M081090	FET
▲ Q3008	AE004663	TJ5M081090	FET
Q3603	BZ510113	T27T030180	FET
Q3604	BZ510113	T27T030180	FET
Q3605	BZ510113	T27T030180	FET
Q3606	BZ510113	T27T030180	FET
Q3607	BZ510113	T27T030180	FET
Q3608	BZ510081	TPYJA05001	COMPOUND TRANSISTOR
Q3609	BZ510045	TNYJD05001	COMPOUND TRANSISTOR
Q3610	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q3611	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q3612	BZ510045	TNYJD05001	COMPOUND TRANSISTOR
Q3613	AE002626	T8YJ2412K0	TRANSISTOR,SILICON
▲ Q3801	BZ510069	TCATC31980	TRANSISTOR,SILICON
Q3802	BZ510069	TCATC31980	TRANSISTOR,SILICON
▲ Q3803	AE004014	TJXG9NK500	FET
▲ Q3804	AE003591	T250035680	FET
▲ Q3805	BZ510070	TCAT032034	TRANSISTOR,SILICON
▲ Q3806	BZ510070	TCAT032034	TRANSISTOR,SILICON
Q3807	BZ510020	TNYJB05001	COMPOUND TRANSISTOR
Q3808	BZ510108	TAAA1504SY	TRANSISTOR,SILICON
Q3809	BZ510105	TCAT03209Y	TRANSISTOR,SILICON
Q3811	BZ510020	TNYJB05001	COMPOUND TRANSISTOR
Q3812	BZ510105	TCAT03209Y	TRANSISTOR,SILICON
Q3813	BZ510057	TAAT01281Y	TRANSISTOR,SILICON
Q3814	BZ510071	TNAAB05003	COMPOUND TRANSISTOR
Q3815	BZ510073	TAATA12660	TRANSISTOR,SILICON
Q4201	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4202	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4203	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4204	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4205	BZ510026	TPYJC05001	COMPOUND TRANSISTOR
Q4206	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4207	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4300	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4301	BZ510109	TCAA3875SY	TRANSISTOR,SILICON
Q4302	BZ510109	TCAA3875SY	TRANSISTOR,SILICON

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>TRANSISTORS</b>			
Q4303	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4304	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4305	BZ510045	TNYJD05001	COMPOUND TRANSISTOR DTC144EKAT146
Q4306	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4307	BZ510081	TPYJA05001	COMPOUND TRANSISTOR DTA143EKAT146
Q4308	BZ510021	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146
Q4309	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4310	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4311	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q4312	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4313	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q4314	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4315	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q8507	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
<b>COILS &amp; TRANSFORMERS</b>			
L001	AE002347	021673220K	COIL 22 UH
L002	AD301989	0216A6330J	COIL 33 UH
L101	BZ310040	02167F470J	COIL 47 UH
L103	AE005142	021LA64R7K	COIL 4.7 UH
L104	BZ310052	021LA6100K	COIL 10 UH
L301	BZ310141	02167F100J	COIL 10 UH
L302	BZ310141	02167F100J	COIL 10 UH
L303	BZ310141	02167F100J	COIL 10 UH
L304	AE004595	021404221M	COIL 21A 220 UH
L305	AE004595	021404221M	COIL 21A 220 UH
L601	AE004601	0216SD1R5J	COIL 1.5 UH
L602	AE005283	0216S8101K	COIL F 100 UH
L603	AE005285	0216S8470K	COIL F 47 UH
L604	AE005284	0216S8220K	COIL F 22 UH
L608	AE004601	0216SD1R5J	COIL 1.5 UH
L609	AE004601	0216SD1R5J	COIL 1.5 UH
L610	AE005059	0216S4470J	COIL 47 UH
L611	AE005059	0216S4470J	COIL 47 UH
L801	AE005285	0216S8470K	COIL F 47 UH
L802	AE005283	0216S8101K	COIL F 100 UH
L803	AE005285	0216S8470K	COIL F 47 UH
L804	AE005285	0216S8470K	COIL F 47 UH
L805	AE005285	0216S8470K	COIL F 47 UH
L806	AE005285	0216S8470K	COIL F 47 UH
L807	AD301539	02AHB0A0A4	CORE,FERRITE W5T_20*10*10A
L817	AE005284	0216S8220K	COIL F 22 UH
L819	AE005284	0216S8220K	COIL F 22 UH
L2101	AE005284	0216S8220K	COIL F 22 UH
L2102	AE005285	0216S8470K	COIL F 47 UH
L2103	AE005284	0216S8220K	COIL F 22 UH
L3001	AE004593	021404101L	COIL 1A 100 UH
L3002	AE004593	021404101L	COIL 1A 100 UH
L3003	BZ310191	02167F2R2J	COIL 2.2 UH
L3004	BZ310150	02167E220K	COIL R7 22 UH
L3601	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3602	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3603	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3604	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3801	AD301785	02167E100K	COIL R6-1 10 UH
▲L3802	AE005286	029X000120	COIL,LINE FILTER SS24H-R15080-CH
L3803	AD301785	02167E100K	COIL R6-1 10 UH
L3804	AD301785	02167E100K	COIL R6-1 10 UH
▲L3805	AE005286	029X000120	COIL,LINE FILTER SS24H-R15080-CH
L3806	AD301785	02167E100K	COIL R6-1 10 UH
L3808	BZ310079	021LA6101J	COIL 100 UH
L3809	AD301785	02167E100K	COIL R6-1 10 UH
L3810	AD301785	02167E100K	COIL R6-1 10 UH
L4001	AE004601	0216SD1R5J	COIL 1.5 UH
L4202	BZ310040	02167F470J	COIL 47 UH
L4300	AE005057	0216S4101J	COIL 100 UH
L4301	AE005057	0216S4101J	COIL 100 UH
L4302	AE005059	0216S4470J	COIL 47 UH
L4303	AE005284	0216S8220K	COIL F 22 UH
L4304	AE005283	0216S8101K	COIL F 100 UH
L4305	AE005285	0216S8470K	COIL F 47 UH
L4306	AE005284	0216S8220K	COIL F 22 UH

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>COILS &amp; TRANSFORMERS</b>			
L4307	AE005060	0216SDR56J	COIL 0.56 UH
L4308	AE005060	0216SDR56J	COIL 0.56 UH
L8502	AE000828	02167F1R0K	COIL 1 UH
L8503	AE000828	02167F1R0K	COIL 1 UH
L8504	AE000828	02167F1R0K	COIL 1 UH
△T3801	AE004942	048119003S	TRANSFORMER, SWITCHING 8119003S
△T3802	AE005145	0481350894	TRANSFORMER, SWITCHING 81350894
△T3803	AE005144	048134003S	TRANSFORMER, SWITCHING 8134003S
<b>JACKS</b>			
△J301	AE002426	0602131008	HEADPHONE JACK HSJ0913-01-140
J3601	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J3602	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4201	AE004334	063D700009	JACK MDC-070V-A_LF
J4202	AE002949	060J421036	RCA JACK MTJ-032-05A-30-FE
J4203	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4204	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4205	AE002949	060J421036	RCA JACK MTJ-032-05A-30-FE
J4206	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4207	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4208	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4209	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4300	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4301	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4302	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4303	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4304	AE003568	060J401102	RCA JACK MSP-251V-05NI-FE-LF
J4305	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4306	AE005146	060J421043	RCA JACK MTJ-032-05A-29-FE
J4307	AE005147	060J421044	RCA JACK MTJ-032-05A-50-FE
<b>SWITCHES</b>			
SW2201	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2202	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2203	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2204	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2206	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2208	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2209	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2251	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2252	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2253	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2254	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
SW2255	BZ612010	0504101T34	SWITCH, TACT EVQ21505R
<b>P.C.BOARD ASSEMBLIES</b>			
PCB130	AE005293	A5P001D130	PCB ASS'Y DMD005A
PCB270	AE005342	A5P001D270	PCB ASS'Y CED014A
PCB280	AE005294	A5P001D280	PCB ASS'Y DED007A
PCB340	AE005295	A5P001D340	PCB ASS'Y CED016A
PCBD20	AE005296	A5P001DD20	PCB ASS'Y CMD004A
PCBDA0	AE005343	A5P001DDA0	PCB ASS'Y CED015A
PCBDJ0	AE005297	A5P001DDJ0	PCB ASS'Y CED011A
<b>MISCELLANEOUS</b>			
B101	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B801	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B802	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B803	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B807	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B2101	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B2301	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04
B2601	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04
B2602	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04
B2603	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04
B2604	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04
B2605	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04
B3001	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04
B3601	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B3602	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B3603	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B3604	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B3608	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B3609	AE004602	024HC36001	CORE, BEADS HCB2012K-600T25
B3610	BZ310186	024HC31022	CORE, BEADS FCM2012H-102T04

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>MISCELLANEOUS</b>			
B3611	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B3801	BZ310121	024HT03553	CORE,BEADS W5RH3.5X5X1.0
B4001	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4002	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4003	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4004	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4005	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4006	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4007	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4008	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4009	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4010	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4300	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4301	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B8503	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
BL001	BZ310174	023V000009	COIL,BALUN WEV1020-9004
BT001	AE000012	1412004008	BATTERY,MANGAN R03(AB)E_2P_G
BT002	AE000012	1412004008	BATTERY,MANGAN R03(AB)E_2P_G
CD101	AE004613	06CU231801	CORD,CONNECTOR CU231801
CD105	BZ614447	WBL6022038	FLAT CABLE AWM2468 AWG26 4C BLACK 220MM
△CD501	AE005290	06CU241001	CORD,CONNECTOR CU241001
CD502	AE005439	06CU2C2801	CORD,CONNECTOR CU2C2801
CD503	AE005440	06CU2C5801	CORD,CONNECTOR CU2C5801
CD701	AE005291	06CU2G1301	CORD,CONNECTOR CU2G1301
CD801	AE005165	122HOR0801	CORD,JUMPER 2HOR0801
CD802	AE005166	122HOU0801	CORD,JUMPER 2HOU0801
CD803	AE005434	06CHRU2201	CORD,CONNECTOR CHRU2201
CP001	BZ614444	069D01001A	CONNECTOR PCB SIDE 003P-2100
CP002	BZ614444	069D01001A	CONNECTOR PCB SIDE 003P-2100
CP101	BZ614350	069S230629	CONNECTOR PCB SIDE A2001WV2-3P
CP102	BZ614420	069S2D0629	CONNECTOR PCB SIDE A2001WV2-13P
CP103	AD301796	069S280629	CONNECTOR PCB SIDE A2001WV2-8P
CP104	AD301998	069S240629	CONNECTOR PCB SIDE A2001WV2-4P
CP107	BZ614416	069S220629	CONNECTOR PCB SIDE A2001WV2-2P
CP301	AD301045	069S140419	CONNECTOR PCB SIDE A2502WV2-4P
CP501	AD301998	069S240629	CONNECTOR PCB SIDE A2001WV2-4P
CP752	AE004336	069S2G0629	CONNECTOR PCB SIDE A2001WV2-16P
CP801	AE005151	069HVWT04A	CONNECTOR PCB SIDE FI-X30S-HF-NPB
CP803	AE005152	069S1K0019	CONNECTOR PCB SIDE A2501WV2-20P
CP805	AE005150	069EVU3010	CONNECTOR PCB SIDE 00_6232_030_006_800
CP806	AE005149	069EVR3010	CONNECTOR PCB SIDE 00_6232_027_006_8
CP807	AE005436	06CU223401	CORD,CONNECTOR CU223401
CU101	BZ710279	800WFAA006	CUSHION A
CU102	BZ710149	800WFAA008	CUSHION C
CU801	BZ710279	800WFAA006	CUSHION A
CD1001	AE005435	06CU144705	CORD,CONNECTOR CU144705
CD2201	AE005437	06CU244301	CORD,CONNECTOR CU244301
CD2251	AE005289	06CU220702	CORD,CONNECTOR CU220702
CD2601	AE001699	122H001902	CORD,JUMPER 2H001902
CD3601	AE005288	06CU1K2701	CORD,CONNECTOR CU1K2701
△CD3801	AE001245	1209419910	CORD,AC BUSH 9419910
CD3807	AE005438	06CU293701	CORD,CONNECTOR CU293701
CP105A	BZ614334	067U004029	WIRE HOLDER B2013H02-4P
CP105B	BZ614334	067U004029	WIRE HOLDER B2013H02-4P
CP2251	AE005287	069S220639	CONNECTOR PCB SIDE A2001WR2-2P
CP2301	AE004608	069EV93010	CONNECTOR PCB SIDE 00_6232_009_006_800
CP2302	79091438	069EVC3010	CONNECTOR PCB SIDE 00_6232_012_006_800
CP2601	AE003571	069GYOT119	CONNECTOR PCB SIDE 09-5000-024-001-001
CP3200	BZ614458	069S290629	CONNECTOR PCB SIDE A2001WV2-9P
CP3601	AE004763	069HYJ3010	CONNECTOR PCB SIDE DC1R019JDA
CP3604	BZ614239	069S290639	CONNECTOR PCB SIDE A2001WR2-9P
CP3801	AD301554	069S2C0629	CONNECTOR PCB SIDE A2001WV2-12P
CP3802	AD301554	069S2C0629	CONNECTOR PCB SIDE A2001WV2-12P
CP4201	AE005149	069EVR3010	CONNECTOR PCB SIDE 00_6232_027_006_8
CP4202	AE005150	069EVU3010	CONNECTOR PCB SIDE 00_6232_030_006_800
CP4301	AE005148	0694S15016	CONNECTOR PCB SIDE 1-788624-1
CU1001	BZ710149	800WFAA008	CUSHION C
ELD201	BZ614043	124116281A	EYE LET XRY16X28BD
ELD202	BZ614044	124120301A	EYE LET XRY20X30BD
△F3001	AE004626	083LA05007	FUSE 1206FA5A-T
△F3801	BZ614422	081PC6R305	FUSE 51MS063L

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>MISCELLANEOUS</b>			
FH3801	AE002634	06710T0009	HOLDER,FUSE
FH3802	AE002634	06710T0009	HOLDER,FUSE
NR801	AE004629	110N4000M3	R,NETWORK
NR802	AE004629	110N4000M3	R,NETWORK
NR803	AE004629	110N4000M3	R,NETWORK
NR804	AE004629	110N4000M3	R,NETWORK
NR805	AE004629	110N4000M3	R,NETWORK
NR806	AE004629	110N4000M3	R,NETWORK
NR813	AE004680	110P4101M4	R,NETWORK
NR814	AE004680	110P4101M4	R,NETWORK
NR815	AE004680	110P4101M4	R,NETWORK
NR816	AE004680	110P4101M4	R,NETWORK
NR817	AE004680	110P4101M4	R,NETWORK
NR818	AE004680	110P4101M4	R,NETWORK
NR822	AE004680	110P4101M4	R,NETWORK
NR823	AE004680	110P4101M4	R,NETWORK
NR2101	AE004680	110P4101M4	R,NETWORK
NR2102	AE004680	110P4101M4	R,NETWORK
NR2103	AE004680	110P4101M4	R,NETWORK
NR2104	AE004680	110P4101M4	R,NETWORK
NR2105	AE004680	110P4101M4	R,NETWORK
NR2106	AE004680	110P4101M4	R,NETWORK
OS2201	AE004623	0773071006	REMOTE RECEIVER
▲RY3801	AE003621	0560V50118	RELAY
▲SP1001	AE005159	070C546009	SPEAKER
▲SP1002	AE005159	070C546009	SPEAKER
TM101	AE005292	076R0JX010	TRANSMITTER
▲TU001	AE004592	0162300043	RF UNIT
TR3801	BZ310181	02A6B2E0A1	CORE,FERRITE
TR3802	BZ310181	02A6B2E0A1	CORE,FERRITE
TR3803	BZ310181	02A6B2E0A1	CORE,FERRITE
TR3804	BZ310118	02AHB9A972	CORE,FERRITE
TR3805	BZ310118	02AHB9A972	CORE,FERRITE
V2301	AE005160	095S123001	LCD
X102	AE004780	100WT01611	CRYSTAL
X104	BZ613019	1002T01606	CERAMIC OSCILLATOR
X301	BZ613042	100CT01803	CRYSTAL
X601	AE004628	100DT04201	CRYSTAL
X801	AE005161	100DT01407	CRYSTAL
X3601	AE004779	100CT01101	CRYSTAL
X4001	AD301803	100BT02701	CRYSTAL
X4300	AE004348	1002R01502	CERAMIC OSCILLATOR
X4301	AE005441	100DA3R529	CRYSTAL
<b>RESISTOR</b>			
	RC.....	CARBON RESISTOR	
<b>CAPACITORS</b>			
	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	

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>RESISTORS</b>			
△R332	AE003270	R3X28B2R7J	R,METAL OXIDE 2.7 OHM 3W
△R333	AE003270	R3X28B2R7J	R,METAL OXIDE 2.7 OHM 3W
△R3808	BZ210206	R002T2155J	RC 1.5M OHM 1/2W
△R3813	BZ210080	R0G3K2275K	RC 2.7M OHM 1/2W
△R3816	AD301596	R5X2AE010J	R,CEMENT 1 OHM 7W
△R3819	BZ210251	R3X181R47J	R,METAL OXIDE 0.47 OHM 1W
△R3821	AD301143	R3X181R27J	R,METAL OXIDE 0.27 OHM 1W
△R3823	BZ210190	R63581R22J	R,FUSE 0.22 OHM 1W
△R3826	AE001883	R3X28A104J	R,METAL OXIDE 100K OHM 2W
△R3838	AE001883	R3X28A104J	R,METAL OXIDE 100K OHM 2W
△R3839	AE001883	R3X28A104J	R,METAL OXIDE 100K OHM 2W
△R3840	BZ210190	R63581R22J	R,FUSE 0.22 OHM 1W
△R3842	BZ210190	R63581R22J	R,FUSE 0.22 OHM 1W
△R3844	AD301203	R002T4101J	RC 100 OHM 1/4W
△R3845	BZ210135	R002T4221J	RC 220 OHM 1/4W
△R3846	BZ210059	R3X1812R2J	R,METAL OXIDE 2.2 OHM 1W
△R3865	AE001255	R65584150J	R,FUSE 15 OHM 1/4W
R3869	BZ210122	R002T4472J	RC 4.7K OHM 1/4W
<b>CAPACITORS</b>			
△C144	AD301434	E02LU4101M	CE 100 UF 35V
△C147	AE000336	E02LU1101M	CE 100 UF 10V
△C173	AE000466	E02LU1221M	CE 220 UF 10V
△C176	AE000466	E02LU1221M	CE 220 UF 10V
C194	BZ110255	CQGTB0415K	CC 0.1 UF 50V B
C196	BZ110098	CHGTB0413K	CC 0.001 UF 50V B
C197	AE005443	CQGTCH4W1J	CC 82 PF 50V CH
C198	BZ110243	CQGTB0414K	CC 0.01 UF 50V B
C199	AE005443	CQGTCH4W1J	CC 82 PF 50V CH
C200	BZ110098	CHGTB0413K	CC 0.001 UF 50V B
C364	BZ110032	E5EZF3102M	CE 1000 UF 25V
C365	BZ110032	E5EZF3102M	CE 1000 UF 25V
C847	AE000466	E02LU1221M	CE 220 UF 10V
C901	BZ110135	E02L02222M	CE 2200 UF 16V
△C3209	AE005444	E61UM0221D	CE 220 UF 6.3V
△C3801	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△C3802	AE003965	P2122B334M	CMP 0.33 UF 275V ECQUL
△C3804	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△C3805	AE005176	E62XHC331M	CE 2*25 330 UF 200V
△C3808	AD301026	CD39E0M13M	CC 0.001 UF 250V
C3813	BZ110172	C03L0R7U2K	CC 680 PF 2KV R
C3815	BZ110172	C03L0R7U2K	CC 680 PF 2KV R
△C3816	AE003902	E62RFC470M	CE 47 UF 200V
△C3817	AD301021	E02LF0222M	CE 2200 UF 6.3V
C3818	AE002229	P411F4393J	CMPP 0.039 UF 400V ECWF
△C3820	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△C3832	BZ110226	C0JBB07H3K	CC 0.0022UF 2KV B
△C3834	AE005174	E61FF1222D	CE 2200 UF 10V
△C3835	AE005445	E62FT3471M	CE 470 UF 25V
△C3836	AE005445	E62FT3471M	CE 470 UF 25V
C3837	AE000029	C0PLRR7H2K	CC 220 PF 2KV R
△C3838	AE005175	E61FF4102D	CE 1000 UF 35V
△C3839	AE005175	E61FF4102D	CE 1000 UF 35V
△C3840	AD301349	E02LU3470M	CE 47 UF 25V
△C3841	AE000466	E02LU1221M	CE 220 UF 10V
△C3843	AD301317	E02LT4221M	CE 220 UF 35V
△C3844	BZ110197	E02LU5470M	CE 47 UF 50V
△C3845	BZ110035	P2122B104M	CMP 0.1 UF 275V ECQUL
△C3847	BZ110227	CD39E0ML3M	CC 0.0033UF 250V
C3848	BZ110219	C0PLRR7Q2K	CC 470 PF 2KV R
△C3854	AD301026	CD39E0M13M	CC 0.001 UF 250V
C3856	BZ110219	C0PLRR7Q2K	CC 470 PF 2KV R
△C3860	AE005176	E62XHC331M	CE 2*25 330 UF 200V
C4414	BZ110250	E02L02102M	CE 1000 UF 16V
<b>DIODES</b>			
D103	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D104	BZ410006	D1VT001330	DIODE,SILICON 1SS133T-77
D105	AD300732	D28XQS04N0	DIODE,SCHOTTKY 11EQS04N-TA2B5
D108	AD300732	D28XQS04N0	DIODE,SCHOTTKY 11EQS04N-TA2B5
D109	BZ410021	D97U05R61B	DIODE,ZENER MTZJ5.6B T-77
D110	BZ410021	D97U05R61B	DIODE,ZENER MTZJ5.6B T-77
D115	AD300732	D28XQS04N0	DIODE,SCHOTTKY 11EQS04N-TA2B5



# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
		<b>DIODES</b>	
D302	AD300070	D97U01201B	DIODE,ZENER
D305	BZ410010	D28T21DQN9	DIODE,SCHOTTKY
D306	BZ410010	D28T21DQN9	DIODE,SCHOTTKY
D308	BZ410073	D28TEQS040	DIODE,SCHOTTKY
D801	AE004795	DE7RB5R62B	DIODE,ZENER
D2202	BZ410087	0021E2Q140	LED
D2601	BZ410121	DDARDS1200	DIODE,SILICON
D2602	AE004646	DE5RB2R21X	DIODE,ZENER
D3001	AE004643	D28R1QS040	DIODE
D3002	AE004642	D28R03A040	DIODE,SCHOTTKY
D3003	AE004643	D28R1QS040	DIODE
D3200	AE004643	D28R1QS040	DIODE
D3201	AE004643	D28R1QS040	DIODE
D3601	AE004937	D77R1A1R10	DIODE,VARISTA
D3602	AE004795	DE7RB5R62B	DIODE,ZENER
D3603	AE004937	D77R1A1R10	DIODE,VARISTA
D3604	AE004793	DD7R60L400	DIODE,SCHOTTKY
D3605	AE004793	DD7R60L400	DIODE,SCHOTTKY
D3606	AE004796	DE7RB6R82B	DIODE,ZENER
D3607	AE004796	DE7RB6R82B	DIODE,ZENER
D3609	AE004794	DE7RB3R32B	DIODE,ZENER
D3613	AE004794	DE7RB3R32B	DIODE,ZENER
D3801	BZ410006	D1VT001330	DIODE,SILICON
▲D3802	BZ410062	D2WTRM11C0	DIODE,SILICON
▲D3803	BZ410062	D2WTRM11C0	DIODE,SILICON
▲D3804	BZ410062	D2WTRM11C0	DIODE,SILICON
▲D3805	BZ410062	D2WTRM11C0	DIODE,SILICON
▲D3806	BZ410031	D6CE24110A	DIODE,VARISTA
D3807	BZ410064	D97U03R91B	DIODE,ZENER
D3808	BZ410021	D97U05R61B	DIODE,ZENER
D3809	BZ410011	D28TELS2N2	DIODE,RECTIFER
▲D3810	BZ410085	D2WXN40050	DIODE,SILICON
▲D3811	BZ410085	D2WXN40050	DIODE,SILICON
▲D3812	BZ410085	D2WXN40050	DIODE,SILICON
▲D3813	BZ410085	D2WXN40050	DIODE,SILICON
D3814	BZ410006	D1VT001330	DIODE,SILICON
D3815	BZ410006	D1VT001330	DIODE,SILICON
D3816	BZ410011	D28TELS2N2	DIODE,RECTIFER
D3817	BZ410103	D2WXGP10J0	DIODE,RECTIFER
▲D3818	BZ410115	D2LKB340L0	DIODE,SCHOTTKY
D3819	AD300070	D97U01201B	DIODE,ZENER
D3820	BZ410094	D97U01501B	DIODE,ZENER
D3821	BZ410006	D1VT001330	DIODE,SILICON
D3822	BZ410006	D1VT001330	DIODE,SILICON
D3823	BZ410011	D28TELS2N2	DIODE,RECTIFER
D3824	BZ410021	D97U05R61B	DIODE,ZENER
D3825	BZ410011	D28TELS2N2	DIODE,RECTIFER
D3826	BZ410011	D28TELS2N2	DIODE,RECTIFER
▲D3827	AE005173	D2BAMX22S0	DIODE,SCHOTTKY
▲D3828	AD301980	D2CF2016L0	DIODE,SILICON
▲D3829	AE001064	D28F31DQ09	DIODE,SCHOTTKY
▲D3830	AE005172	D27A85T400	DIODE,SCHOTTKY
D3831	BZ410010	D28T21DQN9	DIODE,SCHOTTKY
▲D3832	AD300075	D28TELS6N6	DIODE,RECTIFER
D3833	BZ410037	D97U03301B	DIODE,ZENER
D3834	BZ410113	D97U02201B	DIODE,ZENER
D3835	AE002133	D2BXARS010	DIODE,SILICON
D3836	AE002133	D2BXARS010	DIODE,SILICON
D3837	BZ410113	D97U02201B	DIODE,ZENER
D3838	BZ410006	D1VT001330	DIODE,SILICON
▲D3839	AE005173	D2BAMX22S0	DIODE,SCHOTTKY
D3840	BZ410006	D1VT001330	DIODE,SILICON
▲D3841	BZ410006	D1VT001330	DIODE,SILICON
D3842	BZ410006	D1VT001330	DIODE,SILICON
D3843	BZ410084	D97U01101B	DIODE,ZENER
D3844	BZ410021	D97U05R61B	DIODE,ZENER
D3845	BZ410067	D97U02R21B	DIODE,ZENER
D3846	BZ410006	D1VT001330	DIODE,SILICON
D3847	BZ410006	D1VT001330	DIODE,SILICON
▲D3848	AE003872	DOU002720M	DIODE,VARISTA
▲D3849	AE004936	D6E027110A	DIODE,VARISTA

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>DIODES</b>			
D4002	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D4300	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D4301	AE004795	DE7RB5R62B	DIODE,ZENER UDZS5.6B TE-17
D8508	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D8509	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
D8510	BZ410119	DDDRL41480	DIODE,SILICON MCL4148
<b>ICS</b>			
IC101	AE005304	S5P001DF03	MEMORY DATA
IC102	AE005303	S5P001DF02	MEMORY DATA
IC103	79097849	I9UF032290	IC PST3229NR
IC104	AE005300	S5P001DE03	MEMORY DATA
IC105	79097849	I9UF032290	IC PST3229NR
IC199	AE005301	S5P001DE04	MEMORY DATA
IC301	AE005179	I19FF34410	IC MSP3441G-QA-C12
△ IC302	AE005177	I03DP49010	IC LA4901
△ IC303	AE005177	I03DP49010	IC LA4901
IC304	AE002505	I0QJP21510	IC NJM2151AV
IC801	AE004658	I55M002880	IC TC90288XBG
IC802	AE005182	I54F0LV080	IC HD74LV08ATELL
IC803	AE004660	IFKJ0LM850	IC DTC34LM85AL
IC804	AD301028	I5HF016AJ0	IC S-24C16AFJA-TB-01
IC805	AE005186	I5CF062330	IC SN74CBT16233DGGR
IC806	AE005186	I5CF062330	IC SN74CBT16233DGGR
IC807	AE005187	IFCK0113L0	IC PW113-10QL
IC808	AE005306	S5P001DF05	MEMORY DATA
IC2101	AE005188	IFDK000580	IC AD80058
IC2301	AE000100	I06F030180	IC M63018FP
IC2304	AD301770	I07E00358F	IC BA10358F-E2
IC2601	AE000841	ICQK067070	IC ZR36707TQC
△ IC3001	AE004650	I07F097430	IC BA9743AFV-E2
△ IC3002	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
△ IC3003	AE004653	I1KF98D050	IC KIA78D05F
△ IC3200	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
△ IC3201	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
△ IC3202	BZ611130	I0GF9XZ010	IC PQ070XZ01ZP
IC3601	AE004654	I1KF98D330	IC KIA78D33F
IC3602	AE004654	I1KF98D330	IC KIA78D33F
IC3604	AE001295	I0QJ045800	IC NJM4580M(TE1)
IC3605	AE004805	I5PF099930	IC SII9993CTG100
IC3606	AE005421	I57J0L02F0	IC BR24L02F-WE2
IC3607	AE004802	I1FF043340	IC CS4334-KSZR
IC3608	AE005298	S5P001DE01	MEMORY DATA
IC3611	AE005302	S5P001DF01	MEMORY DATA
IC3612	AE003923	I5CF01G080	IC SN74AHC1G08DCKR
△ IC3801	AD302211	I1KJ9A431A	IC KIA431A-AT
△ IC3802	AE002809	000220002W	PHOTO COUPLER PS2561AL1-1-V(W)
△ IC3803	AE002809	000220002W	PHOTO COUPLER PS2561AL1-1-V(W)
△ IC3804	AE005178	I0BD0159M0	IC STR-A6159M
△ IC3805	AE002809	000220002W	PHOTO COUPLER PS2561AL1-1-V(W)
△ IC3806	AD302211	I1KJ9A431A	IC KIA431A-AT
△ IC3807	AE005181	I1KF98D090	IC KIA78D09F
△ IC3808	AE005180	I1KA98R12A	IC KIA78R12API
IC4001	AE003586	ICQK06762V	IC ZR36762PQCG_V
IC4002	BZ611124	I5HJ004BF0	IC S-24C04BFJ-TB
IC4005	AE002726	IF3J00HGT7	IC HY57V641620HGT-7
IC4007	AE005305	S5P001DF04	MEMORY DATA
IC4202	BZ611139	I0QF02534V	IC NJM2534V(TE2)
IC4300	AD301988	I0UF015010	IC MM1501XNRE
IC4301	AD301988	I0UF015010	IC MM1501XNRE
IC4302	BZ611139	I0QF02534V	IC NJM2534V(TE2)
IC4303	BZ611139	I0QF02534V	IC NJM2534V(TE2)
IC4304	AE004651	I0QF025840	IC NJM2584AM(TE1)
IC4305	AE001295	I0QJ045800	IC NJM4580M(TE1)
IC4306	AD301988	I0UF015010	IC MM1501XNRE
IC4307	AE004651	I0QF025840	IC NJM2584AM(TE1)
IC4308	AE004800	I05FE13830	IC TA1383FG
IC4309	AE001069	I0UF015020	IC MM1502XNRE
IC8502	AE003584	I17F017530	IC PCM1753DBQR
<b>TRANSISTORS</b>			
Q101	BZ510021	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146
Q102	BZ510026	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>TRANSISTORS</b>			
Q103	BZ510026	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146
Q104	BZ510021	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146
Q105	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q106	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q107	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q108	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q109	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q110	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q111	BZ510021	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146
Q112	BZ510026	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146
Q113	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q114	BZ510022	TNYJJ05001	COMPOUND TRANSISTOR DTC114TKAT146
Q115	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q116	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q301	AE004662	T93A018020	TRANSISTOR,SILICON 2SD1802S/T-TL-E
Q302	AE004662	T93A018020	TRANSISTOR,SILICON 2SD1802S/T-TL-E
Q303	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q601	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q602	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q603	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q2101	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q2601	BZ510112	T67J1036K0	TRANSISTOR,SILICON 2SA1036KT146
Q2602	AE003592	T67J048TL0	TRANSISTOR,SILICON 2SA2048TL
Q2603	BZ510113	T27T030180	FET 2SK3018T106
Q2604	BZ510113	T27T030180	FET 2SK3018T106
Q2605	BZ510113	T27T030180	FET 2SK3018T106
Q2606	BZ510021	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146
Q2607	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q2608	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q3001	AE004661	T77J011320	TRANSISTOR,SILICON 2SB1132T100(Q,R)
Q3002	BZ510020	TNYJB05001	COMPOUND TRANSISTOR DTC114EKAT146
Q3003	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q3004	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q3005	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q3006	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
▲ Q3007	AE004663	TJ5M081090	FET TPC8109(T2LORION_Q)
▲ Q3008	AE004663	TJ5M081090	FET TPC8109(T2LORION_Q)
Q3603	BZ510113	T27T030180	FET 2SK3018T106
Q3604	BZ510113	T27T030180	FET 2SK3018T106
Q3605	BZ510113	T27T030180	FET 2SK3018T106
Q3606	BZ510113	T27T030180	FET 2SK3018T106
Q3607	BZ510113	T27T030180	FET 2SK3018T106
Q3608	BZ510081	TPYJA05001	COMPOUND TRANSISTOR DTA143EKAT146
Q3609	BZ510045	TNYJD05001	COMPOUND TRANSISTOR DTC144EKAT146
Q3610	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q3611	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q3612	BZ510045	TNYJD05001	COMPOUND TRANSISTOR DTC144EKAT146
Q3613	AE002626	T8YJ2412K0	TRANSISTOR,SILICON 2SC2412KT146 R,S
▲ Q3801	BZ510069	TCATC31980	TRANSISTOR,SILICON KTC3198-AT(Y,GR)
Q3802	BZ510069	TCATC31980	TRANSISTOR,SILICON KTC3198-AT(Y,GR)
▲ Q3803	AE004014	TJXG9NK500	FET STP9NK50ZFP
▲ Q3804	AE003591	T250035680	FET 2SK3568(ORION_Q)
▲ Q3805	BZ510070	TCAT032034	TRANSISTOR,SILICON KTC3203_Y-AT
▲ Q3806	BZ510070	TCAT032034	TRANSISTOR,SILICON KTC3203_Y-AT
Q3807	BZ510020	TNYJB05001	COMPOUND TRANSISTOR DTC114EKAT146
Q3808	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q3809	BZ510105	TCAT03209Y	TRANSISTOR,SILICON KTC3209_Y-AT
Q3811	BZ510020	TNYJB05001	COMPOUND TRANSISTOR DTC114EKAT146
Q3812	BZ510105	TCAT03209Y	TRANSISTOR,SILICON KTC3209_Y-AT
Q3813	BZ510057	TAAT01281Y	TRANSISTOR,SILICON KTA1281_Y
Q3814	BZ510071	TNAAB05003	COMPOUND TRANSISTOR KRC102SRTK
Q3815	BZ510073	TAATA12660	TRANSISTOR,SILICON KTA1266-AT(Y,GR)
Q4201	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4202	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4203	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4204	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4205	BZ510026	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146
Q4206	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4207	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4300	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4301	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>TRANSISTORS</b>			
Q4302	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4303	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4304	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4305	BZ510045	TNYJD05001	COMPOUND TRANSISTOR DTC144EKAT146
Q4306	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4307	BZ510081	TPYJA05001	COMPOUND TRANSISTOR DTA143EKAT146
Q4308	BZ510021	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146
Q4309	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4310	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4311	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q4312	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4313	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q4314	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
Q4315	BZ510108	TAAA1504SY	TRANSISTOR,SILICON KTA1504S_Y_RTK
Q8507	BZ510109	TCAA3875SY	TRANSISTOR,SILICON KTC3875S_Y_RTK
<b>COILS &amp; TRANSFORMERS</b>			
L001	AE002347	021673220K	COIL 22 UH
L002	AD301989	0216A6330J	COIL 33 UH
L101	BZ310040	02167F470J	COIL 47 UH
L103	AE005142	021LA64R7K	COIL 4.7 UH
L104	BZ310052	021LA6100K	COIL 10 UH
L301	BZ310141	02167F100J	COIL 10 UH
L302	BZ310141	02167F100J	COIL 10 UH
L303	BZ310141	02167F100J	COIL 10 UH
L304	AE004595	021404221M	COIL 21A 220 UH
L305	AE004595	021404221M	COIL 21A 220 UH
L601	AE004601	0216SD1R5J	COIL 1.5 UH
L602	AE005283	0216S8101K	COIL F 100 UH
L603	AE005285	0216S8470K	COIL F 47 UH
L604	AE005284	0216S8220K	COIL F 22 UH
L608	AE004601	0216SD1R5J	COIL 1.5 UH
L609	AE004601	0216SD1R5J	COIL 1.5 UH
L610	AE005059	0216S4470J	COIL 47 UH
L611	AE005059	0216S4470J	COIL 47 UH
L801	AE005285	0216S8470K	COIL F 47 UH
L802	AE005283	0216S8101K	COIL F 100 UH
L803	AE005285	0216S8470K	COIL F 47 UH
L804	AE005285	0216S8470K	COIL F 47 UH
L805	AE005285	0216S8470K	COIL F 47 UH
L806	AE005285	0216S8470K	COIL F 47 UH
L807	AD301539	02AHB0A0A4	CORE,FERRITE W5T_20*10*10A
L817	AE005284	0216S8220K	COIL F 22 UH
L819	AE005284	0216S8220K	COIL F 22 UH
L2101	AE005284	0216S8220K	COIL F 22 UH
L2102	AE005285	0216S8470K	COIL F 47 UH
L2103	AE005284	0216S8220K	COIL F 22 UH
L3001	AE004593	021404101L	COIL 1A 100 UH
L3002	AE004593	021404101L	COIL 1A 100 UH
L3003	BZ310191	02167F2R2J	COIL 2.2 UH
L3004	BZ310150	02167E220K	COIL R7 22 UH
L3601	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3602	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3603	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3604	AE004752	02D6000068	COIL,CHOKE ACM2012D-900-2P-T00
L3801	AD301785	02167E100K	COIL R6-1 10 UH
▲L3802	AE005286	029X000120	COIL,LINE FILTER SS24H-R15080-CH
L3803	AD301785	02167E100K	COIL R6-1 10 UH
L3804	AD301785	02167E100K	COIL R6-1 10 UH
▲L3805	AE005286	029X000120	COIL,LINE FILTER SS24H-R15080-CH
L3806	AD301785	02167E100K	COIL R6-1 10 UH
L3808	BZ310079	021LA6101J	COIL 100 UH
L3809	AD301785	02167E100K	COIL R6-1 10 UH
L3810	AD301785	02167E100K	COIL R6-1 10 UH
L4001	AE004601	0216SD1R5J	COIL 1.5 UH
L4202	BZ310040	02167F470J	COIL 47 UH
L4300	AE005057	0216S4101J	COIL 100 UH
L4301	AE005057	0216S4101J	COIL 100 UH
L4302	AE005059	0216S4470J	COIL 47 UH
L4303	AE005284	0216S8220K	COIL F 22 UH
L4304	AE005283	0216S8101K	COIL F 100 UH
L4305	AE005285	0216S8470K	COIL F 47 UH

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>COILS &amp; TRANSFORMERS</b>			
L4306	AE005284	0216S8220K	COIL F 22 UH
L4307	AE005060	0216SDR56J	COIL 0.56 UH
L4308	AE005060	0216SDR56J	COIL 0.56 UH
L8502	AE000828	02167F1R0K	COIL 1 UH
L8503	AE000828	02167F1R0K	COIL 1 UH
L8504	AE000828	02167F1R0K	COIL 1 UH
△T3801	AE004942	048119003S	TRANSFORMER,SWITCHING 8119003S
△T3802	AE005145	0481350894	TRANSFORMER,SWITCHING 81350894
△T3803	AE005144	048134003S	TRANSFORMER,SWITCHING 8134003S
<b>JACKS</b>			
△J301	AE002426	0602131008	HEADPHONE JACK HSJ0913-01-140
J3601	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J3602	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4201	AE004334	063D700009	JACK MDC-070V-A_LF
J4202	AE002949	060J421036	RCA JACK MTJ-032-05A-30-FE
J4203	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4204	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4205	AE002949	060J421036	RCA JACK MTJ-032-05A-30-FE
J4206	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4207	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4208	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4209	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4300	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4301	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4302	AE002950	060J421037	RCA JACK MTJ-032-05A-32-FE
J4303	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4304	AE003568	060J401102	RCA JACK MSP-251V-05NI-FE-LF
J4305	AE002951	060J421030	RCA JACK MTJ-032-05A-31-FE
J4306	AE005146	060J421043	RCA JACK MTJ-032-05A-29-FE
J4307	AE005147	060J421044	RCA JACK MTJ-032-05A-50-FE
<b>SWITCHES</b>			
SW2201	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2202	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2203	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2204	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2206	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2208	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2209	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2251	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2252	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2253	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2254	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
SW2255	BZ612010	0504101T34	SWITCH,TACT EVQ21505R
<b>P.C.BOARD ASSEMBLIES</b>			
PCB130	AE005293	A5P001D130	PCB ASS'Y DMD005A
PCB270	AE005342	A5P001D270	PCB ASS'Y CED014A
PCB280	AE005294	A5P001D280	PCB ASS'Y DED007A
PCB340	AE005295	A5P001D340	PCB ASS'Y CED016A
PCBD20	AE005340	A5P002DD20	PCB ASS'Y CMD004A
PCBDA0	AE005343	A5P001DDA0	PCB ASS'Y CED015A
PCBDJ0	AE005341	A5P002DDJ0	PCB ASS'Y CED011A
<b>MISCELLANEOUS</b>			
B101	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B801	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B802	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B803	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B807	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B2101	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B2301	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B2601	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B2602	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B2603	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B2604	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B2605	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B3001	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B3601	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B3602	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B3603	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B3604	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B3608	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25
B3609	AE004602	024HC36001	CORE,BEADS HCB2012K-600T25

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>MISCELLANEOUS</b>			
B3610	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B3611	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B3801	BZ310121	024HT03553	CORE,BEADS W5RH3.5X5X1.0
B4001	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4002	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4003	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4004	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4005	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4006	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4007	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4008	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4009	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4010	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4300	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B4301	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
B8503	BZ310186	024HC31022	CORE,BEADS FCM2012H-102T04
BL001	BZ310174	023V000009	COIL,BALUN WEV1020-9004
BT001	AE000012	1412004008	BATTERY,MANGAN R03(AB)E_2P_G
BT002	AE000012	1412004008	BATTERY,MANGAN R03(AB)E_2P_G
CD101	AE004613	06CU231801	CORD,CONNECTOR CU231801
CD105	BZ614447	WBL6022038	FLAT CABLE AWM2468 AWG26 4C BLACK 220MM
△CD501	AE005290	06CU241001	CORD,CONNECTOR CU241001
CD502	AE005439	06CU2C2801	CORD,CONNECTOR CU2C2801
CD503	AE005440	06CU2C5801	CORD,CONNECTOR CU2C5801
CD701	AE005291	06CU2G1301	CORD,CONNECTOR CU2G1301
CD801	AE005165	122H0R0801	CORD,JUMPER 2H0R0801
CD802	AE005166	122H0U0801	CORD,JUMPER 2H0U0801
CD803	AE005434	06CHRU2201	CORD,CONNECTOR CHRU2201
CP001	BZ614444	069D01001A	CONNECTOR PCB SIDE 003P-2100
CP002	BZ614444	069D01001A	CONNECTOR PCB SIDE 003P-2100
CP101	BZ614350	069S230629	CONNECTOR PCB SIDE A2001WV2-3P
CP102	BZ614420	069S2D0629	CONNECTOR PCB SIDE A2001WV2-13P
CP103	AD301796	069S280629	CONNECTOR PCB SIDE A2001WV2-8P
CP104	AD301998	069S240629	CONNECTOR PCB SIDE A2001WV2-4P
CP107	BZ614416	069S220629	CONNECTOR PCB SIDE A2001WV2-2P
CP301	AD301045	069S140419	CONNECTOR PCB SIDE A2502WV2-4P
CP501	AD301998	069S240629	CONNECTOR PCB SIDE A2001WV2-4P
CP752	AE004336	069S2G0629	CONNECTOR PCB SIDE A2001WV2-16P
CP801	AE005151	069HVV04A	CONNECTOR PCB SIDE FI-X30S-HF-NPB
CP803	AE005152	069S1K0019	CONNECTOR PCB SIDE A2501WV2-20P
CP805	AE005150	069EVU3010	CONNECTOR PCB SIDE 00_6232_030_006_800
CP806	AE005149	069EVR3010	CONNECTOR PCB SIDE 00_6232_027_006_8
CP807	AE005436	06CU223401	CORD,CONNECTOR CU223401
CU101	BZ710279	800WFAA006	CUSHION A
CU102	BZ710149	800WFAA008	CUSHION C
CU801	BZ710279	800WFAA006	CUSHION A
CD1001	AE005435	06CU144705	CORD,CONNECTOR CU144705
CD2201	AE005437	06CU244301	CORD,CONNECTOR CU244301
CD2251	AE005289	06CU220702	CORD,CONNECTOR CU220702
CD2601	AE001699	122H0O1902	CORD,JUMPER 2H0O1902
CD3601	AE005288	06CU1K2701	CORD,CONNECTOR CU1K2701
△CD3801	AE001245	1209419910	CORD,AC BUSH 9419910
CD3807	AE005438	06CU293701	CORD,CONNECTOR CU293701
CP105A	BZ614334	067U004029	WIRE HOLDER B2013H02-4P
CP105B	BZ614334	067U004029	WIRE HOLDER B2013H02-4P
CP2251	AE005287	069S220639	CONNECTOR PCB SIDE A2001WR2-2P
CP2301	AE004608	069EV93010	CONNECTOR PCB SIDE 00_6232_009_006_800
CP2302	79091438	069EVC3010	CONNECTOR PCB SIDE 00_6232_012_006_800
CP2601	AE003571	069GYOT119	CONNECTOR PCB SIDE 09-5000-024-001-001
CP3200	BZ614458	069S290629	CONNECTOR PCB SIDE A2001WV2-9P
CP3601	AE004763	069HYJ3010	CONNECTOR PCB SIDE DC1R019JDA
CP3604	BZ614239	069S290639	CONNECTOR PCB SIDE A2001WR2-9P
CP3801	AD301554	069S2C0629	CONNECTOR PCB SIDE A2001WV2-12P
CP3802	AD301554	069S2C0629	CONNECTOR PCB SIDE A2001WV2-12P
CP4201	AE005149	069EVR3010	CONNECTOR PCB SIDE 00_6232_027_006_8
CP4202	AE005150	069EVU3010	CONNECTOR PCB SIDE 00_6232_030_006_800
CP4301	AE005148	0694S15016	CONNECTOR PCB SIDE 1-788624-1
CU1001	BZ710149	800WFAA008	CUSHION C
ELD201	BZ614043	124116281A	EYE LET XRY16X28BD
ELD202	BZ614044	124120301A	EYE LET XRY20X30BD
△F3001	AE004626	083LA05007	FUSE 1206FA5A-T

# ELECTRICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
<b>MISCELLANEOUS</b>			
△F3801	BZ614422	081PC6R305	FUSE
FH3801	AE002634	06710T0009	HOLDER,FUSE
FH3802	AE002634	06710T0009	HOLDER,FUSE
NR801	AE004629	110N4000M3	R,NETWORK
NR802	AE004629	110N4000M3	R,NETWORK
NR803	AE004629	110N4000M3	R,NETWORK
NR804	AE004629	110N4000M3	R,NETWORK
NR805	AE004629	110N4000M3	R,NETWORK
NR806	AE004629	110N4000M3	R,NETWORK
NR813	AE004680	110P4101M4	R,NETWORK
NR814	AE004680	110P4101M4	R,NETWORK
NR815	AE004680	110P4101M4	R,NETWORK
NR816	AE004680	110P4101M4	R,NETWORK
NR817	AE004680	110P4101M4	R,NETWORK
NR818	AE004680	110P4101M4	R,NETWORK
NR822	AE004680	110P4101M4	R,NETWORK
NR823	AE004680	110P4101M4	R,NETWORK
NR2101	AE004680	110P4101M4	R,NETWORK
NR2102	AE004680	110P4101M4	R,NETWORK
NR2103	AE004680	110P4101M4	R,NETWORK
NR2104	AE004680	110P4101M4	R,NETWORK
NR2105	AE004680	110P4101M4	R,NETWORK
NR2106	AE004680	110P4101M4	R,NETWORK
OS2201	AE004623	0773071006	REMOTE RECEIVER
△RY3801	AE003621	0560V50118	RELAY
△SP1001	AE005159	070C546009	SPEAKER
△SP1002	AE005159	070C546009	SPEAKER
TM101	AE005292	076R0JX010	TRANSMITTER
△TU001	AE004592	0162300043	RF UNIT
TR3801	BZ310181	02A6B2E0A1	CORE,FERRITE
TR3802	BZ310181	02A6B2E0A1	CORE,FERRITE
TR3803	BZ310181	02A6B2E0A1	CORE,FERRITE
TR3804	BZ310118	02AHB9A972	CORE,FERRITE
TR3805	BZ310118	02AHB9A972	CORE,FERRITE
V2301	AE005160	095S123001	LCD
X102	AE004780	100WT01611	CRYSTAL
X104	BZ613019	1002T01606	CERAMIC OSCILLATOR
X301	BZ613042	100CT01803	CRYSTAL
X601	AE004628	100DT04201	CRYSTAL
X801	AE005161	100DT01407	CRYSTAL
X3601	AE004779	100CT01101	CRYSTAL
X4001	AD301803	100BT02701	CRYSTAL
X4300	AE004348	1002R01502	CERAMIC OSCILLATOR
X4301	AE005441	100DA3R529	CRYSTAL

**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

# **TOSHIBA CORPORATION**

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN