

TOSHIBA

FILE NO. 810-200677GR

SERVICE MANUAL



DVD HOME CINEMA SYSTEM

SD-57HTKR



The above model is classified as a green product (*1), as indicated by the underlined serial number.
This Service Manual describes replacement parts for the green product. When repairing this green product, use the part(s) described in this manual and lead-free solder (*2).

For (*1) and (*2), see the next page.

(*1)

GREEN PRODUCT PROCUREMENT

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

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

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

(*2)

LEAD-FREE SOLDER

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

WARNING

This product is manufactured using lead free solder.

DO NOT USE LEAD BASED SOLDER TO REPAIR THIS PRODUCT !

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

SECTION 1. GENERAL

Safety Precautions

WARNINGS



The exclamation mark within a triangle is a warning sign alerting the user to important instructions accompanying the product.



The lightning flash with arrowhead symbol within a triangle is a warning sign alerting the user to "dangerous voltage" inside the unit.



To reduce the risk of electric shocks, do not remove the cover. No user-serviceable parts inside the unit. Refer all servicing to qualified personnel.



This unit uses a laser. Only a qualified service person should remove the cover or attempt to service the player due to possible eye injury.



Invisible laser radiation may occur when the unit is opened or interlocks are by-passed. Avoid exposure to laser beam. Use of controls, adjustments or procedures other than those specified herein may result in hazardous radiation exposure.

110-127/
220-240~

This unit operates on 110-127/220-240 ~ 50/60Hz. If it is not to be used for a long time, the AC power cord should be unplugged.



The unit must not be exposed to moisture or rain. The unit should not be exposed to dripping or splashing and objects containing liquids, such as vases, should never be placed on top of it.



The power switch for the unit is mounted on a secondary circuit and does not disconnect the whole unit from the mains in OFF position.



Please ensure that all connections are properly made before operating the unit.



The unit should be positioned so that it is properly ventilated. Avoid placing it, for example, close to curtains, on a carpet or inside a built-in fixture such as a bookcase. Openings for ventilation must not be blocked or covered during use.



Do not expose this unit to direct sunlight or heat sources.

NOTE

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Manufactured under licence from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished works. " 1992-1997 Dolby Laboratories, Inc. All rights reserved.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Do not open covers and do not repair yourself. Refer servicing to qualified personnel. This DVD VIDEO player is classified as a CLASS 1 LASER PRODUCT as stated on the back of the set.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

CAUTION :

1. Do not operate the system in an enclosed cabinet and allow about 10cm (4 inches) of free space all around the receiver for adequate ventilation.
2. No naked flame sources, such as lighted candles, should be placed on the apparatus.
3. Attention should be drawn to the environmental aspects of battery disposal.
4. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Following information is only for EU-member states:

The use of the symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



Where the mains Plug is used as the disconnect device, the disconnect device shall remain readily operable.

Specification

Technical data

Power supply	110-127V/220-240V mains voltage, 50Hz/60Hz
Power consumption	130W ; In standby <1W
Dimensions	430W x 50H x 350D mm
Laser	Semiconductor laser, wavelength 650 nm
Video signal-noise ratio	55dB (DVD)
Audio frequency range	DVD (PCM) 125Hz ~ 20kHz (+/- 3dB); CD 125Hz ~ 20kHz (+/- 3dB)
FM tuner	
System	Quartz-controlled PLL synthesiser system
Reception range	87.5~108 MHz (50kHz increments)
Audio output signal	
Audio	L/R 2Vrms, 47kOhm
Audio output	
Stereo	100W+100W $\leq$ (4 Ohms at 1kHz, THD 10%)
Surround	Front: 100W+100W $\leq$ (4 Ohms at 1kHz, THD 10%) Center: 100W $\leq$ (4 Ohms at 1kHz, THD 10%) Rear: 100W+100W $\leq$ (4 Ohms at 1kHz, THD 10%)
Subwoofer	Ouputput: 100W (4 Ohms at 80Hz, THD 10%)
Headphones	Stereo output 3.5mm jack
Front/Rear speakers	
Dimensions	n 220 (base) x 908H mm
Impedance	4 Ohms
Center speaker	
Dimensions	425W x 106H x 85D mm
Impedance	4 Ohms
Subwoofer	
Dimensions	202W x 305H x 317D mm
Impedance	4 Ohms

Specifications are subject to change without prior notice.

DISASSEMBLY INSTRUCTIONS

Dismantling of the Front Panel Assembly

- 1) Open the DVD Tray by using the Open/Close Button while the Set is ON and disconnect the mains supply after removing the Tray Cover.

Note: If this is not possible, the DVD Tray has to be open manually.

Take a mini screw driver about 2mm diameter and make a marking 24mm from the tip as shown in figure 2 . Place the set on its side, insert the mini screw driver till the marking and slide it towards the right as shown in figure 1 until the Tray moves out of the Front Panel.

- 2) Return the set to its upright position and remove the Tray Cover as shown in Figure 3 and close the tray manually by pushing it back in.
- 3) Loosen 9 screws and remove the Top Cover by lifting the rear portion upwards before sliding it out towards the rear.
 - 5 screws on the back
 - 2 screws each on the left & right side
- 4) Loosen 5 screws & lift up the top edge of Front Panel assembly to free some catches before sliding it out towards the front.
 - 3 screws on the bottom
 - 1 screw each on the left & right side



Figure 1



Figure 2

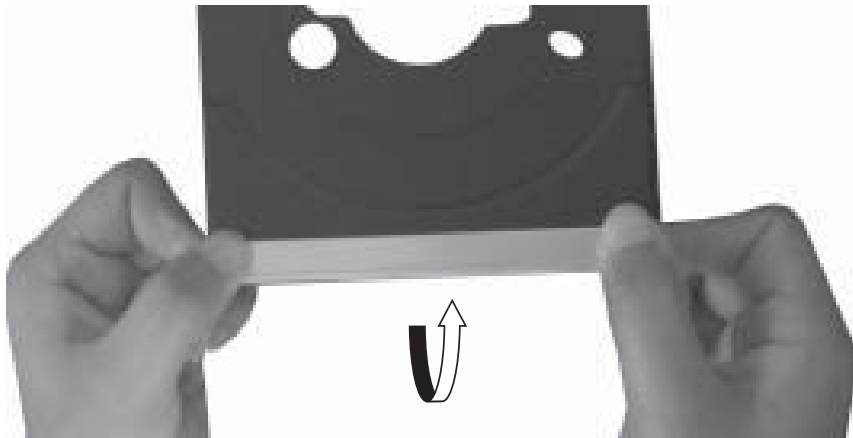


Figure 3

Dismantling of the Main PCB

- 1) Loosen 7 screw "A" at the back panel as shown in figure 4.
- 2) Loosen 4 screw "B" on the top of main board as shown in figure 5.

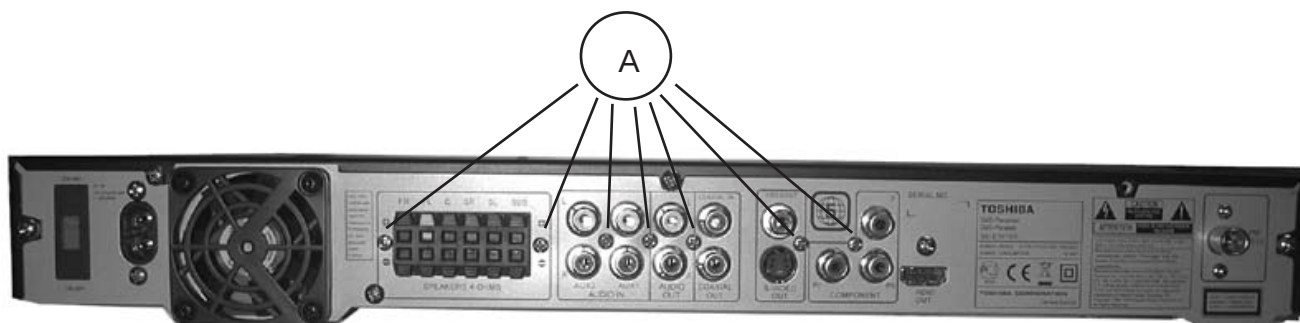


Figure 4

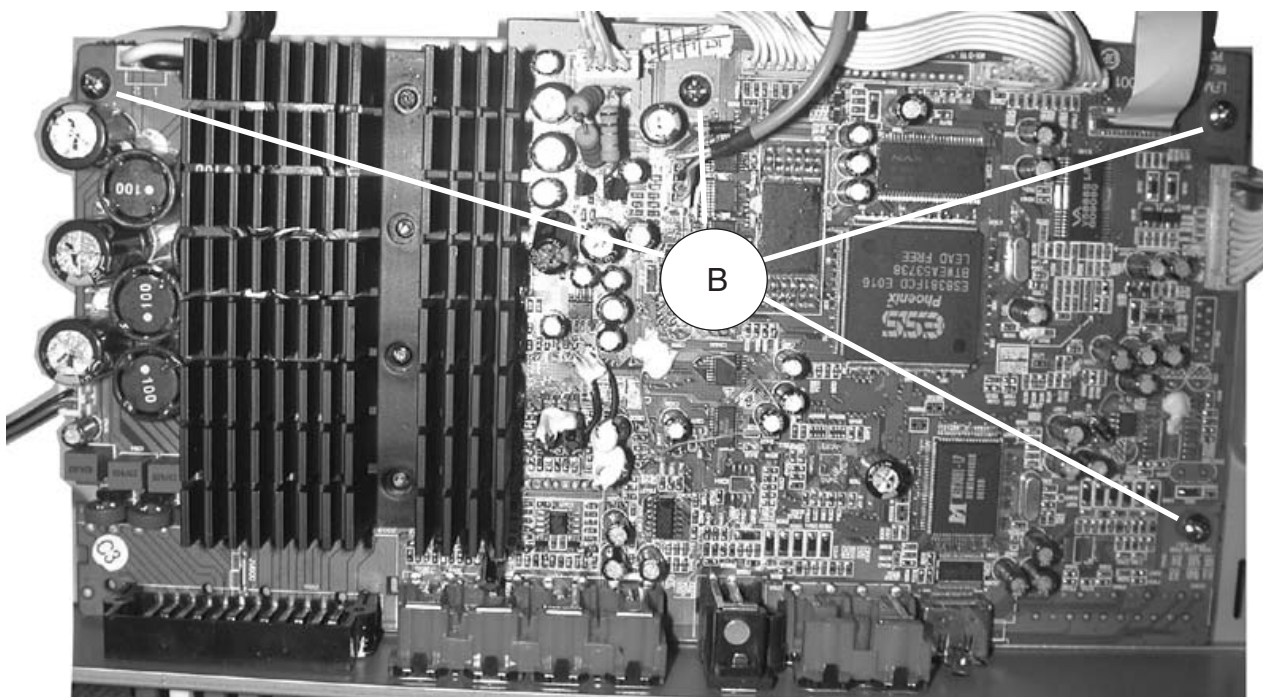


Figure 5

Dismantling of the DVD Module

- 1) Loosen 4 screws "C" to remove the DVD Module as shown in figure 6.

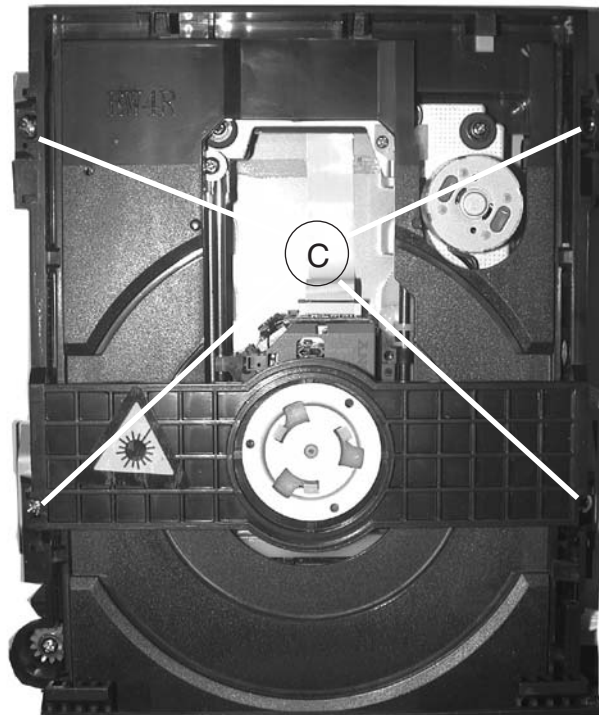


Figure 6

Dismantling of the Power Board

- 1) Loosen 4 screws "D" at the top of the Power Board as shown in figure 7

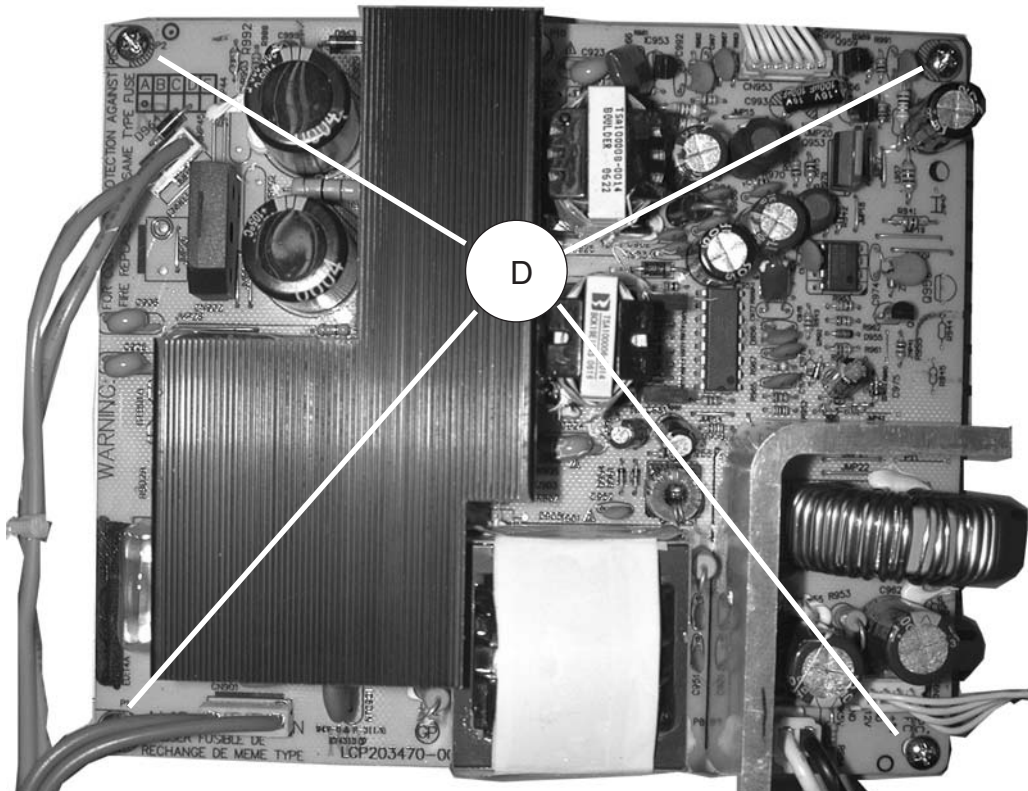


Figure 7

Dismantling of the DC Power cord

- 1) Loosen 2 screws "E" to remove the power cord as shown in figure 8.

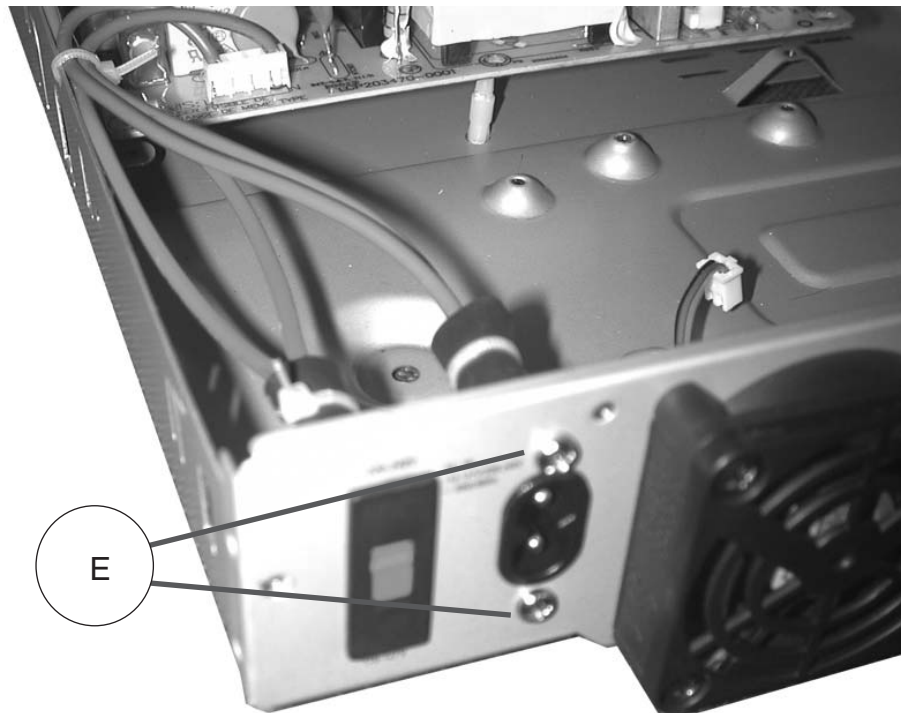


Figure 8

Dismantling of the Cable of switch voltage

- 1) Cut the rubber bushing use scissors, then use brand iron solder between AC socket and two cables as shown in figure 9

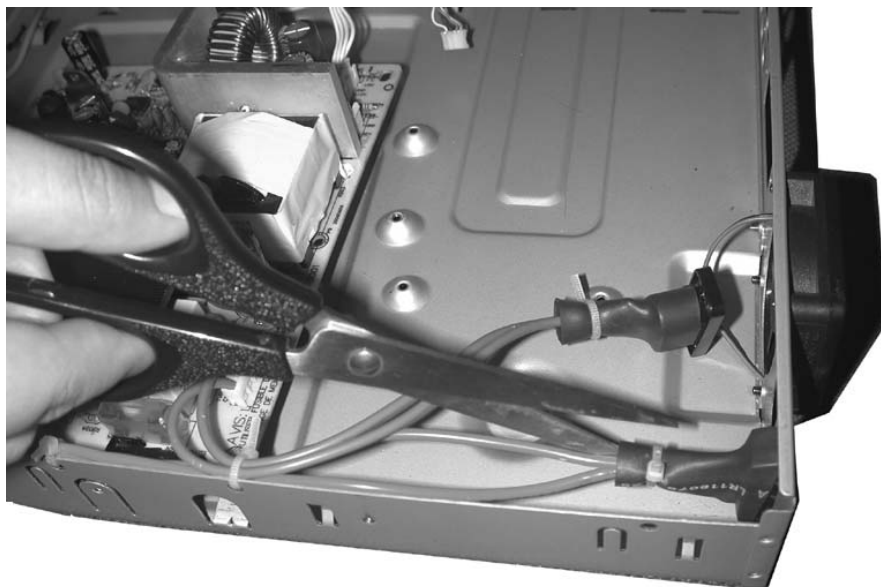


Figure 9

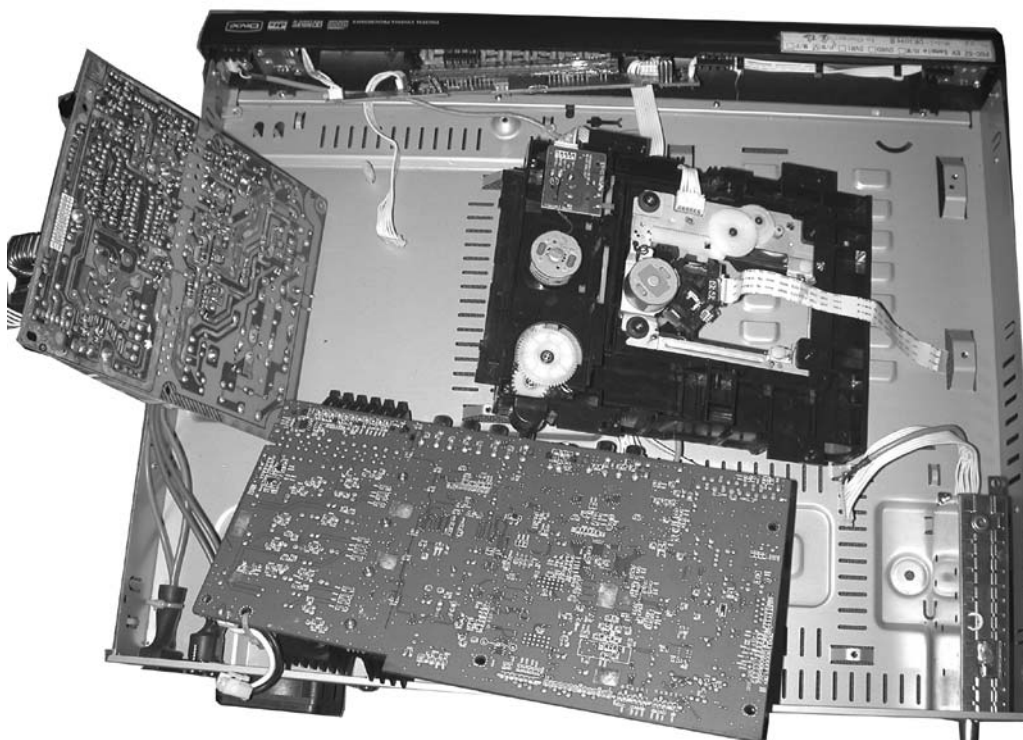
SERVICE POSITIONS

Service positio



Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

Service position B



SECTION 2. ELECTRICAL

Troubleshooting

If you experience any of the following difficulties while using the system, use this troubleshooting guide to help you solve the problem. Should any problem persist, consult your nearest service center.

No power

- Is the power cord firmly plugged into the wall outlet?
- One of the safety mechanisms may be operating. In this case, unplug the player from the wall outlet and then plug it in again.

No picture

- Check that the system is connected securely.
- The video cable is damaged. Replace it with a new one.
- Make sure you connect the system to video input jack on the TV.
- Make sure you turn on the TV.
- Make sure you select the video input on the TV so that you can view the pictures from this system.
- Make sure the TV TYPE and VIDEO OUTPUT setting in the setup menu are set correctly.

The picture noise appears

- Clean the disc.
- If video from this system has to go through your VCR to get to your TV, the copy-protection applied to some DVD programs could affect picture quality. If you still experience problems after checking your connections, please try connecting your DVD system directly to your TV's input.

The aspect ratio of the screen cannot be changed even though you set "TV TYPE" in the SETUP menu when you play a wide picture

- The aspect ratio is fixed on your DVD disc.
- Connect the system directly to the TV. Otherwise, you may not change the aspect ratio.
- Depending on the TV, you may not change the aspect ratio.

There is no sound or only a very low-level sound is heard

- Check that the speakers and components are connected securely.
- Make sure that you have selected the correct source on the system.
- The protective device on the system has been activated because of a short circuit. Turn off the system, eliminate the short circuit problem and turn on the power again.
- The audio connecting cord is damaged. Replace it with a new one.
- The system is in pause mode, in slow-motion play mode, fast forward or fast reverse is performed. Press **PLAY/PAUSE** to return to normal play mode.
- Check the speaker settings.

The left and right sounds are unbalanced or reversed

- Check that the speakers and components are connected correctly and securely.
- Adjust front balance parameter using **SELECT** and **VOLUME + / VOLUME -**.

Severe hum or noise is heard

- Check that the speakers and components are connected securely.
- Check that the connecting cords are away from a transformer or motor, and at least 3 meters away from a TV set or fluorescent light.
- Move your TV away from the audio components.
- The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.
- Clean the disc.

No stereo sound effect when you play a Video CD or a CD

- Set the Audio mode to STEREO.
- Make sure you connect the system appropriately.

The surround effect is difficult to hear when you are playing a Dolby Digital sound track

- Check the speaker connections.
- Depending on the DVD disc, the output signal may not be the entire 5.1 channel but monaural or stereo even if the sound track is recorded in Dolby Digital format.

The sound comes from the center speaker only

- Depending on the disc, the sound may come from the center speaker only.

No sound or only a very low-level sound is heard from the rear speakers

- Adjust the speaker volume.

The language for the subtitles cannot be changed when you play a DVD

- Multilingual subtitles are not recorded on the DVD.
- Changing the language for the subtitles is prohibited on the DVD.

The subtitles cannot be turned off when you play a DVD

- Depending on the DVD, you may not be able to turn the subtitles off.

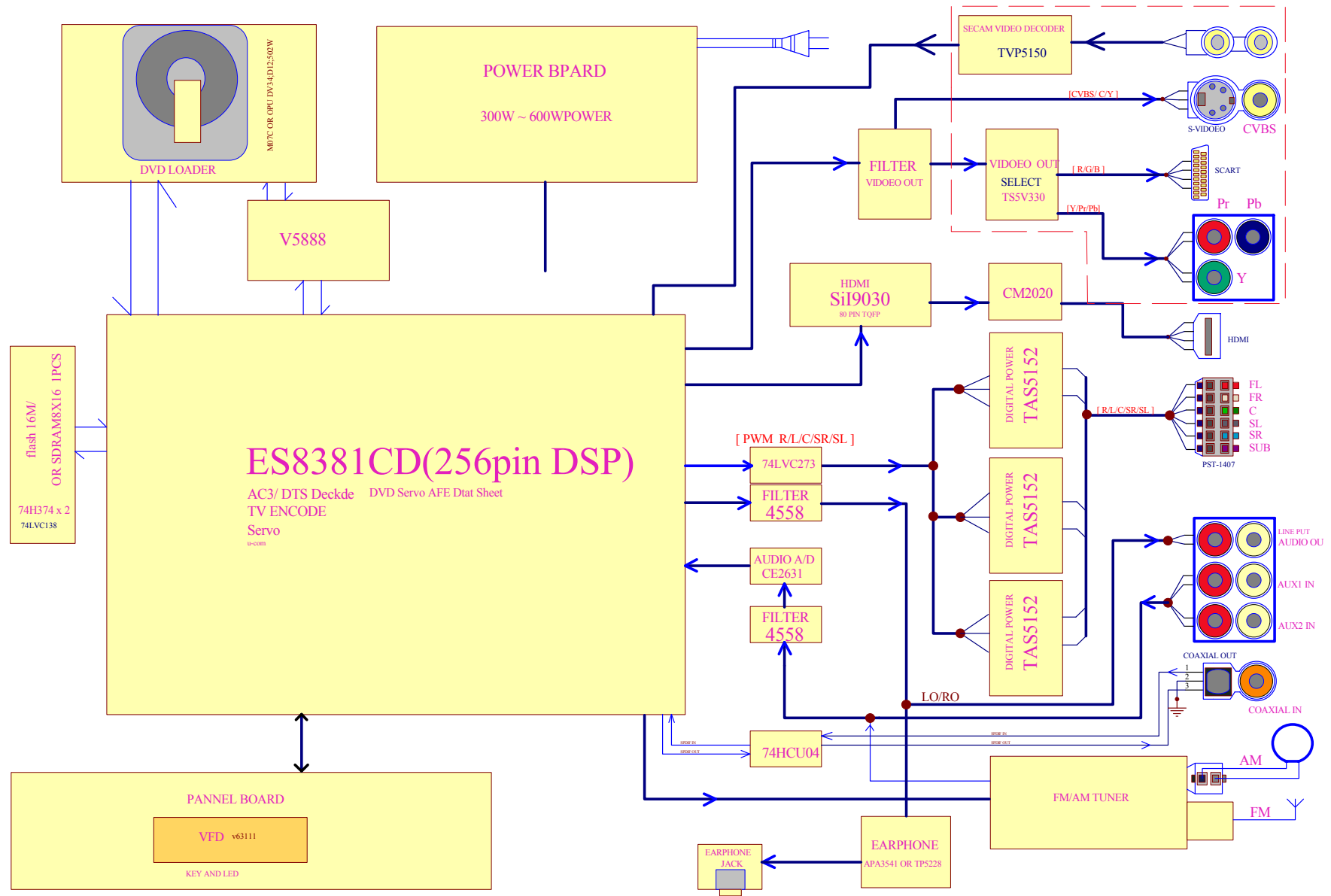
The angles cannot be changed when you play a DVD

- Multi-angles are not recorded on the DVD.
- Change the angles when the angle mark appears on the TV screen.

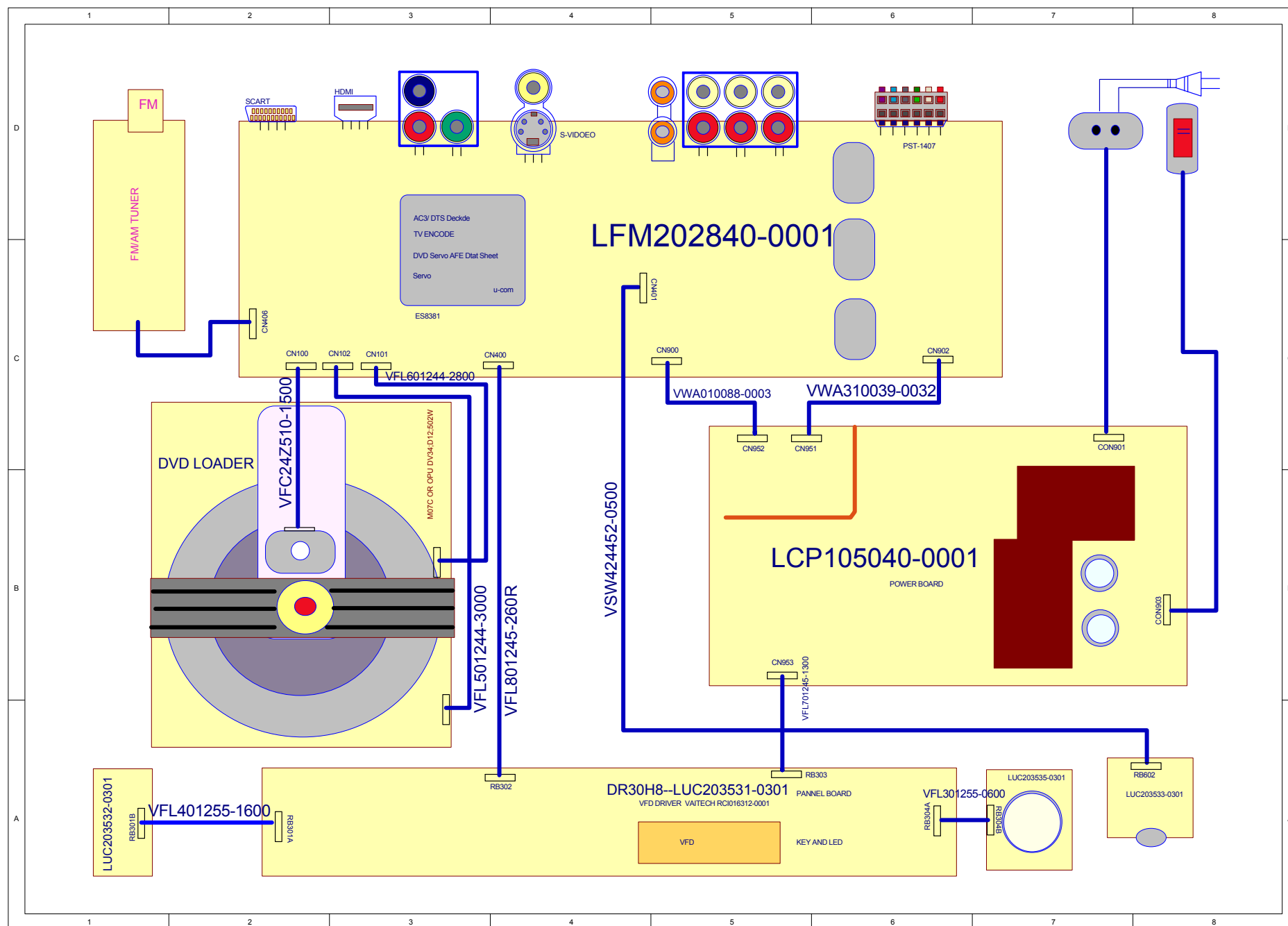
The system does not operate properly

- Static electricity, etc., may affect the system's operation. Press **ON/STANDBY** button to turn off, then press again to turn on.

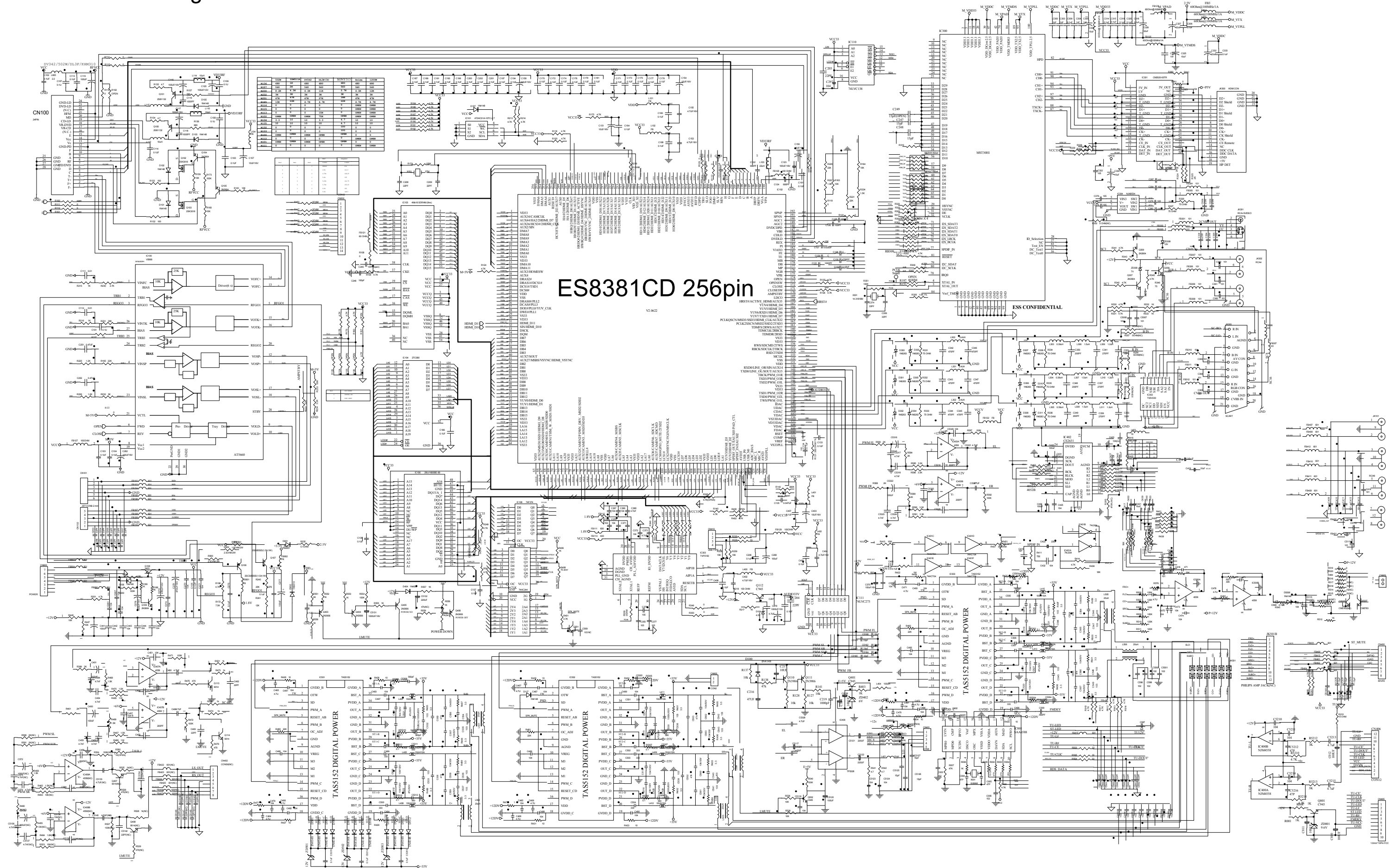
Block Diagram



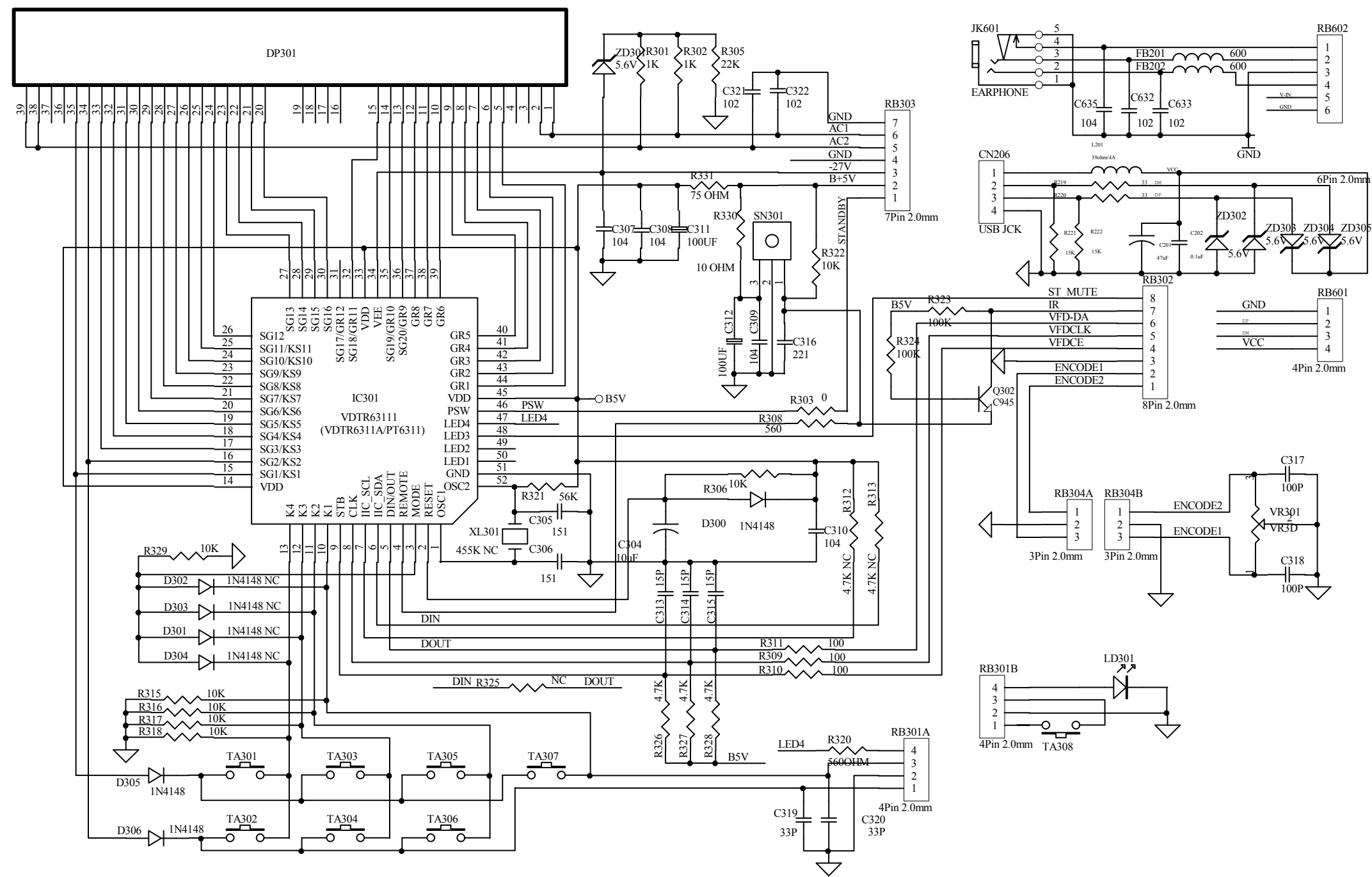
Wiring Diagrams



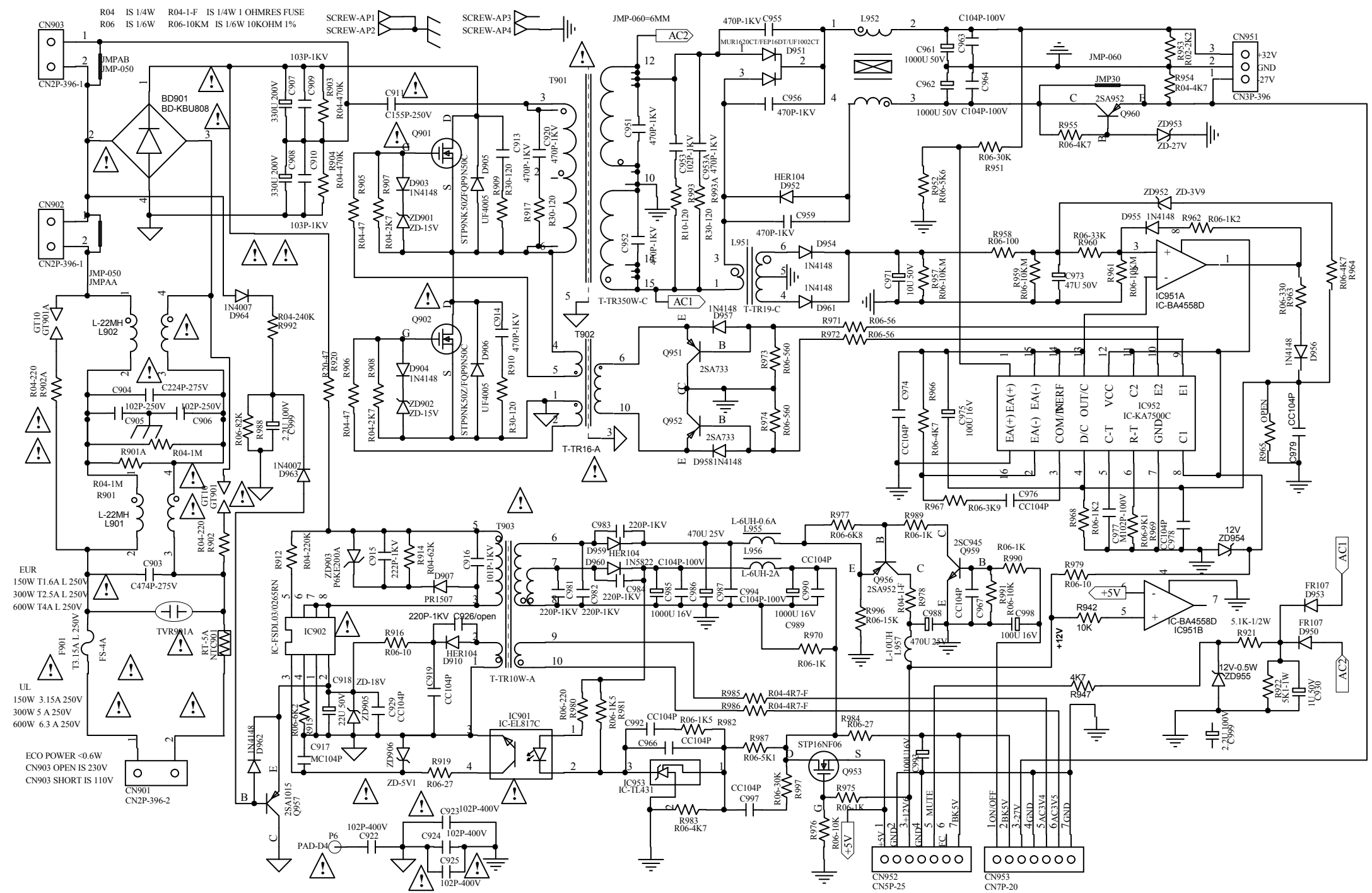
Schematic Diagrams Main PCB



Schematic Diagrams Control PCB



Power Supply Diagrams

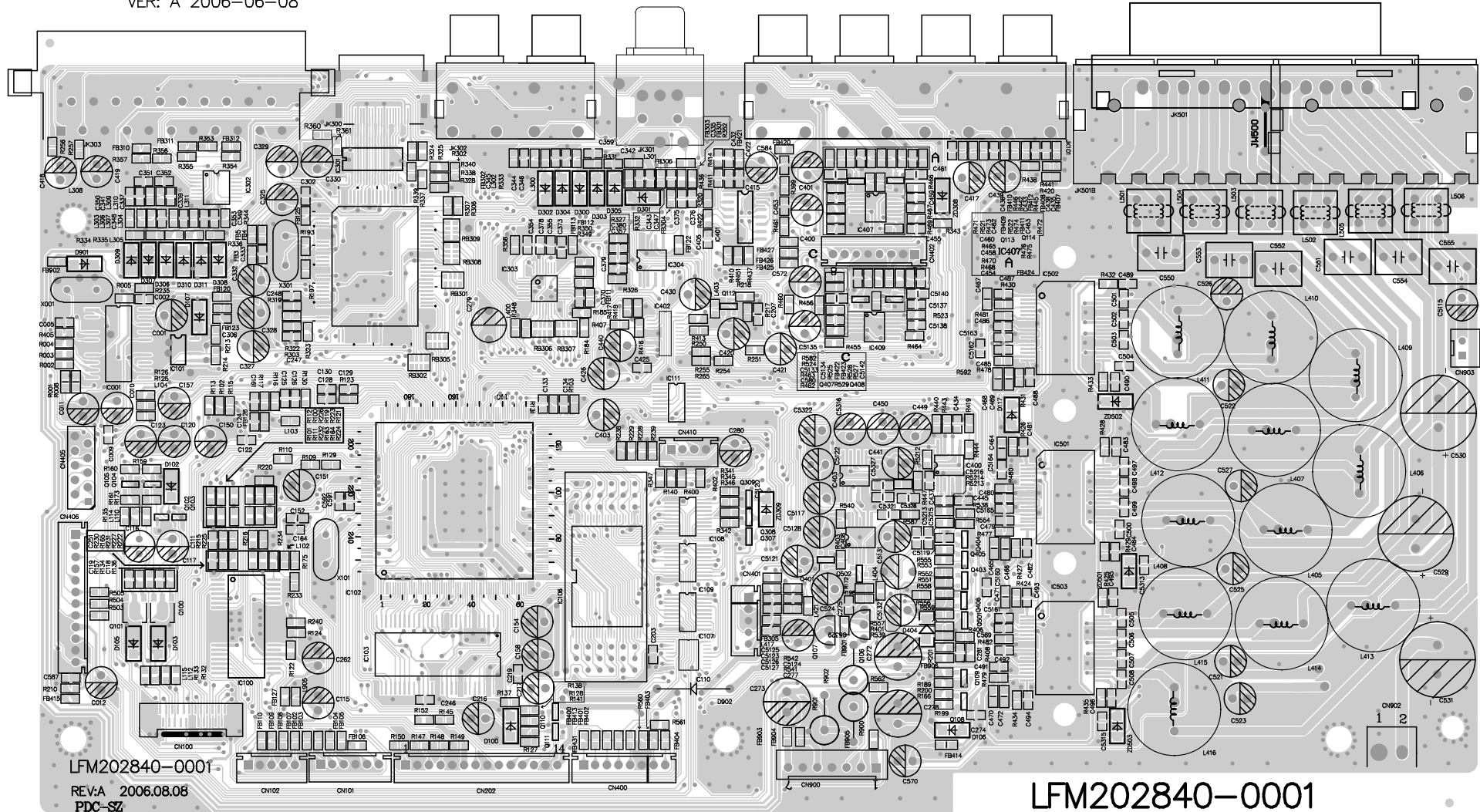


Printed circuit board

Main PCB

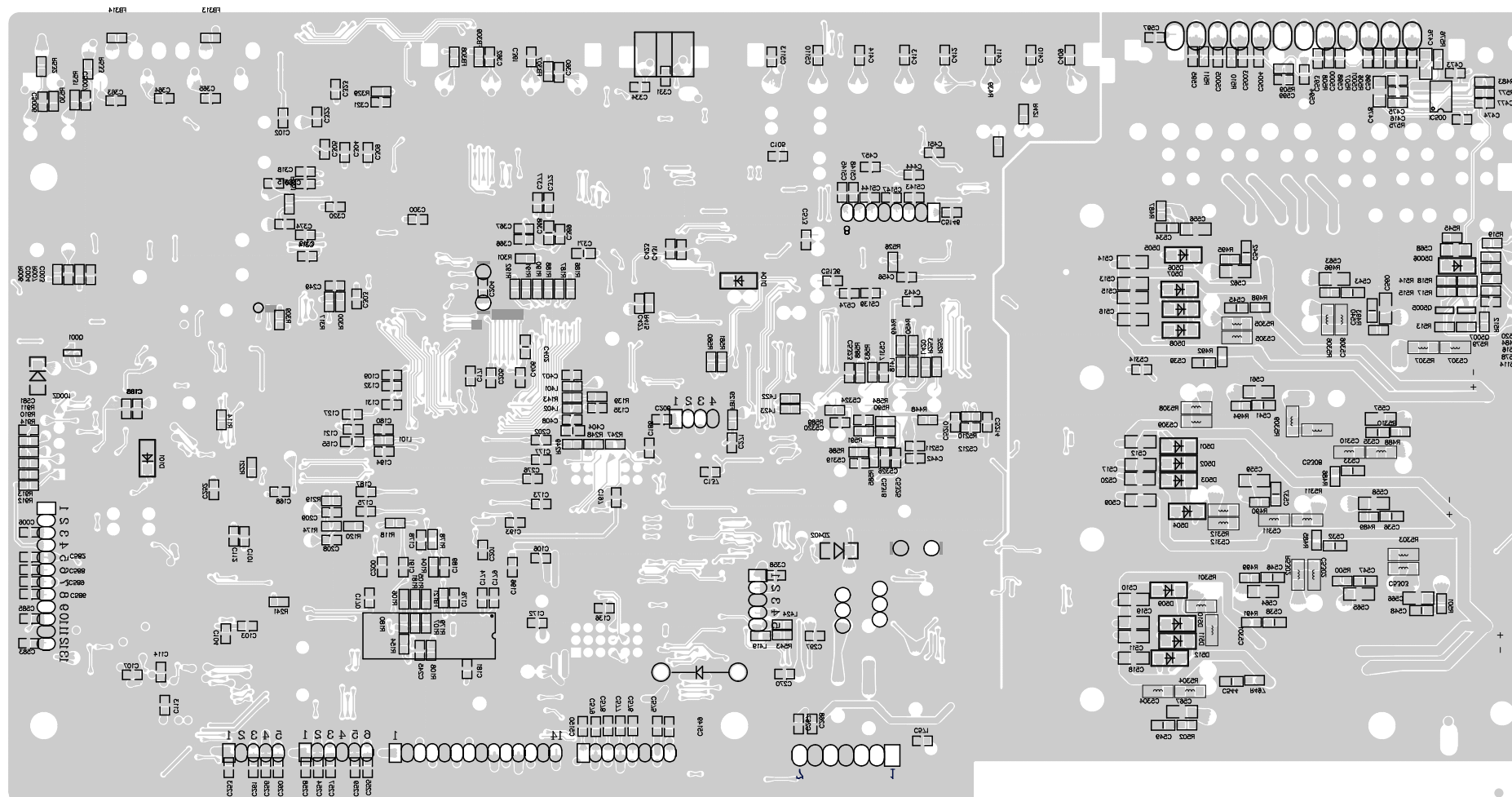
DR30H8-LFM202840-0001

VER: A 2006-06-08



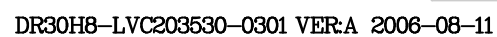
Top View

Main PCB



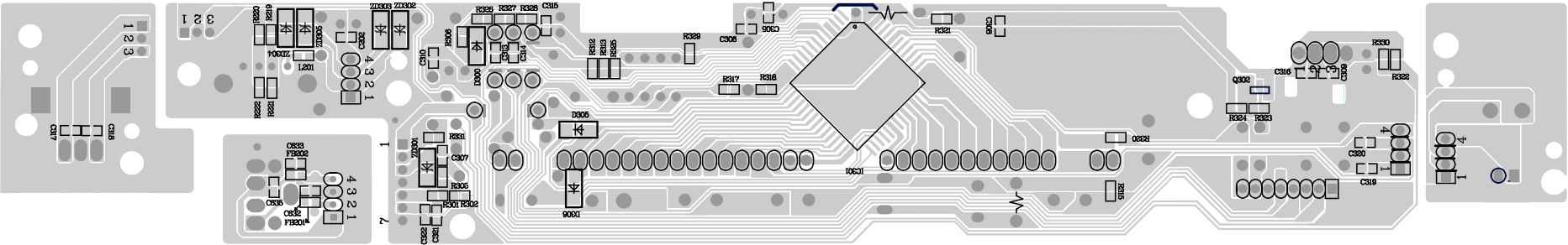
Bottom View

Control PCB



Top View

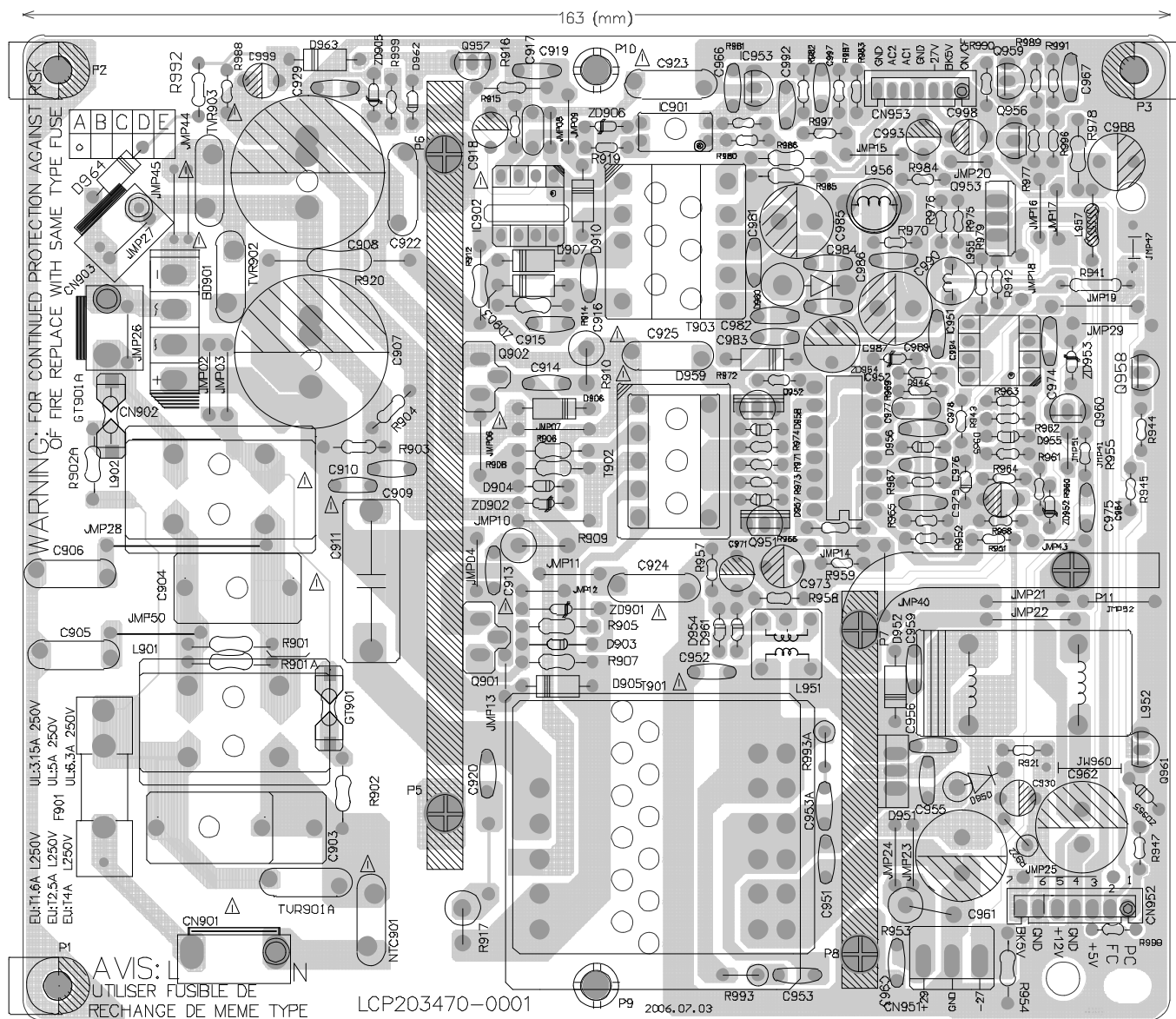
Control PCB



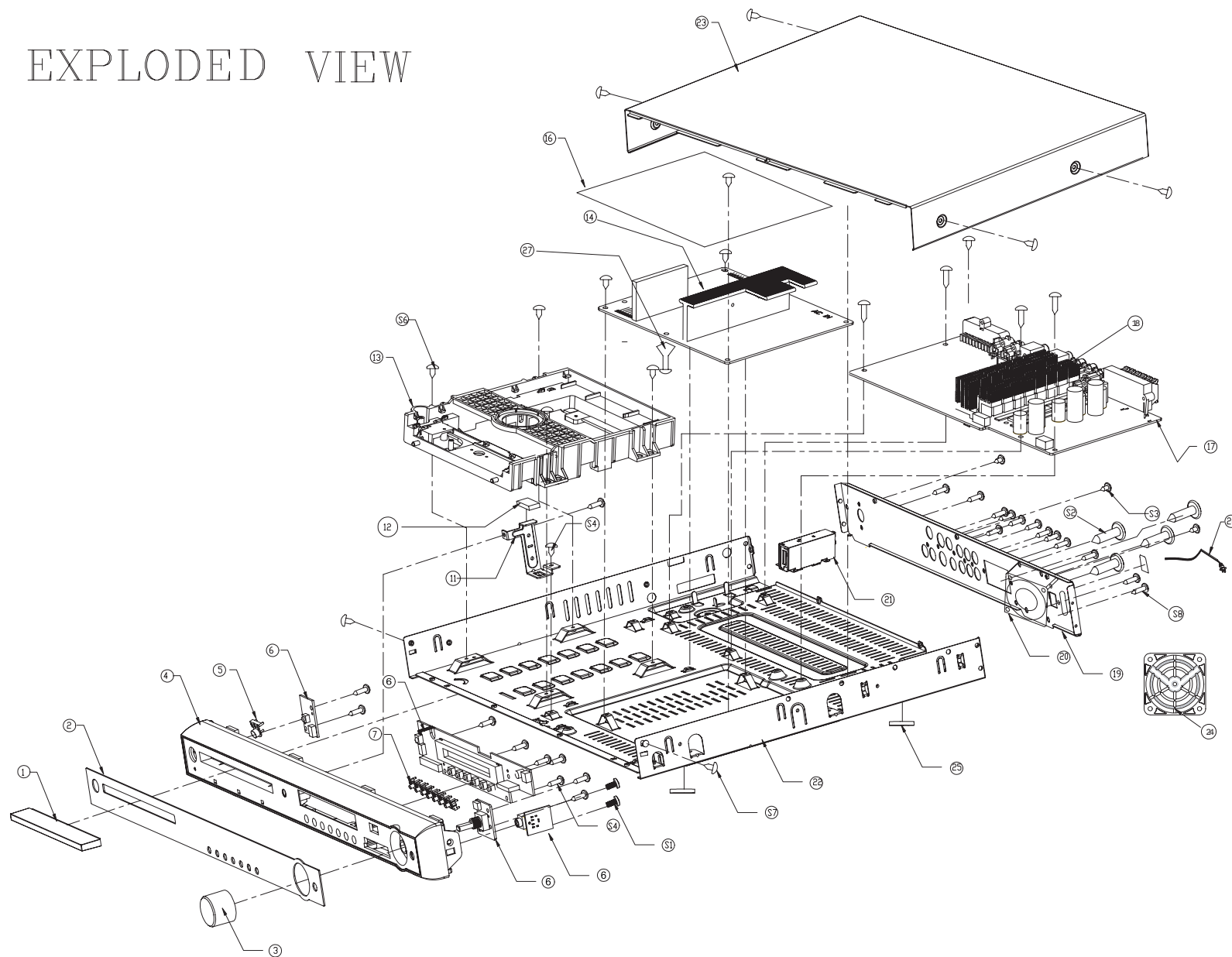
Bottom View

Printed circuit board

Power PCB



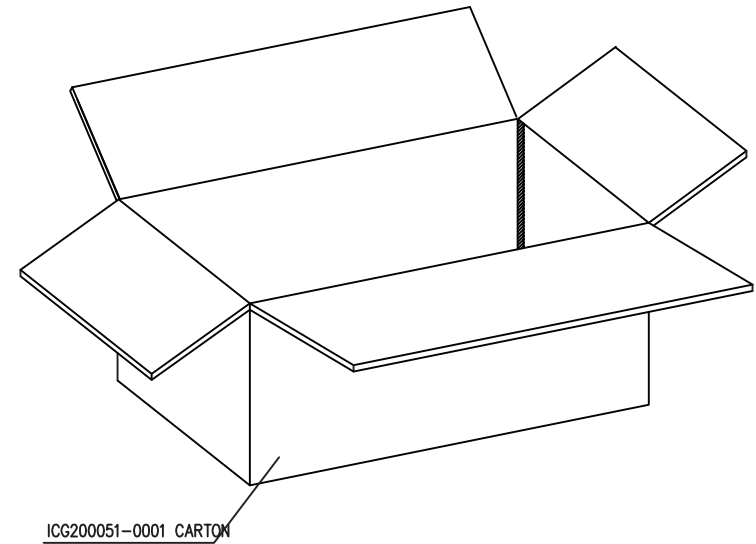
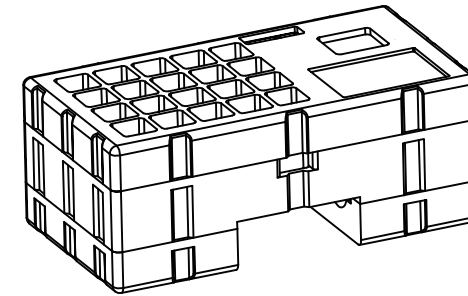
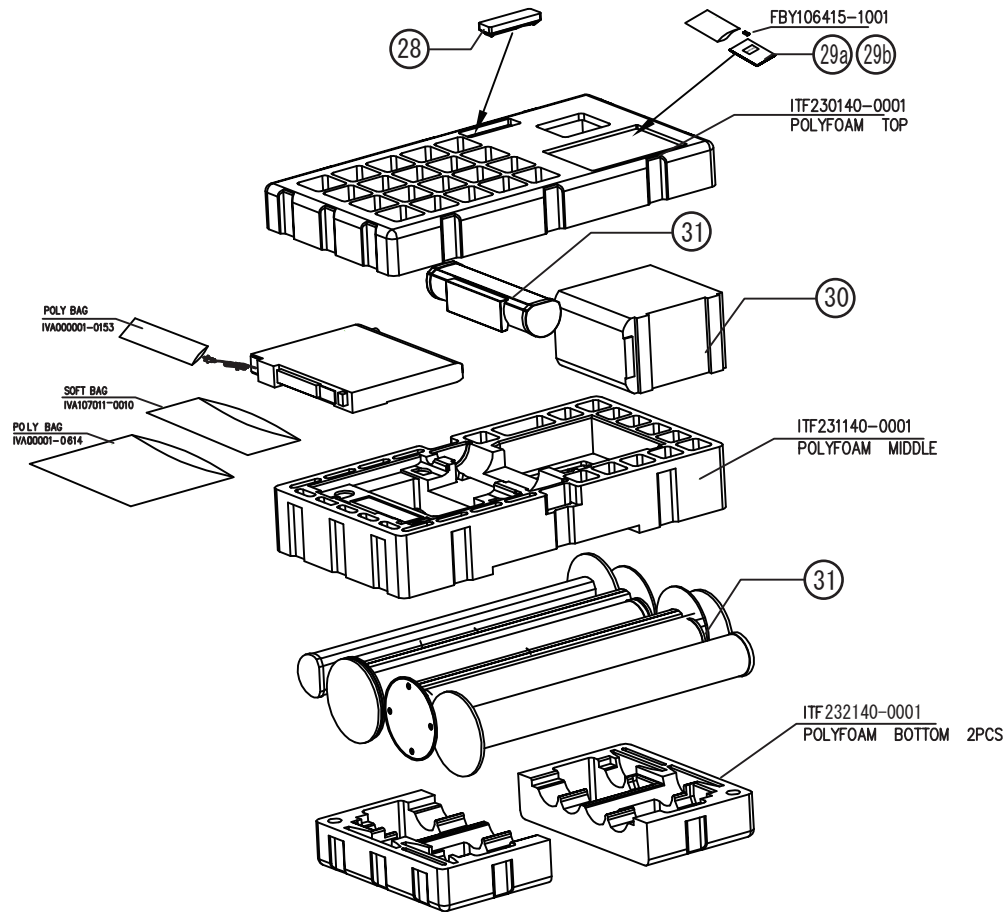
EXPLODED VIEW



SECTION 3. EXPLODED VIEW

SECTION 4. PACKING VIEW

PACKING



PARTS LIST: SD-57HTKR

	Loc. No.	TSB P/N	Ref. P/N	Description
	1	AH800558	BPD101095-0006	GP DVD DOOR ABS BLACK COLOR 130x6x20
	2	AH800559	BPN100234-2009	GP MASK PANEL L425.3xW31xH1.0mm PC
	3	AH800505	BPK105085-0001	GP VOLUME KNOB D26x20 ABS
	4	AH800560	BPF106023-1008	GP FRONT PANEL L430xW48xH25mm HIPS
	5	AH800502	BPK112095-0001	GP STANDBY KNOB L20.75xW14xH7.4mm ABS
	6	AH800561	ABE203530-0001	GP CON+STB+EARPHONE+VOLUME PCB ASS'Y
	7	AH800507	BPK102095-0001	GP FUN KNOB L103.75xW14.25xH9.8mm
	11	AH800562	GSE100551-0001	GP FRONT BKT SECC L35.5xW13xH13xT1.0mm
	12	AH800563	IVE170007-0004	GP EMI SPONGE L15xW8xT2.5mm
	13	AH800564	ASL261608-1120	GP DVD LOADER MECHANICAL ASS'Y FOR
	14	AH800565	ABE203470-0001	GP POWER PCB ASS'Y
	16	AH800566	BFP121071-0001	GP PVC SHEET L160xW150xT0.5mm W/ADV
	17	AH800567	ABE202840-0002	GP MAIN ASS'Y
	18	AH800568	GAL200066-0001	HEATSINK ALUMINIUM L96.5mmXW62.6mmXH33mm
	20	AH800570	FAN221203-0001	GP FAN 12VDC 11.B984.GN 50x50x10mm
	21	AH800571	WTP000011-Z004	GP TUNER PACK KWAGSUN KST-F404HA-2B(EU)
	22	AH800572	GSE100529-6002	GP BOTTOM COVE SECC T=0.8mm
	23	AH800573	GSE100528-0005	TOP COVER SECC T=0.8mm BLACK
	24	AH800574	BPG200006-0001	GP GRILLE ABS FOR FAN L50mmxW50mmx4mm
	25	AH800516	BRF100033-0001	GP RUBBER FOOT 14.0xT2.0mm
	26	AH800575	VPE013202-0010	GP PWR CORD 2P 1703 BLK VDE KE-21+KE-22C
	27	AH800515	DSS100022-0001	GP SPACER A=10 B=1.2-1.6mm
	28	AH800576	WIR248001-EP02	REMOTE CONTROL 48 KEYS
	29a	AH800577	YOM200083-0001	OWNER MANUAL
	29b	AH800578	YOM200083-0002	RUSSIA OWER'S MANUAL SIZE:A4
	30	AH800579	ESW208001-0601	SUBWOOFER 80W 1WAY 1DRIVER
	31	AH800580	ESB23C101-0601	SPK FR70Wx2+C70W+SR50Wx2
	-	AH800531	VRC303001-0010	GP RCA CABLE 1500mm BLK OD2.6x7.8
	-	AH800581	VOT100001-0020	GP HDMI CABLE 1500mm BLK A,B=HDMI 19P
	-	AH800582	VFC24Z510-1500	GP FFC WIRE 24PIN L=150mm UL2896 P=0.5mm (CN100-LOADER)
	-	AH800583	VFL601244-2800	GP C/W 6P 280mm 2468#26 RAINBOW (CN101-LOARDER)
	-	AH800584	VFL501244-3000	GP CON/WIRE 5P 300mm 2468#26 RAINBOW (CN102-LOADER)
	-	AH800585	VSW424452-0500	GP SHIELD WIRE 4P 500MM 2547#28 GRAY (CN401-RB602)
	-	AH800586	VFL801245-260R	GP C/W 8PIN 260mm 2468#26 RAINBOW (CN400-RB302)
	-	AH800587	VWA010088-0003	GP C/W 4P 100mm 2468#26 RAINBOW A,B=2.5 (CN900-CN952)
	-	AH800588	VWA310039-0032	GP C/W 2P 80mm 1015#18 RED-BLACK (CN902-CN951)
	-	AH800589	VFL401255-1600	GP C/W 4P 160MM 2468#26AWG RAINBOW (RB301A-RB301B)
	-	AH800590	VFL701245-1300	GP C/W 7P 130mm 2468#26 RAINBOW A=2.0mm (RB303-CN953)
	-	AH800591	VFL301255-0600	GP C/W 3P 60mm 2468#26 RAINBOW A,B=2012V (RB304A-RB304B)
	-	AH800592	CJP013003-0030	GP AC SOCKET SO-222-PC-S(TECX) BLACK
	-	AH800593	MSW004060-0010	GP SW SLIDE AC 125V/250V 12A

ELECTRICAL PARTS LIST MAIN PCB

X101	AH800594	JQC022000-2760	GP CRYSTAL 27.0000MHz HC-49US+/-20ppm
X301	AH800595	JQC023100-1461	GP CRYSTAL 14.31818MHz HC-49US
IC100	AH800540	RCI005888-0002	GP IC 28P V5888S HSOP VAITECH 5-CH BTL
IC101	AH800596	RCI024004-0004	GP IC 8P TU24C04CS2BF SOIC TURBO CMOS
IC102	AH800597	RCI008381-0001	GP IC 256P ES8381FCD PQFP ESS DVD PROCES
IC103	AH800598	RCI508016-0001	GP IC 54P NT5SV8M16DS-6K TSOPII NANYA
IC106	AH800599	RCI290160-A000	GP IC 48P MX29LV160CBTC-70G TSOP MXIC
IC107	AH800600	RCI740244-0009	GP IC 20 PIN SN74HC244PWR TSSOP TI
IC108	AH800601	RCI740374-0004	GP IC 20 PIN SN74F374DBR SSOP TI
IC109	AH800601	RCI740374-0004	GP IC 20 PIN SN74F374DBR SSOP TI



Loc. No. TSB P/N Ref. P/N Description

IC110	AH800602	RCI740138-0003	GP IC 16 PIN SN74LVC138APWR TSSOP TI
IC111	AH800603	RCI740273-0002	GP IC 20 PIN SN74LVTH273PWR TSSOP TI
IC300	AH800604	RCI003001-0002	GP IC 100P MST30H1 PQFP MSTAR HDMI 1.1
IC301	AH800605	RCI002020-0001	GP IC 38P CM2020-00TR TSSOP C.MD HDMI
IC400	AH800606	RCI004558-0010	GP IC 8P 4558 SOP8 AOTOM
IC401	AH800544	RCI740004-0003	GP IC 14 PIN 74HCU04D PHILIPS TSOP
IC402	AH800607	RCI002631-0001	GP IC 24P CE2631 SSOP CEI 4-CH STEREO
IC403	AH800606	RCI004558-0010	GP IC 8P 4558 SOP8 AOTOM
IC407	AH800606	RCI004558-0010	GP IC 8P 4558 SOP8 AOTOM
IC408	AH800549	RCI003541-1001	GP IC 8P APA3541-TRL SOP-8 HEADPHONE
IC500	AH800606	RCI004558-0010	GP IC 8P 4558 SOP8 AOTOM
IC501	AH800608	RCI005152-0001	GP IC 36P TAS5152DKDR SSOP TI
IC502	AH800608	RCI005152-0001	GP IC 36P TAS5152DKDR SSOP TI
IC503	AH800608	RCI005152-0001	GP IC 36P TAS5152DKDR SSOP TI

ELECTRICAL PARTS LIST POWER PCB

	BD901	AH800609	RHD208080-1010	GP BRIDGE KBU808 8A 800V UL
	F901	AH800610	KSA020400-0122	GP FUSE 4A 250V SLOW (WALTER TSD)
	GT901	AH800611	RAU000501-1001	GP SURGE ABSORBER BL YP-501M 500V 0.8pF
	GT901A	AH800611	RAU000501-1001	GP SURGE ABSORBER BL YP-501M 500V 0.8pF
	NTC901	AH800612	RNT005130-5029	GP THERMIST.NTC 5OHM 5A TKS:SCK13055MSY
	T901	AH800613	TSB100006-0014	GP SW TRANSFORMER FERRITE CORE ER-39
	T902	AH800614	TSA100006-Z014	GP SW. MODEL TRANSFORMER BOULDER
	T903	AH800615	TSA100008-0014	GP SW TRANSFORMER FERRITE CORE EE22/29S
	TVR901A	AH800616	RPT050001-0020	GP THERMIST.PTC 50A 561V D13.5xT4.9mm
	C903	AH800617	PVX2024G0-4741	GP COND SAFTY 0.4uF 275V 125' 10%PILKOR
	C904	AH800618	PVX2025G0-2240	GP COND SAFETY 0.22uF 275V X2P 20%
	C907	AH800619	PVE4995E2-3310	GP CAP.E 330uF 200V 20% 105'C D18xL32
	C908	AH800619	PVE4995E2-3310	GP CAP.E 330uF 200V 20% 105'C D18xL32
	C909	AH800620	PRD2355Q0-1030	GP COND DISC 0.01uF1KV 20%
	C910	AH800620	PRD2355Q0-1030	GP COND DISC 0.01uF1KV 20%
	C911	AH800621	PVN7264F0-1552	GP COND METAL 1.5uF 250V DC +/-10%
	C922	AH800622	PLD5369Q0-2230	GP COND DISC 0.022UF 1KV +80%-20%
	C923	AH800623	PVY1025F0-1023	GP CAP.SAFTY Y1 102PF 250V 20% Y5U
	C924	AH800623	PVY1025F0-1023	GP CAP.SAFTY Y1 102PF 250V 20% Y5U
	IC901	AH800624	RHO000817-3102	GP OPTICAL SENSOR 4P CTR:200^400
	IC902	AH800625	RHI000365-0002	GP IC 8P FSDM0365RNB DIP FAIRCHILD
	IC951	AH800626	RHI004558-0101	GP ROHS IC 8 PIN RD4558P TI
	IC952	AH800627	RHI007500-1001	GP IC 16 PIN KA7500C DIP FAIRCHILD
	IC953	AH800628	RHI004310-1101	GP IC 3 PIN TL431 TO-92 CHANG JIANG
	Q901	AH800629	RHM100060-1001	GP MOSFET STP10NK60Z TO-220 ST 10A 600A
	Q902	AH800629	RHM100060-1001	GP MOSFET STP10NK60Z TO-220 ST 10A 600A
	R902	AH800630	QAF045000-2210	GP RESISTOR 220 OHM1/4 W 5%CF
	R902A	AH800630	QAF045000-2210	GP RESISTOR 220 OHM1/4 W 5%CF

ELECTRICAL PARTS LIST CON+STB+EARPHONE+VOLUME PCB

TA301	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V
TA302	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V
TA303	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V
TA304	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V
TA305	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V
TA306	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V
TA307	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V



Loc. No. TSB P/N Ref. P/N Description

TA308	AH800631	MRW106002-1020	GP TACT SW H5.0mm 2PIN 160GF 20MA 15V
IC301	AH800632	RCI063111-1001	GP IC 52P V63111 QFP VAI TECH

SAFETY PRECAUTION

The parts identified by  mark are critical for safety. Replace only with part number specified. The mounting position of replacement is to be identical with originals.
The substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

TOSHIBA CORPORATION

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