

Service Service Service



Service Manual



TABLE OF CONTENTS

	Page
Service AIDS & CD playability	1
Specifications	2
Connection & Controls	3
Disassembly Instructions	4
Block & Wiring diagrams	5
DISPLAY BOARD	6
MPEG BOARD	7
EXPLODE DIAGRAM	8
SERVICE PARTLIST	9
FACTORY PARTLIST	10

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PHILIPS

SERVICE AIDS

Service Tools:

Universal Torx driver holder	4822 395 91019
Torx bit T10 150mm	4822 395 50456
Torx driver set T6-T20	4822 395 50145
Torx driver T10 extended	4822 395 50423

Compact Disc:

SBC426/426A Test disc 5 + 5A	4822 397 30096
SBC442 Audio Burn-in test disc 1kHz	4822 397 30155
SBC429 Audio Signals disc	4822 397 30184
Dolby Pro-logic Test Disc	4822 395 10216



WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

ESD



Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used

Safety components are marked by the symbol Δ .



INFORMATION ABOUT LEAD-FREE SOLDERING

Philips CE is producing lead-free sets from 1.1.2005 onwards.

IDENTIFICATION:

Regardless of special logo (not always indicated) one must treat all sets from 1 Jan 2005 onwards, according next rules:



- On our website www.atyourservice.ce.Philips.com you find more information to:
 - * BGA-de-/soldering (+ baking instructions)
 - * Heating-profiles of BGAs and other ICs used in Philips-sets
 - * Lead free

You will find this and more technical information within the "magazine", chapter "workshop news".

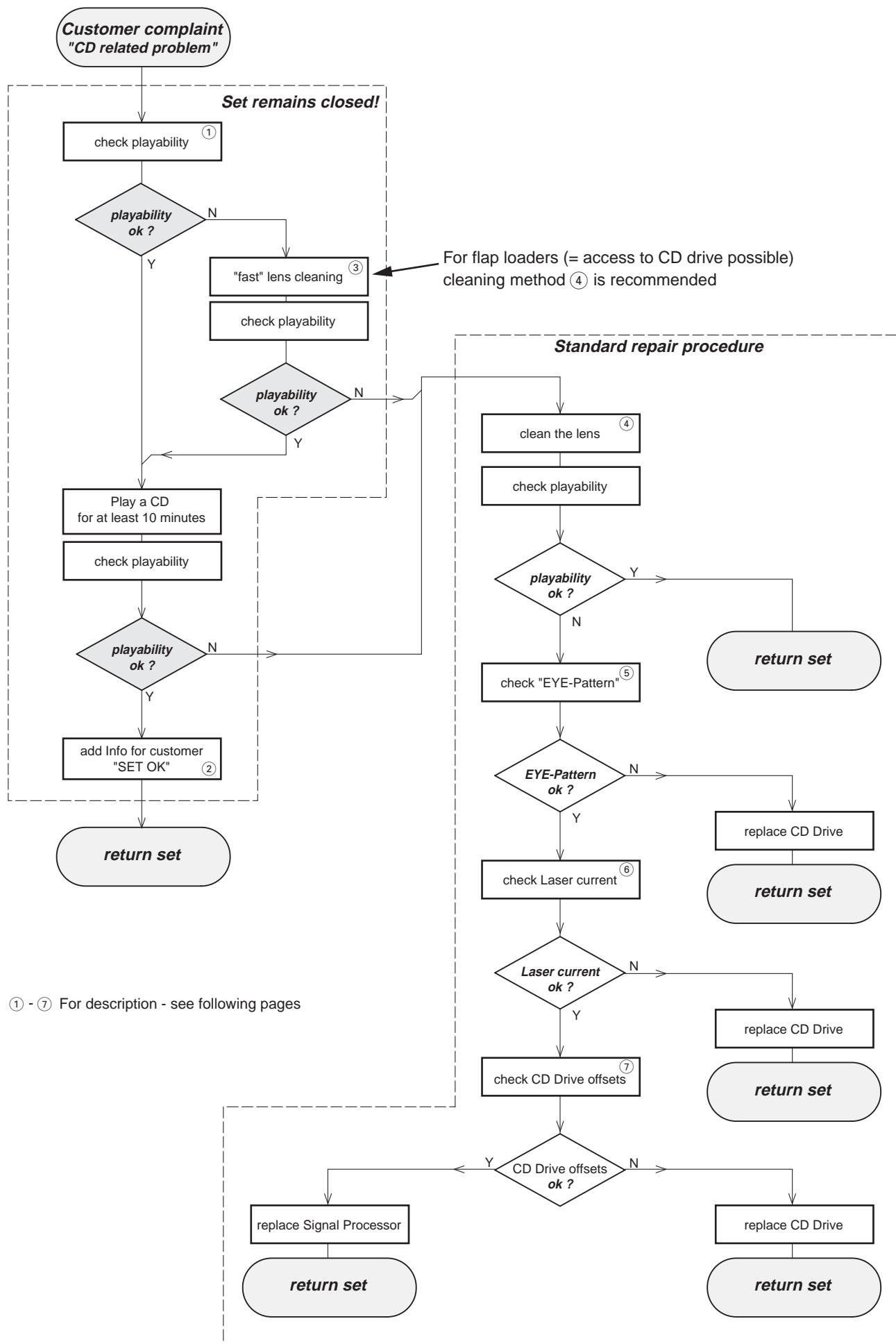
For additional questions please contact your local repair-helpdesk.

SERVICE INSTRUCTION

Safety regulations require that after a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the AC Power lead for external damage.
- Check the strain relief of the AC Power cord for proper function.
- Check the electrical DC resistance between the AC Power Plug and the secondary side (only for sets which have a AC Power isolated power supply):
- 1. Unplug the AC Power cord and connect a wire between the two pins of the AC Power plug.
- 2. Set the AC Power switch to the "on" position (keep the AC Power cord unplugged!).
- 3. Measure the resistance value between the pins of the AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be larger than 4.5 Mohm (For U.S. it should be between 4.2 Mohm and 12 Mohm).
- 4. Switch "off" the set, and remove the wire between the two pins of the AC Power plug.
- Check the cabinet for defects, to avoid touching of any inner parts by the customer.

CD PLAYABILITY CHECK



① - ⑦ For description - see following pages

CD PLAYABILITY CHECK

(1)

PLAYABILITY CHECK

For sets which are compatible with **CD-RW** discs
use CD-RW Printed Audio Disc 7104 099 96611
TR 3 (Fingerprint)
TR 8 (600 μ Black dot) **maximum at 01:00**

- playback of these two tracks without audible disturbance
playing time for: Fingerprint \geq 10seconds
Black dot from 00:50 to 01:10
- jump forward/backward (search) within a reasonable time

For all other sets
use CD-DA SBC 444A 4822 397 30245
TR 14 (600 μ Black dot) **maximum at 01:15**
TR 19 (Fingerprint)
TR 10 (1000 μ wedge)

- playback of all these tracks without audible disturbance
playing time for: 1000 μ wedge \geq 10seconds
Fingerprint \geq 10seconds
Black dot from 01:05 to 01:25
- jump forward/backward (search) within a reasonable time

(4)

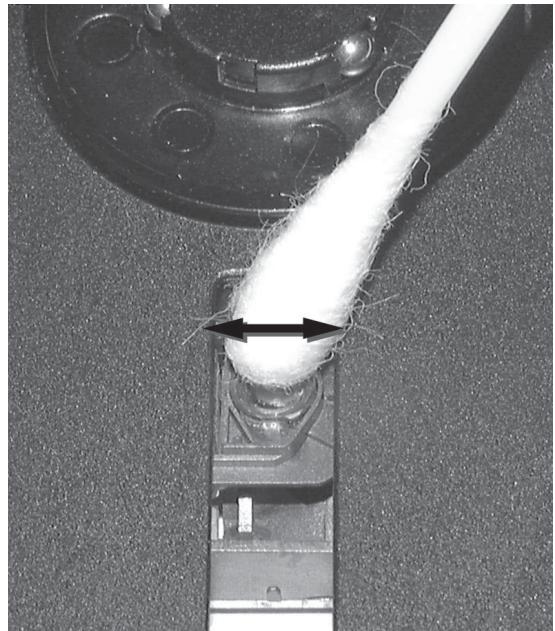
LIQUID LENS CLEANING

Before touching the lens it is advised to clean the surface of the lens by blowing clean air over it.
This to avoid that little particles make scratches on the lens.

Because the material of the lens is synthetic and coated with a special anti-reflectivity layer, cleaning must be done with a non-aggressive cleaning fluid. It is advised to use "Cleaning Solvent B4-No2", available with codenumber 4822 389 10026.

The actuator is a very precise mechanical component and may not be damaged in order to guarantee its full function. Clean the lens gently (don't press too hard) with a soft and clean cotton bud moistened with the special lens cleaner.

The direction of cleaning must be in the way as indicated in the picture below.



(2)

CUSTOMER INFORMATION

It is proposed to add an addendum sheet to the set which informs the customer that the set has been checked carefully - but no fault was found.
The problem was obviously caused by a scratched, dirty or copy-protected CD. In case problems remain, the customer is requested to contact the workshop directly.
The lens cleaning (method ③) should be mentioned in the addendum sheet.

The final wording in national language as well as the printing is under responsibility of the Regional Service Organizations.

(3)

FAST LENS CLEANING (*dry brush*)

Use lens cleaning CD
SBC AC300 9082 100 00043

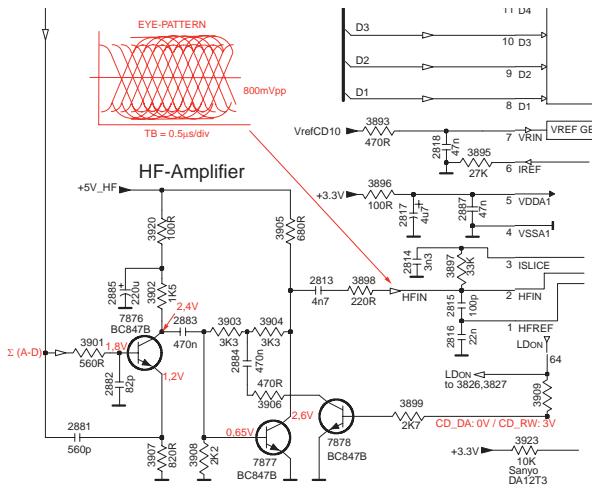
Insert the lens cleaning CD, press PLAY and follow the voice guide's instructions on the CD.

CD PLAYABILITY CHECK

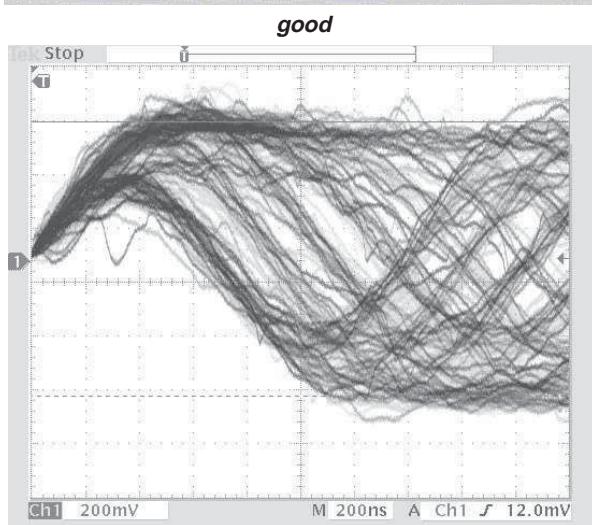
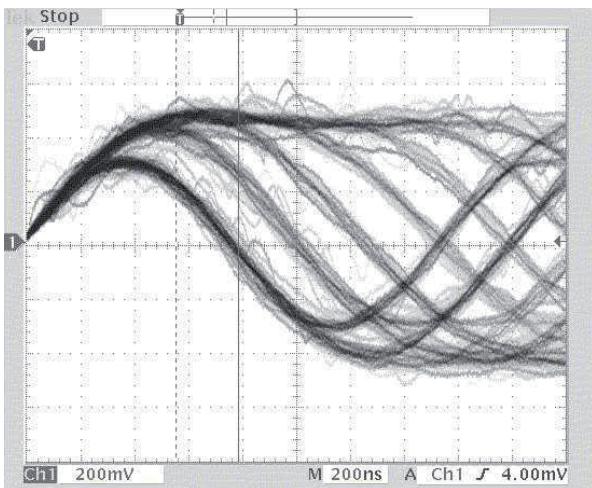
(5)

EYE-PATTERN SIGNAL – JITTER MEASUREMENT

Measure the signal on the input of the Signal processor using an **analog** oscilloscope. Please find the exact measuring point in your Service Manual.



See below examples of the signal. Amplitude should read at least 700mVpp using SBC444A.



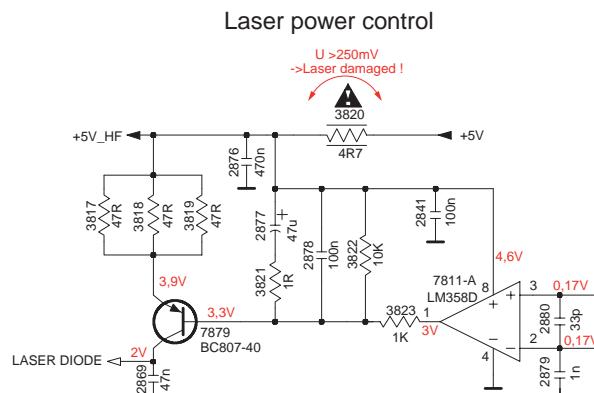
If the oscilloscope shows a signal like the 'bad' one, and/or the amplitude decreases within 1 minute - the CD drive has to be replaced.

(6)

CD DRIVE – LASER CURRENT MEASUREMENT

The laser current can be measured as a voltage drop on a resistor. The resistor is marked in every Service Manual. The value depends on the type of CD drive.

	typical value	most probable defect
VAMxxxx	: 150-230mV	$\geq 350\text{mV}$
MCDxx	: 170-230mV	$\geq 300\text{mV}$
DA1x	: 210-250mV	$\geq 350\text{mV}$
DA2x	: 175-200mV	$\geq 250\text{mV}$
Use SBC444A (CD-DA) for measurement.		



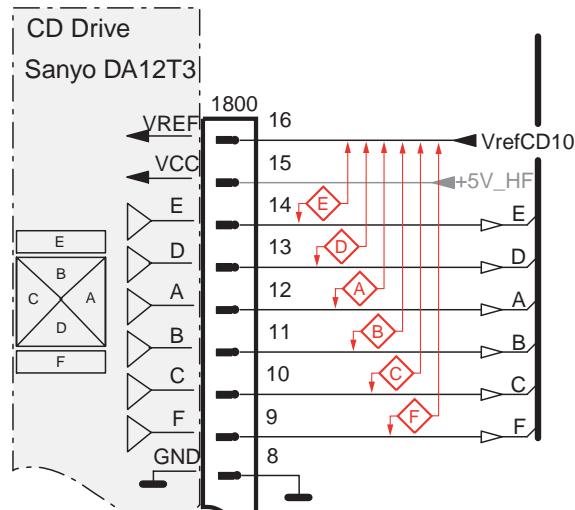
CD DRIVE – OFFSET MEASUREMENT

The photodiodes of the CD-drive may have an offset. These offsets have to be compensated by the signal processor. High offsets can lead to poor playability of some CDs (skipping tracks).

To measure the offset values, start the **Service Test Program** - section "Focus Test" without a CD.

The offsets can be measured with a DC Millivoltmeter directly on the connector (see drawing below). Pin numbering varies from drive to drive.

The values from diode A-D should read $0 \pm 10\text{mV}$. Diodes E and F are less critical.



If one of the offsets is higher than $\pm 10\text{mV}$ the CD drive has to be replaced. Otherwise replace the Signal Processor.

TECHNICAL SPECIFICATIONS

AMPLIFIER

Output power	2 x 10 W RMS
Signal-to-noise ratio	≥ 60 dBA
Frequency response	63 – 20000 Hz, ± 3 dB
Input sensitivity AUX	0.9 V (max. 2 V)
Impedance loudspeakers	4 Ω

DVD PLAYER

Laser Type	Semiconductor
Disc Diameter	12cm / 8cm
Video Decoding	MPEG-2 / MPEG-1
Video DAC	10 Bits
Signal System	PAL / NTSC
Video Format	4:3 / 16:9
Video S/N	56 dB (minimum)
Composite Video Output	1.0Vp-p, 75 Ω
Audio DAC	24 Bits / 96 kHz
Frequency Response	4 Hz - 20 kHz (44.1kHz) 4 Hz - 22 kHz (48kHz) 4 Hz - 44 kHz (96kHz)
Number of programmable tracks	16
Signal-to-noise ratio	≥ 65 dBA
Channel separation	≥ 40 dB (1 kHz)
Total harmonic distortion	< 0.1% (1 kHz)

TUNER

FM wave range	87.5 – 108 MHz
Sensitivity at 75 Ω	
– mono, 26 dB signal-to-noise ratio	2.8 µV
– stereo, 46 dB signal-to-noise ratio	61.4 µV
Selectivity	≥ 28 dB
Total harmonic distortion	≤ 5%
Frequency response	63 – 5500 Hz (-6 dB)
Signal-to-noise-ratio	≥ 50 dBA

SPEAKERS

2-way bass reflex system	
Dimensions (w x h x d)	125 x 250x 232 (mm)

GENERAL INFORMATION

AC Power	220 – 240V / 50 Hz
Dimensions (w x h x d)	218 x 90 x 221.5 (mm)
Weight(without speakers)	4.7 / 1.1 kg
Standby power consumption	≤ 6W
Eco power Standby	< 1W

Specifications and external appearance are subject to change without notice.

SERVICE TOOLS

Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints)	
SBC 426/426A	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without “pause”)	4822 397 30155

AVAILABLE ESD PROTECTION EQUIPMENT

anti-static table mat	large 1200x650x1.25mm	4822 466 10953
	small 600x650x1.25m	4822 466 10958
anti-static wristband		4822 395 10223
connection box (3 press stud connections, 1MΩ)		4822 320 11307
extendible cable (2m, 2MΩ, to connect wristband to connection box)		4822 320 11305
connecting cable (3m, 2MΩ, to connect table mat to connection box)		4822 320 11306
earth cable (1MΩ, to connect any product to mat or to connection box)		4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat)		4822 310 10671
wristband tester		4822 344 13999

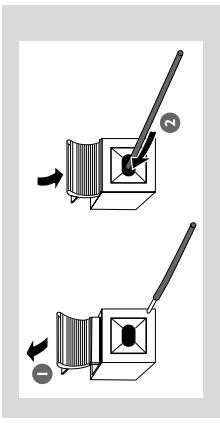
Connections

Connections

3 - 1

CONNECTION AND CONTROLS

Step 2: Connecting speakers

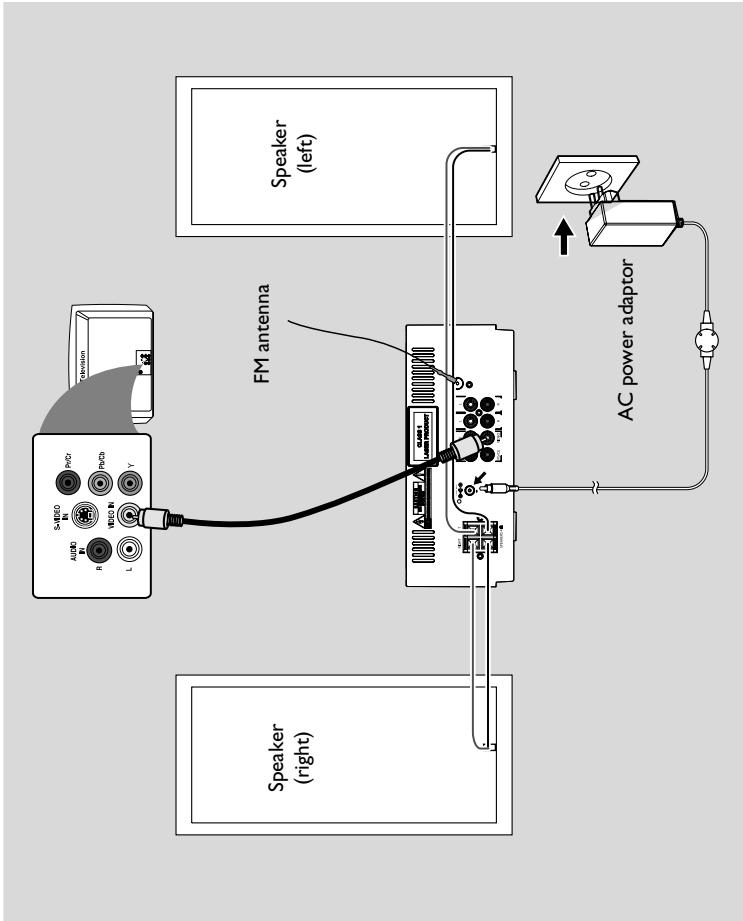


Speaker

Connect the speaker wires to the **SPEAKER** terminals, right speaker to "R" and left speaker to "L", coloured (marked) wire to "+" and black (unmarked) wire to "-". Fully insert the stripped portion of the speaker wire into the terminal as shown.

Notes:

- Ensure that the speaker cables are correctly connected. Improper connections may damage the system due to short-circuit.
- For optimal sound performance, use the supplied speakers.
- Do not connect more than one speaker to any one pair of +/- speaker terminals.
- Do not connect speakers with an impedance lower than the speakers supplied. Please refer to the SPECIFICATIONS section of this manual.



IMPORTANT!

- The type plate is located at the rear of the system.
- Before connecting the AC power cord to the wall outlet, ensure that all other connections have been made.
- Never make or change any connections with the power switched on.
- **High voltage! Do not open. You run the risk of getting an electric shock.**
- **The machine does not contain any user-serviceable parts.**

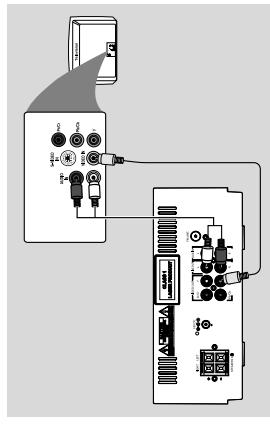
- **Modification of the product could result in hazardous radiation of EMC or other unsafe operation.**
- To avoid overheating of the system, a safety circuit has been built in. Therefore, your system may switch to Standby mode automatically under extreme conditions. If this happens, let the system cool down before reusing it (not available**

Notes:
- To avoid magnetic interference, do not position the front speakers too close to your TV set.
- Allow adequate ventilation around the DVD System.

Step 4: Connecting TV

- IMPORTANT!**
- You only need to make one video connection from the following options, depending on the capabilities of your TV system.
 - Connect the DVD system directly to the TV.

Using Video In jack (CVBS)

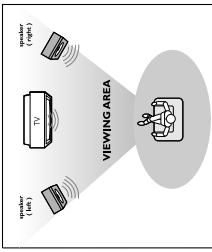


- 1 Use the composite video cable (yellow) to connect the system's **VIDEO** jack to the video input jack (or labelled as A/V In, Video In, Composite or Baseband) on the TV set.
- 2 To hear the sound of this DVD Player through your TV, use the audio cables (white/red) to connect **LINE OUT (L/R)** jacks of the DVD Player to the corresponding **AUDIO IN** jacks on the TV.

Step 3: Antenna connection

Connect the supplied FM antenna to the respective terminal. Adjust the position of the antenna for optimal reception.

FM Antenna



Step 1: Placing speakers

- For better FM stereo reception, connect an outdoor FM antenna to the FM AERIAL (FM ANTENNA) terminal.

Place the front left and right speakers at equal distances from the TV set and at an angle of approximately 45 degrees from the listening position.

Notes:
- To avoid magnetic interference, do not position the front speakers too close to your TV set.
- Allow adequate ventilation around the DVD System.

Connections

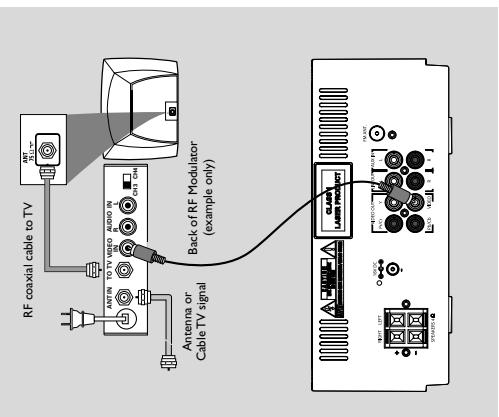
Connections

CONNECTION AND CONTROLS

Using an accessory RF modulator

IMPORTANT!

- If your TV set only has a single Antenna In jack (or labelled as 75 ohm or RF In), you will need a RF modulator in order to view the DVD playback via TV. See your electronics retailer or contact Philips for details on RF modulator availability and operations.



- 1 Use the composite cable (yellow) to connect the system's **VIDEO** jack to the video input jack on the RF modulator.

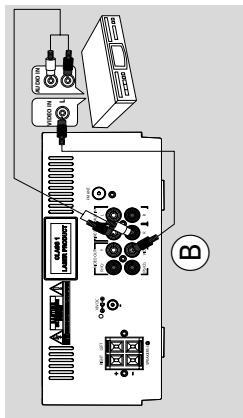
- 2 Use an RF coaxial cable (not supplied) to connect the RF modulator to your TV's RF jack.

Step 5: Connecting the power adaptor

IMPORTANT!

- Never make or change any connection with the power switched on.

the AC power adaptor to the system and then to the power outlet.



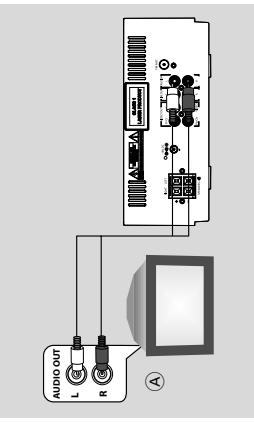
Using the VCR for recording DVDs ⑧

Connect one of the system's **VIDEO OUT** jacks to the corresponding **VIDEO IN** jack and **LINE OUT (R/L)** jacks to the **AUDIO IN** jacks on the VCR. This will allow you to make analogue stereo (two channel, right and left) recordings.

Optional: Connecting additional equipment

IMPORTANT!

- Some discs are copy-protected. You cannot record the disc through a VCR or digital recording device.
- When making connections, make sure the colour of cables matches the colour of jacks.
- Always refer to the owner's manual of the other equipment for complete connection and usage details.



Listening to the playback of other equipment ⑧

IMPORTANT!

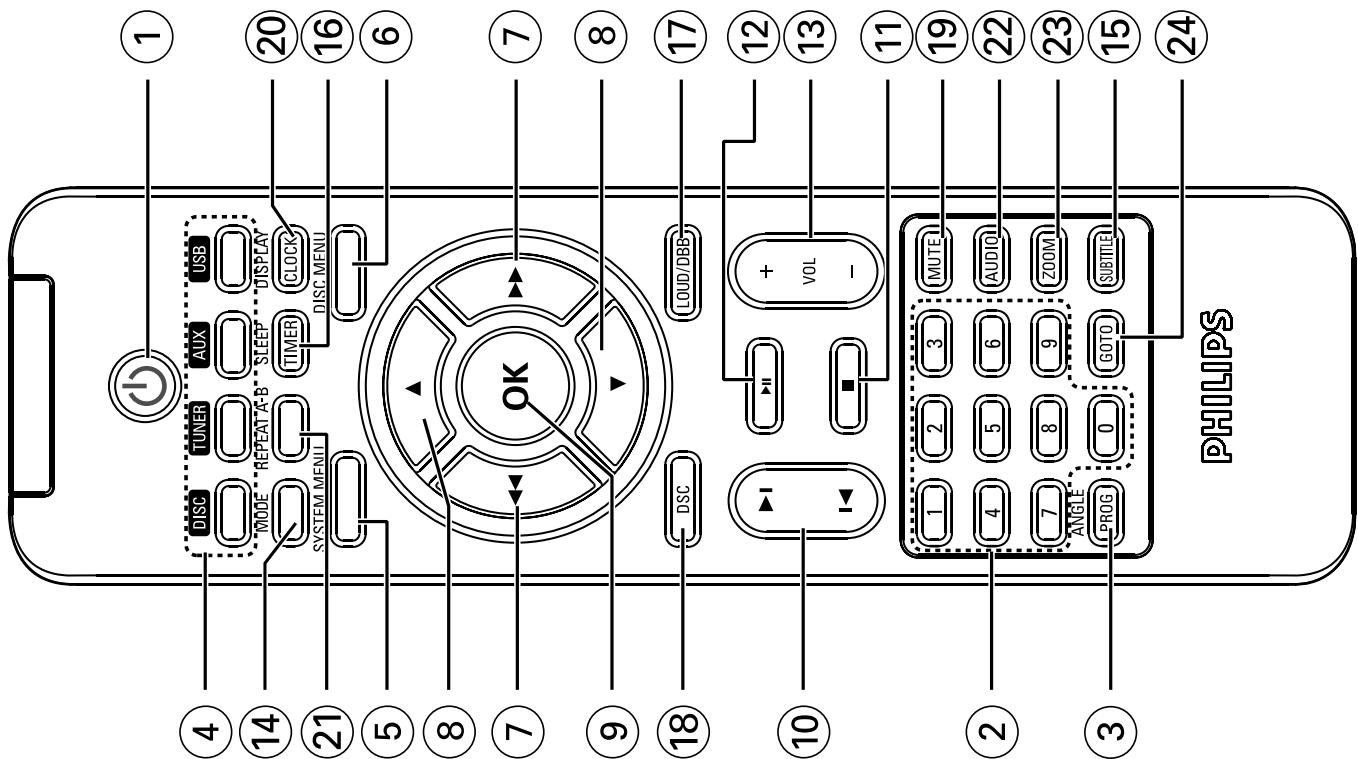
- Use a cinch cable to connect AUX on the rear panel of the DVD player to the analogue audio out terminals of an external equipment (TV/VCR, Laser Disc player, DVD player or CD Recorder). Before starting operation, press **SOURCE** on the front panel to select AUX or press **AUX** on the remote in order to activate the input source.

Note:

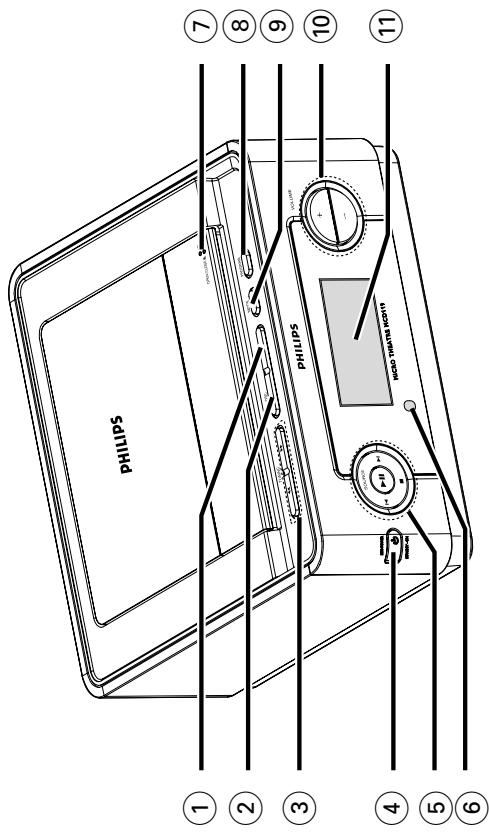
- If you are connecting equipment with a mono output (a single audio out terminal), connect it to the AUX left terminal. Alternatively, you can use a "single to double" cinch cable (the output sound still remain mono).

CONNECTION AND CONTROLS

Controls



Controls



Controls

Controls

Controls on the system

- (1) **DBB**
– enables or disables bass enhancement.
- (2) **DSC**
– selects different types of preset sound equalizer settings.
- (3) **TUNING ↺/↗**
Tuner tunes to a radio station
Disc fast searches backward/forward in a disc at different speeds.
- (4) **ECO POWER/STANDBY-ON ⏻**
– switches the system on or to Eco-power standby mode.
- (5) **▶/■**
Disc starts or interrupts disc playback
- (6) **iR Sensor**
point the remote control towards this sensor.
- (7) **OPEN/CLOSE**
– opens or closes the disc door.
- (8) **PROGRAM**
Tuner program the favourite stations.
Disc program the favourite tracks.
- (9) **MODE**
– selects various repeat/shuffle play modes (For VCD with PBC feature, PBC must be turned off.)
- (10) **VOLUME +/-**
– adjusts the volume upward/downward.
Clock
– sets the clock time
- (11) **Display**
– shows the current status of the DVD player.

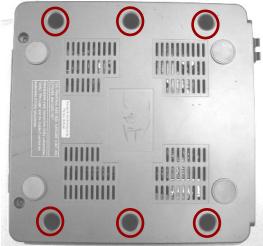
Controls on the remote control

- (10) **◀/▶**
– Disc: skips to the previous/next chapter/title/track.
– Tuner: selects a preset radio station.
- (11) **■**
– In DISC mode, to stop playback or clear a program.
- (12) **▶▶**
– In DISC mode, to start or interrupt playback.
– In TUNER mode, to activate the plug and play function.
- (13) **VOL +/-**
– to select the respective sound source: DISC/TUNER or AUX.
- (14) **MODE**
– to select repeat modes or the shuffle play mode for a disc.
- (15) **SUBTITLE**
– to select a subtitle language.
- (16) **SLEEP/TIMER**
Standby mode
– sets a time for switching on the system automatically.
- (17) **LOUD/DBB**
Power-on mode
– sets the sleep timer function (auto-off).
- (18) **DSC**
– enables or disables automatic loudness adjustment.
- (19) **MUTE**
– enables or disables bass enhancement.
- (20) **DISPLAY/CLOCK**
for disc
– displays the disc information on the TV screen.
for clock
– sets the system clock.
- (21) **REPEAT A-B**
– for VCD/CD: to repeat a specific section within the same track.
– for DVD: to repeat a specific section in a disc.
- (22) **AUDIO**
for VCD
– sets Mono-Left, Mono-Right or Stereo sound mode.
for DVD
– selects an audio language.
- (23) **ZOOM**
– DVD/VCD/Picture CD: enlarges or reduces a picture or active image on the TV screen.
- (24) **GOTO**
– In DISC mode, to fast search in a disc by entering a time, title, chapter or track.
- Notes for remote control:**
– First, select the source you wish to control by pressing one of the source select keys on the remote control (DISC or TUNER, for example).
– Then select the desired function (▶/■, ↺/↗ for example).

DISASSEMBLY DIADRAMS

A. Remove Bottom CAB

Remove screws 3x12 - 6 pcs

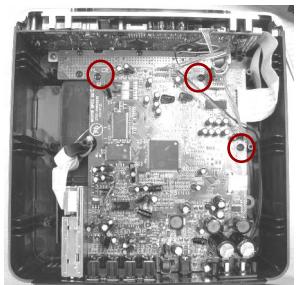


B. Remove Main board

Remove screws 3x10 - 4 pcs.

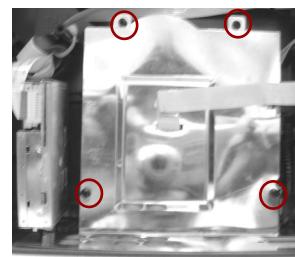


Remove screws 3x10 - 3 pcs.



C. Remove Dust cover

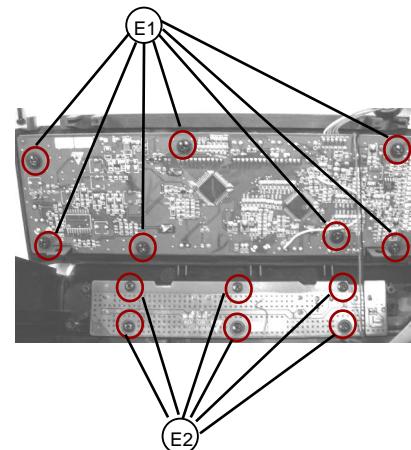
Remove screws 2x8 - 4 pcs.



E. Remove Display & Key board

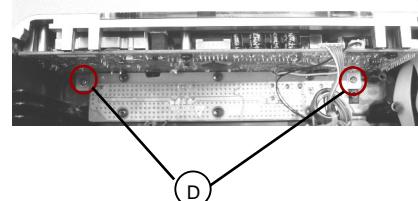
E1: Remove screws 3x10 - 7 pcs.

E2: Remove screws 2x8 - 6 pcs.



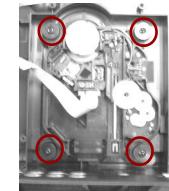
D. Remove Front assembly

Remove screws 2x8 - 2 pcs.

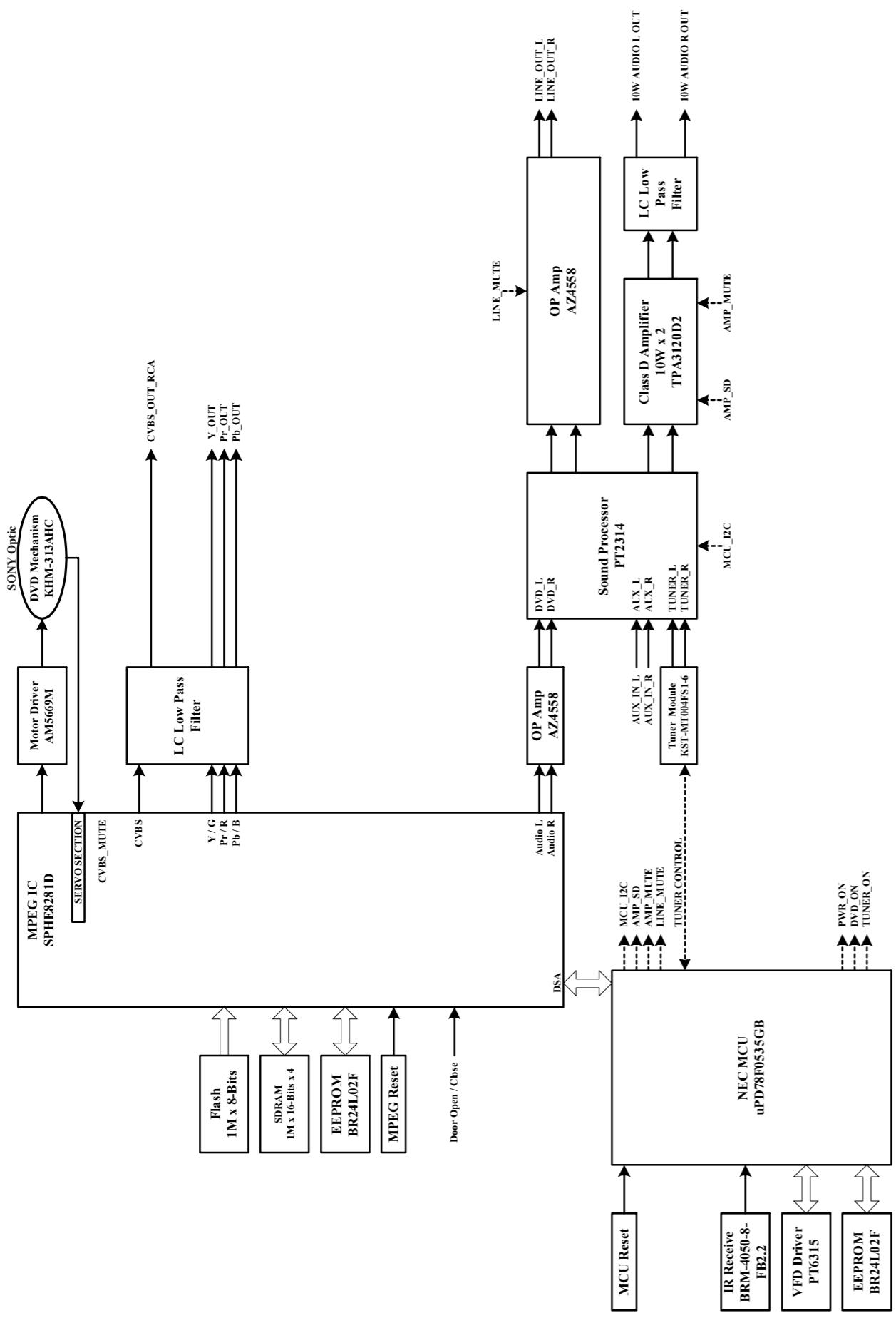


F. Remove CD mechanism

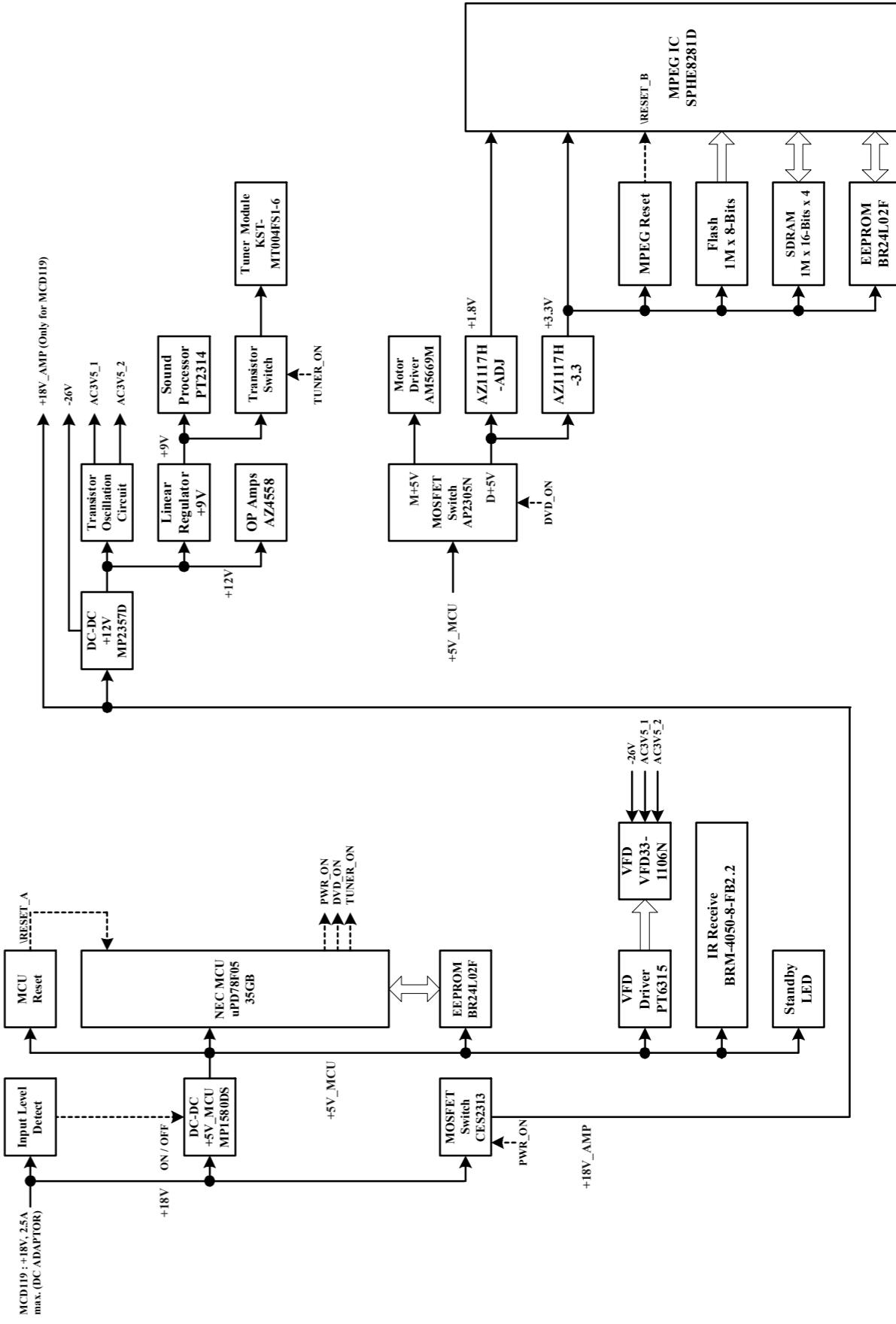
Remove screws 3x10 - 4 pcs.



BLOCK DIAGRAM

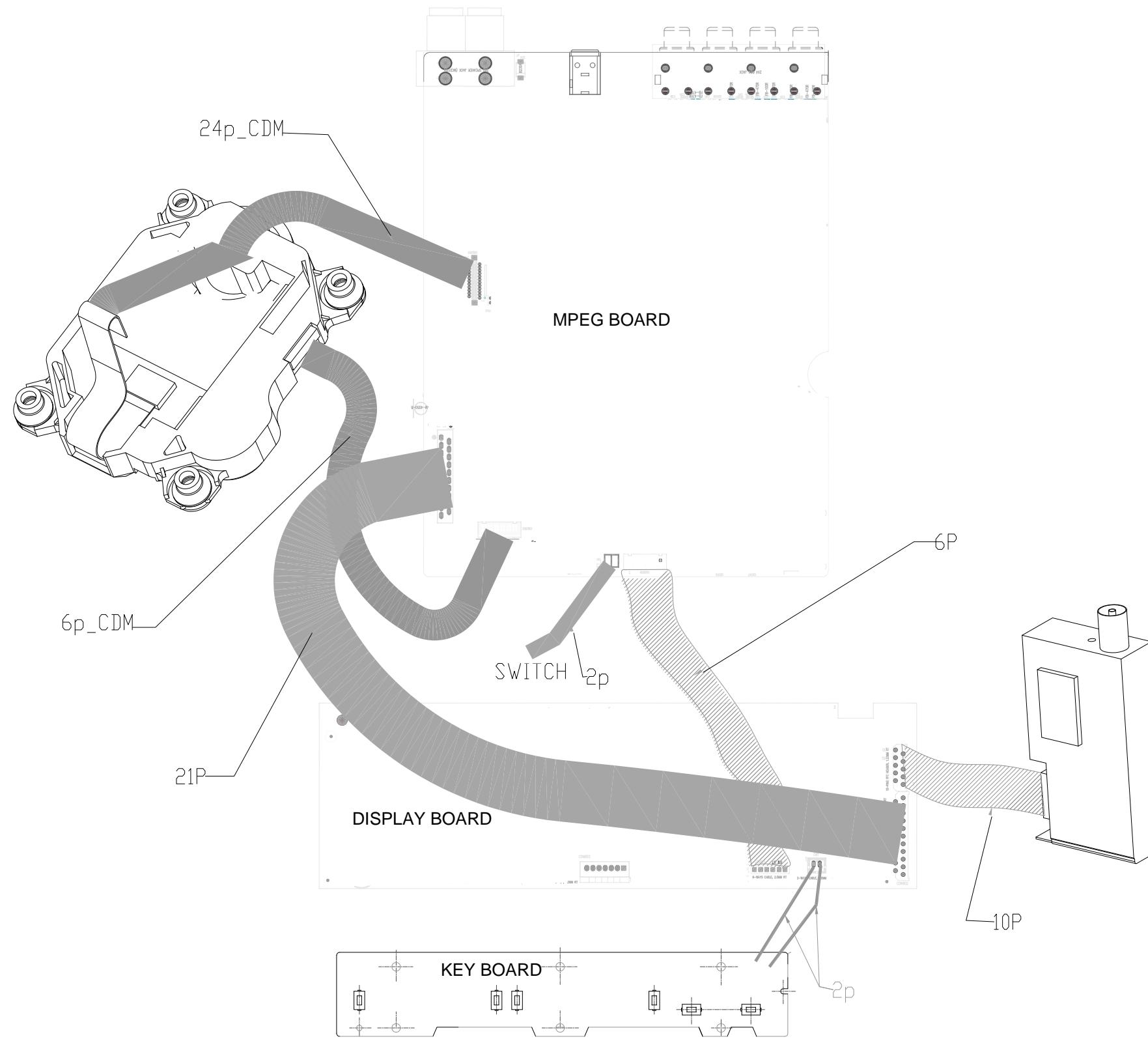


Philips DVD Micro MCD119 Block Diagram - Main Unit AV and Control

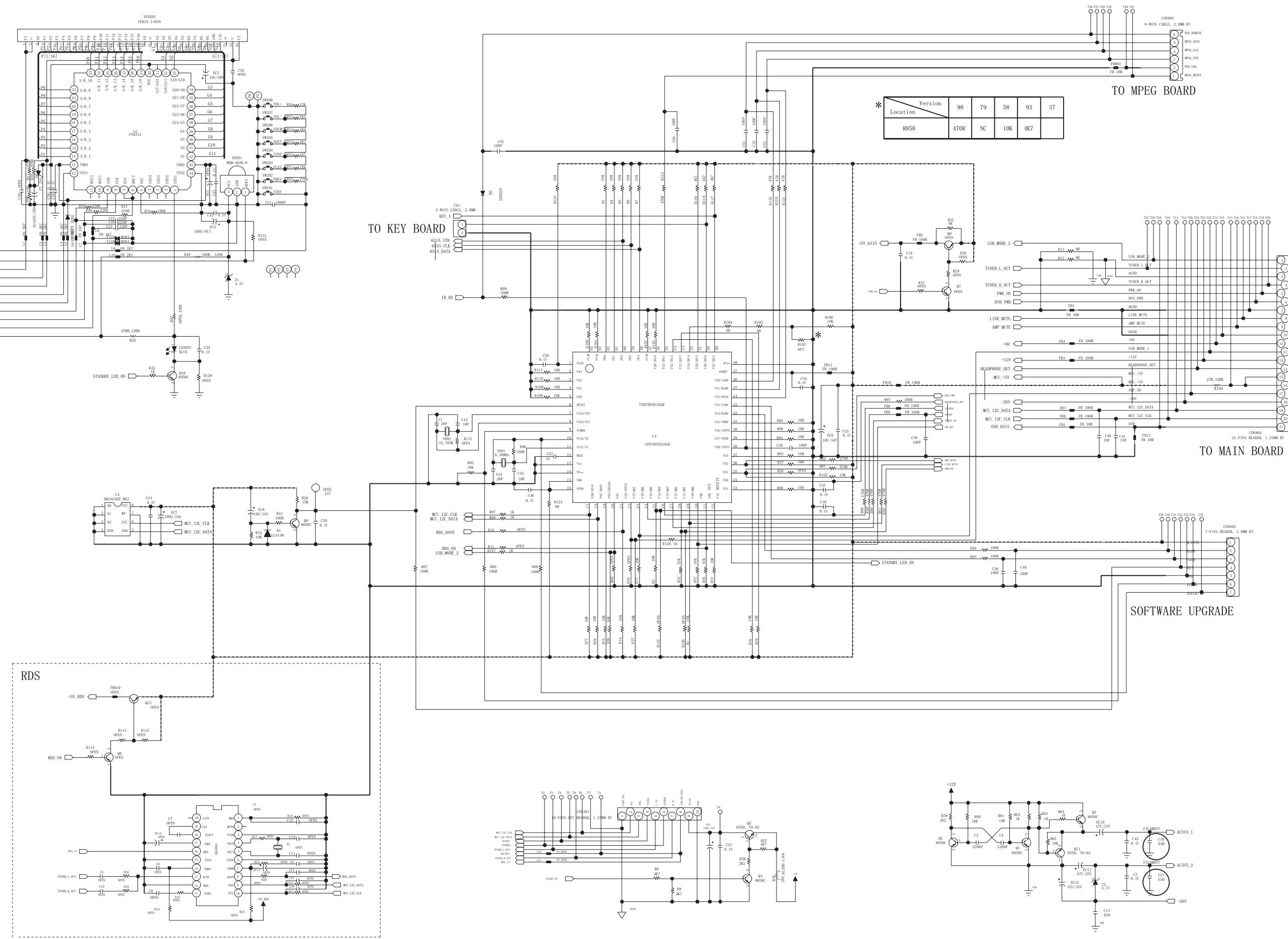


Philips DVD Micro MCD119 Block Diagram - Main Unit Power Management and Control

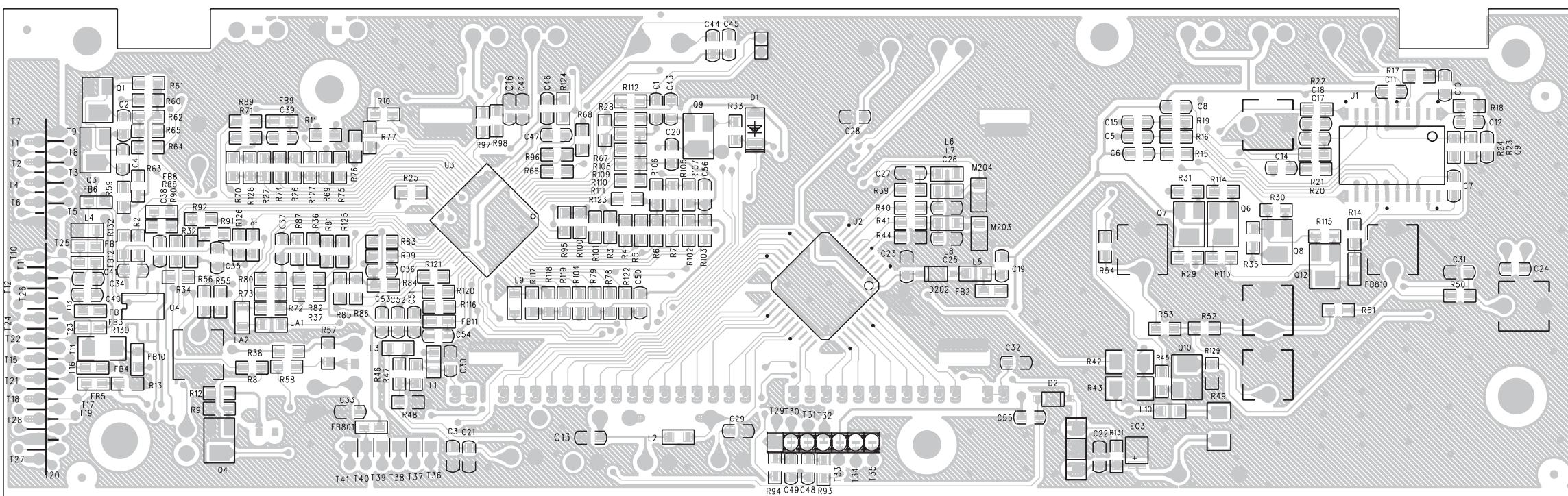
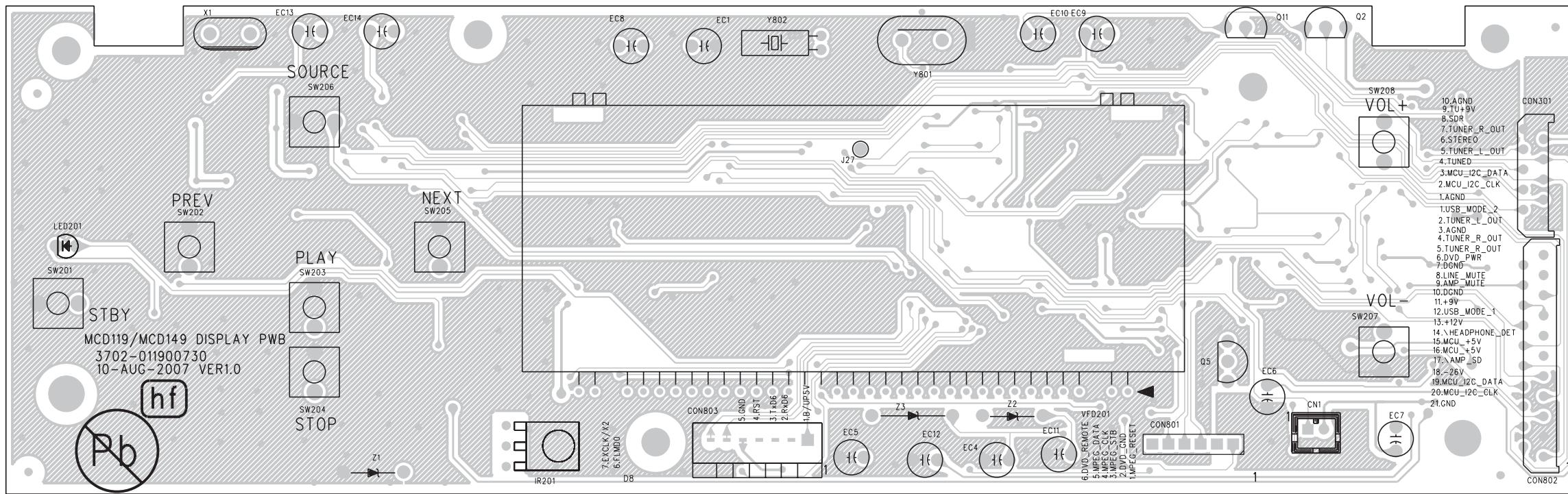
WIRING DIAGRAM



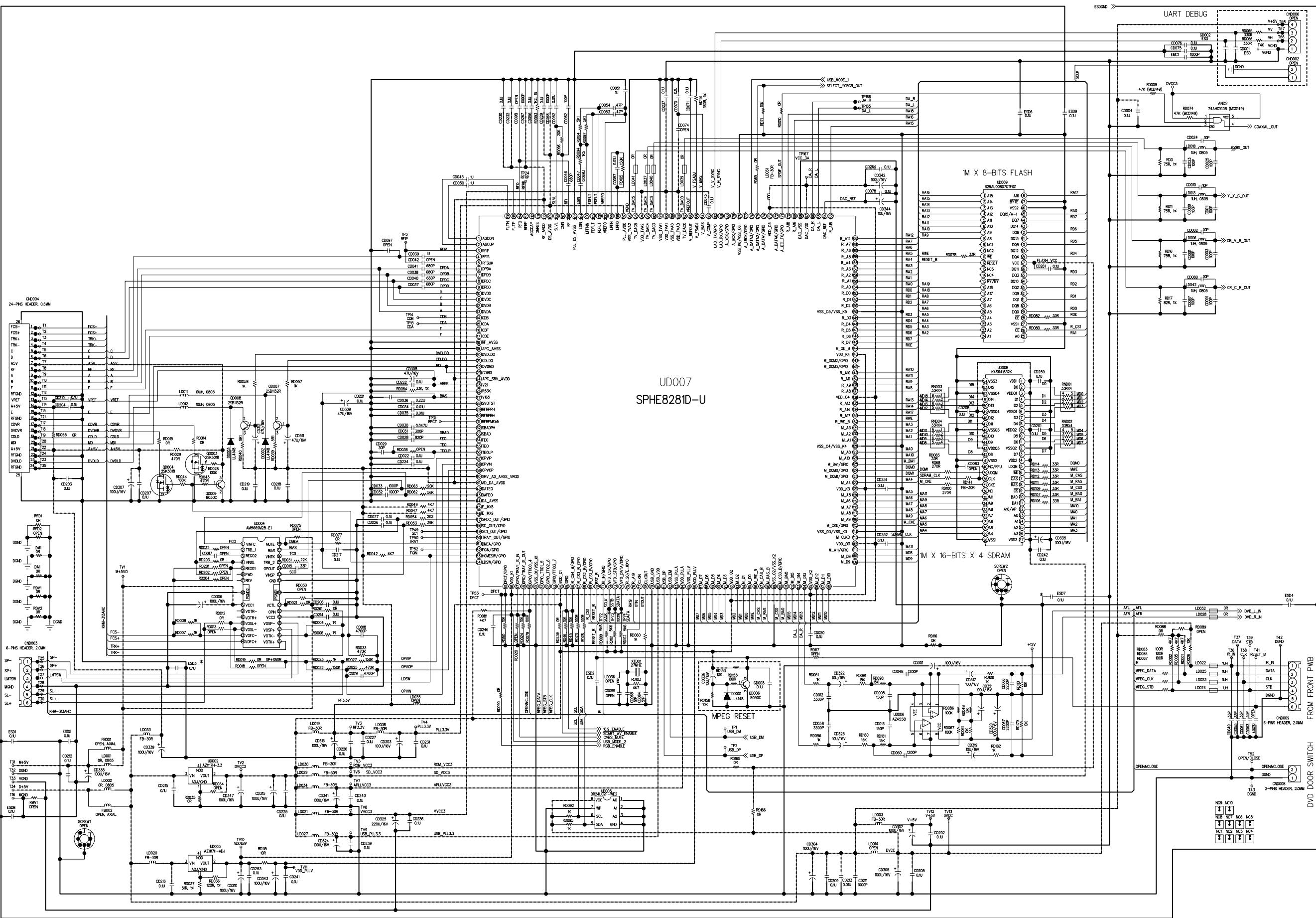
CIRCUIT DIAGRAM - DISPLAY BOARD



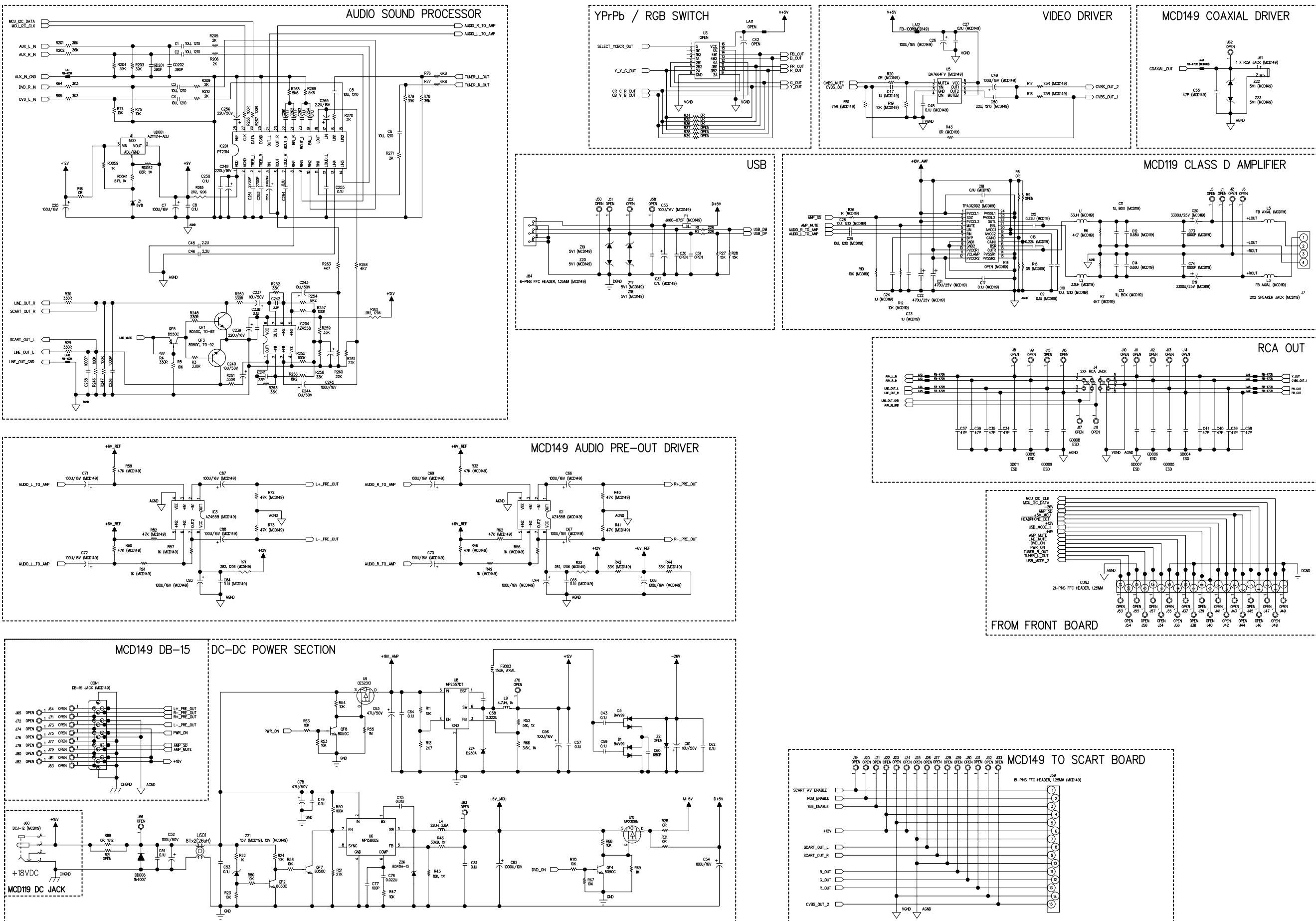
LAYOUT DIAGRAM - DISPLAY BOARD



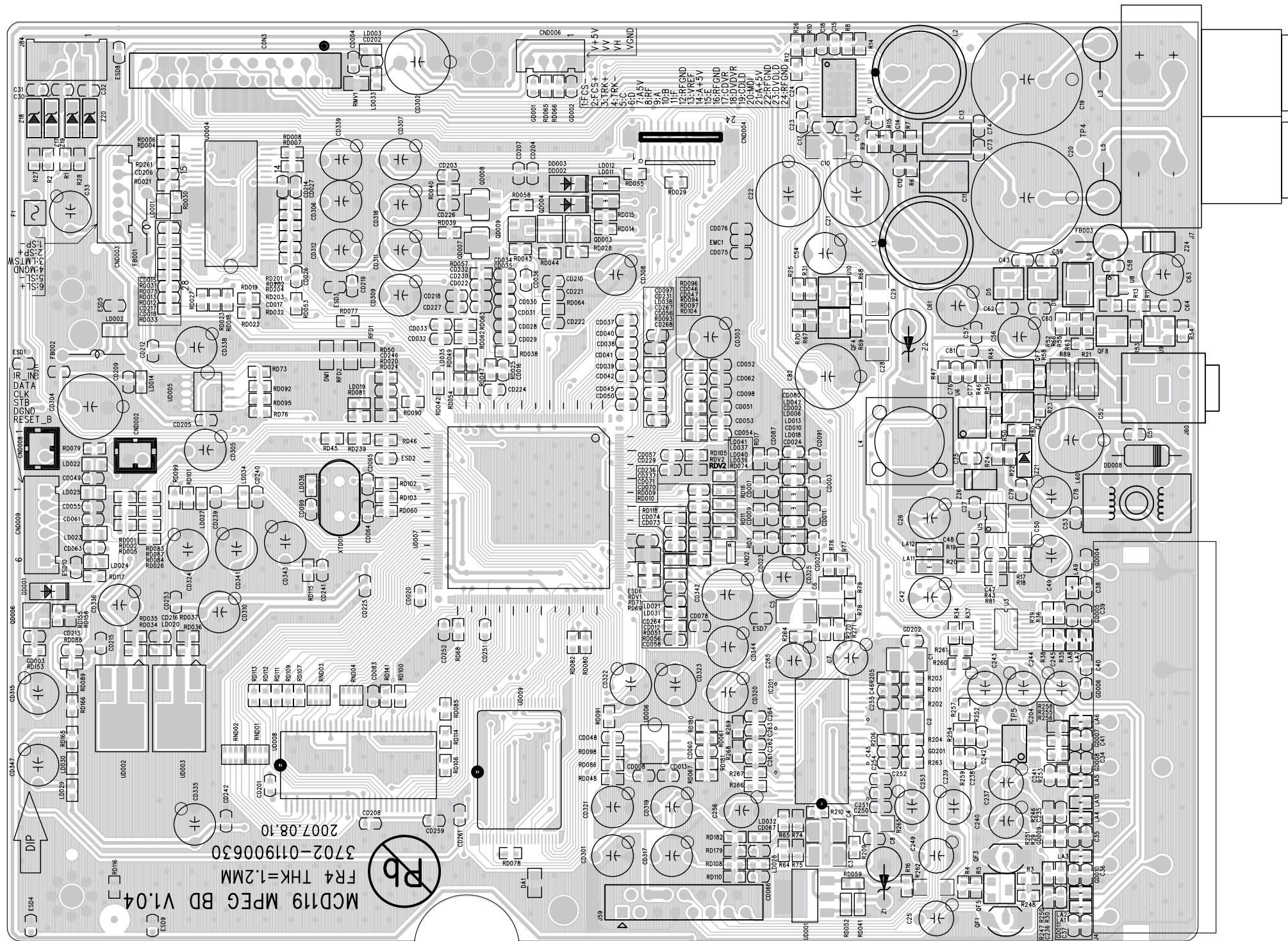
CIRCUIT DIAGRAM - MPEG BOARD

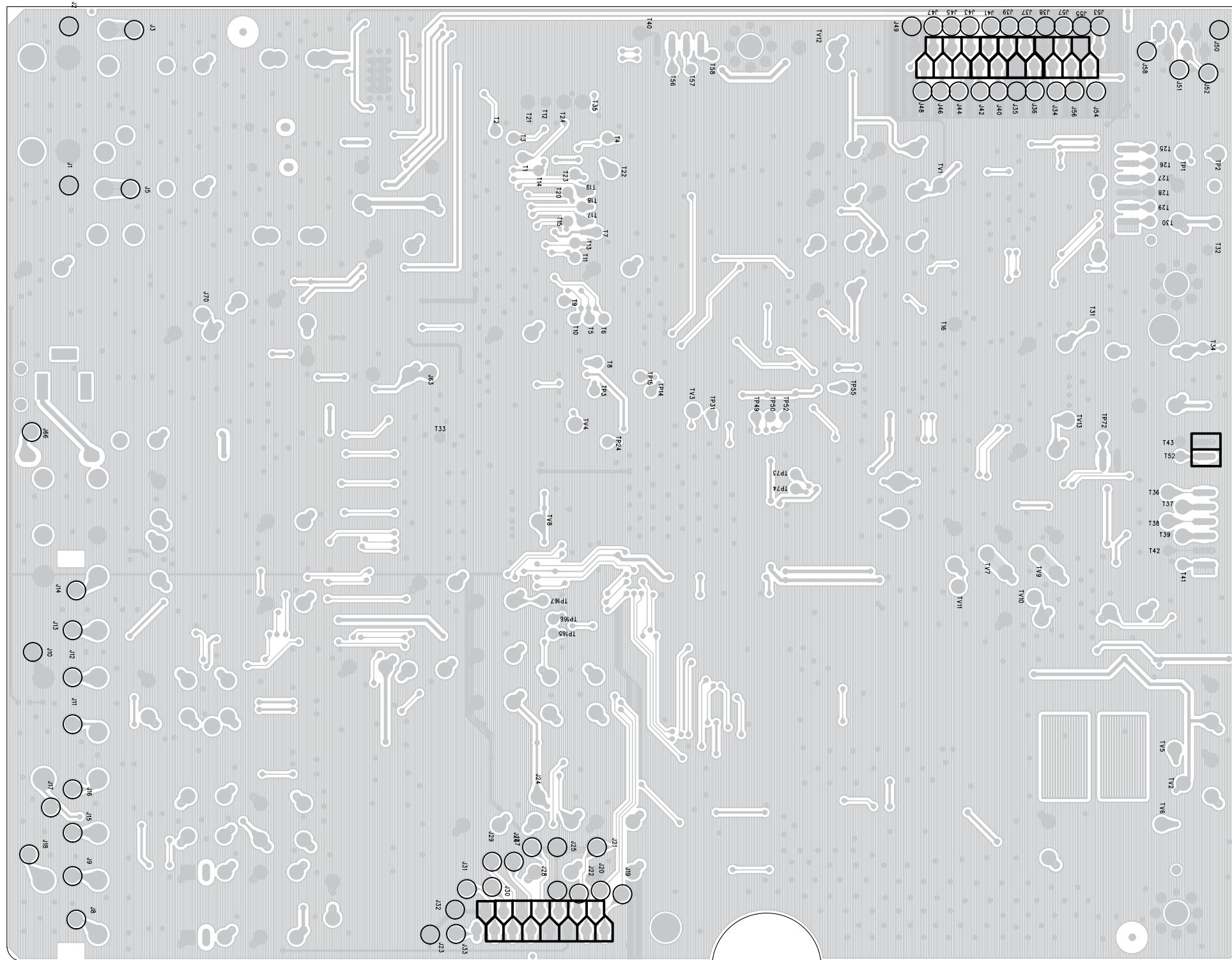


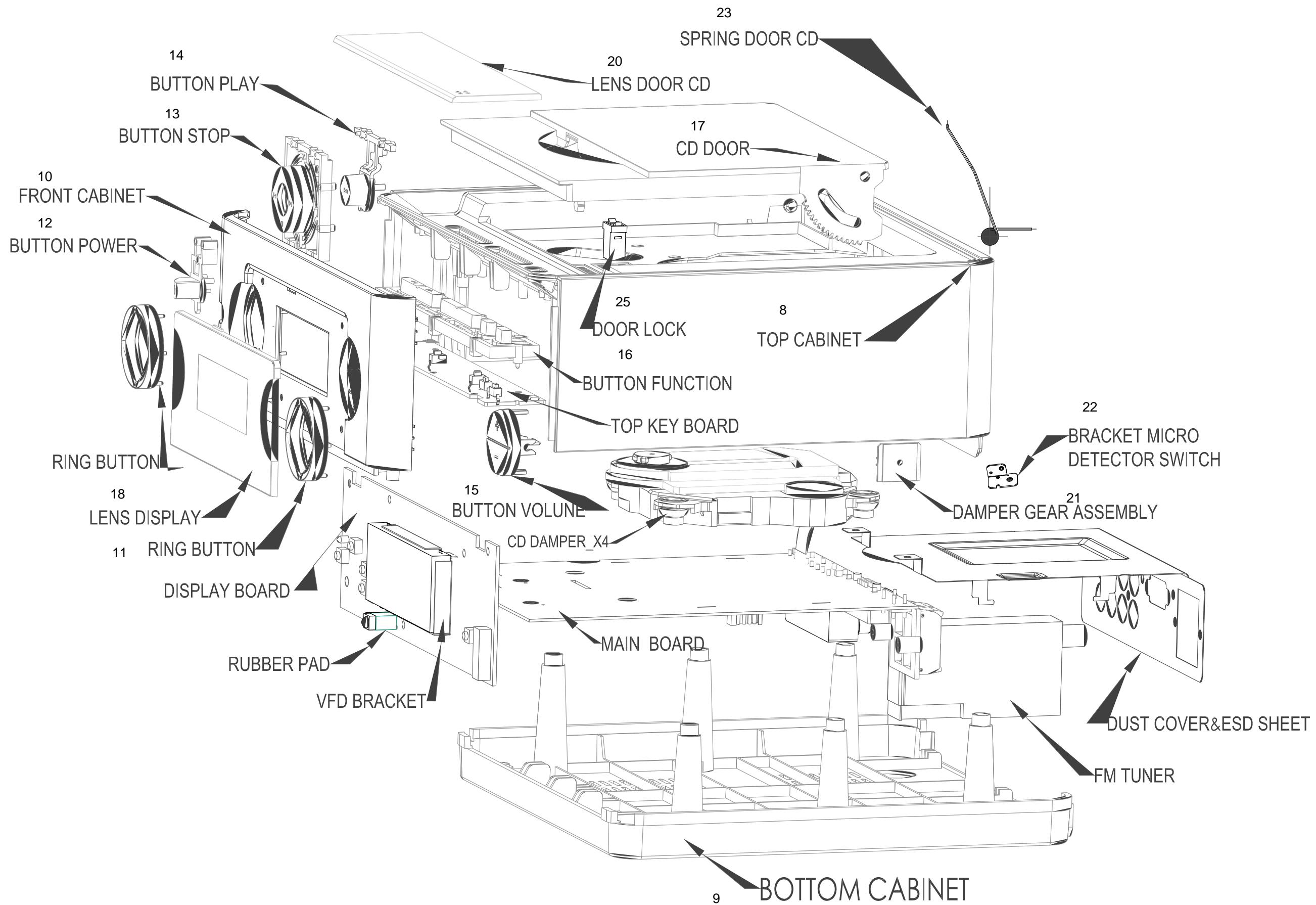
CIRCUIT DIAGRAM - MPEG BOARD



LAYOUT DIAGRAM - MPEG BOARD - TOP



LAYOUT DIAGRAM - MPEG BOARD - TOP

EXPLODE DIAGRAM

ACCESSORY PARTS

27	9965 100 07082	REMOTE CTRL "PHILIPS" (MCD119)
28	9965 100 08138	FM WIRE ANTENNA AWG#22
29	9940 000 02597	RCA CABLE VIDEO (YELLOW)
32	9965 100 07083	SPK BOX 4OHM 20WFOR MCD119/12
33	△ 9965 100 07084	AC/DCADAPTOR18V3.2A(I/P 230V)(/05)
33	△ 9965 100 07085	AC/DCADAPTOR18V3.2A50/60Hz(/12)
3	9965 000 41913	KEY BOARD ASSEMBLY /12

MECHNICAL&MISCELLANEOUS PARTS

5	9965 100 07071	TUNER MOD KST-MT004FS1-6 (EUR)
6	9965 100 01397	DVD MECHANISM KHM-313AHC
DRSW	9965 100 07074	DETECTOR SWITCH DTS-10-70 1P1T
FFC1	9965 100 08139	FFC CABLE 24PIN P=0.5MML=210MM
FFC2	9940 000 04281	FFC 21P P1.25MM L110MM C TYPE
FFC3	9965 100 07660	FFC CABLE 10P P=1.25MM L=400MM
10	9965 100 07077	FRONT CABINET(/05)
10	9965 000 41867	FRONT CABINET(/12)
11	9965 000 41871	RING BUTTON
12	9965 000 41875	BUTTON POWER
13	9965 000 41872	BUTTON STOP
14	9965 000 41870	BUTTON PLAY
15	9965 000 41874	BUTTON VOLUME
16	9965 000 41873	BUTTON FUNCTION
17	9965 000 41869	DOOR CD
18	9965 100 07078	LENS DISPLAY
19	9965 000 41878	LENS BUTTON POWER
20	9965 000 41877	LENS DOOR CD
21	9940 000 01664	DAMPER GEAR ASSEMBLY
22	9965 100 07079	BRACKET MICRO DETECTOR SW(SECC)
23	9965 000 41880	SPRING DOOR CD
24	9965 100 07080	RUBBER FOOT (DIA.18.5X2MM)
25	9965 100 07081	DOOR LOCK
8	9965 100 07075	TOP CABINET
9	9965 100 07076	BOTTOM CABINET

ELECTRICAL PARTS - MAIN BOARD

D1	9965 100 07044	CH-SW DIODE, BAV99 SOT23
D5	9965 100 07044	CH-SW DIODE, BAV99 SOT23
DD008	9965 100 07042	DIODE RECT 1N4007 1A/1000VDO41
IC201	9965 100 01347	IC ET2314 SOUND SO28
IC204	9965 000 41702	IC, AZ4558 OPERATIONALL
J4	9965 100 07062	RCA JACK 8PINS D=8.3MM90DEGREE
J60	9965 100 07061	DC-JACK DCJ-12 3P D=2.5MM 90
J7	9965 100 07063	SPK TERMINAL MSP-134V-04
L601	9965 100 07060	TORODIDAL COIL 30uH +/-30% DCR
QD003	9965 100 00099	MOSFET 2SK3018 UMT3
QD004	9965 100 00099	MOSFET 2SK3018 UMT3
QD006	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
QD007	9965 100 00285	TRANSISTOR 2SB1132R
QD008	9965 100 00285	TRANSISTOR 2SB1132R
QD009	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT

ELECTRICAL PARTS - MAIN BOARD

QF1	9965 100 07047	TRANSISTOR, 3DA8050CS
QF2	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
QF3	9965 100 07047	TRANSISTOR, 3DA8050CS
QF4	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
QF5	9965 100 07048	CH-TR. PNP SS8550LT1 SOT-23
QF5	9965 100 07049	CH-TR. PNP 3CA8550M SOT-23
QF7	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
QF8	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
RND01	9965 100 00095	ARRAY-RES 33Rx4 1/16W +/-5%
RND02	9965 100 00095	ARRAY-RES 33Rx4 1/16W +/-5%
RND03	9965 100 00095	ARRAY-RES 33Rx4 1/16W +/-5%
RND04	9965 100 00095	ARRAY-RES 33Rx4 1/16W +/-5%
U1	9965 100 07053	IC TPA3120D2PWPR25WSTEREOCLASS
U10	9965 100 07051	CH-MOSFET, AP2305GN SOT-23
U6	9965 100 07058	IC,MP1580HS, 2A 380KHz
U8	9965 100 07059	IC,MP2357DJ, 0.5A 1.4MHz
U9	9965 100 07052	CH-MOSFET, CES2313 SOT-23
UD001	9965 100 07057	IC AZ1117H-ADJTRE1REGULATORSOR
UD002	9965 000 41892	IC AZ1117H-3.3 REGULATOR
UD003	9965 100 07057	IC AZ1117H-ADJTRE1REGULATORSOR
UD004	9965 100 00290	IC AM5669M28-E1 MOTOR DRIVER
UD005	9940 000 05674	IC BR24L02F-WE2
UD006	9965 000 41702	IC, AZ4558 OPERATIONAL
UD007	9965 100 00103	IC MPEG DECODER SPHE8281D-U
UD008	9965 100 00101	IC W9864G6EH-7 TSOP54L SDRAM
UD008	9965 100 00102	IC W9864G6EH-6 TSOP54L SDRAM
UD008	9965 100 07054	IC K4S641632K-UC75TSOP54LSDRAM
UD008	9965 100 07055	IC K4S641632K-UC60 SDRAM64MBIT
UD009	9965 100 07056	IC 8M S29AL008D70TFI01FLASHSMD
XTD01	9965 100 07041	CRYSTAL 27MHz20PPM30PF HC-49/S
Z1	9965 100 07043	ZENER DIODE MTZ6.8B 1/2W
Z21	9965 100 07016	CH-ZENER DIODE UDVSTE-1715B
Z24	9965 100 07045	SCHOTTKY BARRIER REc DIODE
Z26	9965 100 07046	SCHOTTKY BARRIER REC DIODE

ELECTRICAL PARTS - DISPLAY BOARD

D2	9965 100 07067	SCHOTTKYBARRIERDIODE SS0520SOD
D202	9965 100 07067	SCHOTTKYBARRIERDIODE SS0520SOD
IR201	9965 100 08338	IR RECEIVER BRM-45B6-8-FB2.2
LED201	9965 000 41894	LED 3MM SUPER BLUE
M203	9940 000 04264	MULT. VAR. 10.6-15.4V
M204	9940 000 04264	MULT. VAR. 10.6-15.4V
Q1	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
Q10	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
Q11	9940 000 04223	TRANSISTOR 3CA8550 HFE=120-220
Q2	9965 100 07047	TRANSISTOR, 3DA8050CS
Q3	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
Q4	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
Q5	9940 000 04223	TRANSISTOR 3CA8550 HFE=120-220
Q9	9965 100 07050	CH-TRNPN3DA8050hFE=120-220SOT
TACTSW	9965 100 07070	TACTSWITCHTSJ-065001-3006x6x5

ELECTRICAL PARTS - DISPLAY BOARD

U2	9965 100 00296	IC, VFD DRIVER PT6315 LQFP44
U3	9965 100 01365	IC,MCU UPD78F0535 NEC
U4	9940 000 05674	IC BR24L02F-WE2
VFD201	9965 100 07069	VFD VFD33-1106N (BOE).
Y801	9965 100 00295	XTAL 8.38MHZ +/-20PPM CAP=20PF
Y802	9940 000 05671	XTAL 32.768KHZ +/-20PPM 12PF
Z1	9965 100 07065	DIODEZENERBZX55-C3.3V1/2W+/-5%
Z2	9965 100 07066	DIODEZENERBZX55/C4V7 1/2W+/-5%
Z3	9965 100 07064	ZENER DIODE 2.4V 1/2W
Z3	9965 100 07068	CH-ZENERDIODED01-BZT52C2V4S-TR

Note: Only these parts mentioned in the list are normal service parts.

FACTORY BOM

Level	Item	Component	Desc	Unit	Qty	Location			
0	0010	9008-011900012	PHILIPS MCM119//12	SET	1.000				
.1	0010	8900-070900100	ELECTRICAL SECTION OF MCD119/12	SET	1.000				
.2	0010	8901-070900100	MAIN PWB ASSEMBLY OF MCD119/12	SET	1.000				
..3	0010	1001-270000250	CRYSTAL 27MHz 20PPM 30PF HC-49/S	PC	1.000	XTD01			
..3	0015	1112-108043291	CAP ELECT, 1000UF10V+/-20%8X14 105DEGREE.	PC	1.000	C82			
..3	0020	1121-100081020	CH-CAP, CER 10PF50V+/-5%0603	PC	4.000	CD002, CD010, CD024, CD080			
..3	0030	1121-300082020	CH-CAP, CER 30PF50V+/-10%0603	PC	1.000	CD029			
..3	0040	1121-330081020	CH-CAP, CER33PF50V+/-5%0603	PC	7.000	C241, C242, CD015, CD049, CD055, CD061, CD063			
..3	0060	1121-470081020	CH-CAP, CER47PF50V+/-5%0603	PC	10.000	C34, C35, C36, C37, C38, C39, C40, C41, CD053, CD054			
..3	0070	1121-510081020	CH-CAP, CER 51PF 50V +/-5% 0603	PC	2.000	CD064, CD065			
..3	0080	1121-101081020	CH-CAP, CER100PF50V+/-5%0603	PC	10.000	C77, CD001, CD003, CD009, CD011, CD023, CD025, CD062, CD087, CD091			
..3	0090	1121-151081020	CH-CAP, CER150PF50V+/-5%0603	PC	2.000	CD008, CD013			
..3	0100	1121-301081020	CH-CAP, CER300PF50V+/-5%0603	PC	1.000	CD031			
..3	0110	1121-391082020	CH-CAP, CER390PF50V+/-10%0603	PC	2.000	GD201, GD202			
..3	0120	1121-681081020	CH-CAP, CER 680PF50V+/-5%0603	PC	6.000	C60, CD037, CD038, CD040, CD041, CD046			
..3	0130	1121-821082020	CH-CAP, CER 820PF50V+/-10%0603	PC	1.000	CD028			
..3	0140	1121-102081020	CH-CAP, CER 1000PF50V+/-5%0603	PC	8.000	C235, C236, CD032, CD033, CD211, CD267, CD268, EMC1			
..3	0150	1121-122082020	CH-CAP, CER1200PF 50V+/-10% 0603	PC	2.000	CD048, CD060			
..3	0160	1121-222082020	CH-CAP, CER 2200PF50V+/-10%0603	PC	2.000	CD066, CD067			
..3	0170	1121-272082020	CH-CAP, CER 2700PF50V+/-10%0603	PC	2.000	C251, C252			
..3	0180	1121-332082020	CH-CAP, CER3300PF50V+/-10%0603	PC	2.000	CD012, CD058			
..3	0190	1121-472082020	CH-CAP, CER4700PF50V+/-10%0603	PC	2.000	CD016, CD018			
..3	0200	1121-103082020	CH-CAP, CERO. 01UF50V+/-10%0603	PC	6.000	C75, CD034, CD035, CD052, CD057, CD213			
..3	0210	1121-223082020	CH-CAP, CER 0.022UF 50V +/-10% 0603	PC	2.000	C58, C76			
..3	0220	1121-473082020	CH-CAP, CERO. 047UF50V+/-10%0603	PC	1.000	CD030			
..3	0230	1121-683082020	CH-CAP, 0.068UF50V+/-10%0603	PC	1.000	CD047			
..3	0240	1121-104082020	CH-CAP, CERO. 1UF50V+/-10%0603	PC	83.000	C8, C9, C17, C18, C43, C51, C53, C57, C59, C62, C64, C79, C81, C238, C250, C254, C255, C261, C262, C263, C264, CD004, CD020, CD022, CD026, CD027, CD056, CD070, CD071, CD073, CD075, CD076, CD078, CD201, CD202, CD203, CD204, CD205, CD206, CD207, CD208, CD209, CD210, CD212, CD214, CD215, CD216, CD217, CD218, CD219, CD221, CD222, CD224, CD225, CD226, CD227, CD229, CD230, CD231, CD232, CD236, CD237, CD239, CD240, CD241, CD242, CD246, CD251, CD252, CD253, CD259, CD261, CD264, ESD1, ESD2, ESD3, ESD4, ESD5, ESD6, ESD7, ESD8, ESD9, G D003			
..3	0250	1121-224082020	CH-CAP, CERO. 22UF50V+/-10%0603	PC	3.000	C15, C16, CD036			
..3	0260	1121-684082020	CH-CAP, CERO. 68UF50V+/-10%0603	PC	2.000	C12, C14			
..3	0270	1121-105082020	CH-CAP, CER 1UF50V+/-10%0603	PC	8.000	C23, C24, C28, C29, CD039, CD045, CD050, CD051			
..3	0280	1121-225044020	CH-CAP, CER2. 2UF10V+80%-20%0603	PC	8.000	C1, C2, C3, C4, C5, C6, C45, C46			
..3	0290	1121-106042170	CH-CAP, CER 10UF 10V +/-10% 1210	PC	1.000	C10			
..3	0300	1132-225083060	CAP ELECT, 2.2UF 50V +/-20% 5X11 TAPING	PC	2.000	C253, C265			
..3	0310	1132-106053060	CAP ELECT, 10UF 16V +/-20% 5X11 TAPING	PC	6.000	CD317, CD319, CD322, CD323, CD336, CD344			
..3	0320	1132-106083060	CAP, ELECT 10UF 50V +/-20% 5X11 TAPING	PC	5.000	C61, C237, C240, C243, C244			
..3	0330	1132-226083060	CAP ELECT, 22UF 50V +/-20% 5X11 TAPING	PC	1.000	C256			
..3	0340	1132-476053060	CAP ELECT, 47UF 16V +/-20% 5X11 TAPING	PC	4.000	CD308, CD309, CD311, CD312			
..3	0350	1132-476083100	CAP ELECT, 47UF 50V +/-20% 6.3X11 TAPING	PC	2.000	C63, C78			
..3	0360	1132-107053060	CAP ELECT, 100UF 16V +/-20% 5X11 TAPING	PC	25.000	C7, C25, C54, C56, C245, CD301, CD302, CD303, CD304, CD305, CD306, CD307, CD310, CD315, CD316, CD320, CD321, CD324, CD335, CD338, CD339, CD341, CD342, CD343, CD347			
..3	0370	1132-107083220	CAP ELECT, 100UF 50V +/-20% 8x12 TAPING	PC	1.000	C52			
..3	0380	1132-227053060	CAP ELECT, 220UF 16V +/-20% 5X11 TAPING	PC	3.000	C239, C249, CD325			
..3	0390	1132-477063290	CAP ELECT, 470UF 25V +/-20% 8x14 TAPING	PC	4.000	C19, C20, C21, C22			
..3	0400	1138-105091000	CAP METALLIZED POLYESTER FILM 1.0uF 63V +/-5% CL21X TAPING	PC	2.000	C11, C13			
..3	0405	1221-000042050	CH-RES, OR 1/8W +/-5% 1206	PC	1.000	R62			
..3	0410	1221-000062020	CH-RES, 0 OHM1/16W+/-5%0603	PC	38.000	DA1, DM1, R14, R15, R16, R25, R31, R34, R35, R36, R43, RD010, RD012, RD014, RD015, RD019, RD021, RD035, RD055, RD69, RD077, RD088, RD090, RD116, RD165, RD166, RD203, RD239, RD261, RDV1, RDV2, RFD1, LD028, LD032, LD037, LD039, LD040, LD041			

FACTORY BOM

Level	Item	Component	Desc	Unit	Qty	Location			
... 3	0420	1221-000062030	CH-RES, 0 OHM1/16W+/-5%0605	PC	2.000	LD001, LD002			
... 3	0430	1221-010062020	CH-RES, 1R1/16W+/-5%0603	PC	5.000	RD004, RD006, RD007, RD008, RD023			
... 3	0440	1221-022022050	CH-RES, 2. 2R1/4W+/-5%1206	PC	2.000	R262, R265			
... 3	0450	1221-051062020	CH-RES, 5. 1R1/16W+/-5%0603	PC	2.000	RD039, RD040			
... 3	0460	1221-100062020	CH-RES, 10R1/16W+/-5%0603	PC	1.000	RD115			
... 3	0470	1221-220062020	CH-RES, 22R1/16W+/-5%0603	PC	2.000	R1, R2			
... 3	0480	1221-330062020	CH-RES, 33R1/16W+/-5%0603	PC	12.000	RD078, RD080, RD082, RD085, RD100, RD106, R107, RD109, RD111, RD112, RD113, RD114			
... 3	0490	1221-510051020	CH-RES, 51R1/10W+/-1%0603	PC	2.000	RD037, RD041			
... 3	0495	1221-680051020	CH-RES, 68R1/10W+/-1%0603	PC	1.000	RD052			
... 3	0500	1221-750061020	CH-RES, 75R1/16W+/-1%0603	PC	3.000	RD3, RD11, RD16			
... 3	0510	1221-820061020	CH-RES, 82R1/16W+/-1%0603	PC	1.000	RD17			
... 3	0520	1221-101062020	CH-RES, 100R1/16W+/-5%0603	PC	9.000	R266, R267, RD73, RD76, RD079, RD083, RD084, RD087, RD155			
... 3	0530	1221-121061020	CH-RES, 120R1/16W+/-1%0603	PC	1.000	RD036			
... 3	0540	1221-331062020	CH-RES, 330R1/16W+/-5%0603	PC	9.000	R3, R4, R29, R30, R248, R250, R251, RD065, RD066			
... 3	0550	1221-361061020	CH-RES, 360R1/16W+/-1%0603	PC	1.000	RD118			
... 3	0560	1221-471062020	CH-RES, 470R1/16W+/-5%0603	PC	2.000	RD029, RD043			
... 3	0570	1221-102062020	CH-RES, 1K1/16W+/-5%0603	PC	14.000	R22, R26, R76, R77, RD051, RD056, RD057, RD058, RD059, RD060, RD092, RD095, RD108, RD182			
... 3	0580	1221-122061020	CH-RES, 1. 2K 1/16W +/-1% 0603	PC	1.000	RD093			
... 3	0590	1221-152062020	CH-RES, 1. 5K1/16W+/-5%0603	PC	1.000	RD094			
... 3	0600	1221-202062020	CH-RES, 2K1/16W+/-5%0603	PC	6.000	R205, R206, R209, R210, R270, R271			
... 3	0610	1221-222062020	CH-RES, 2. 2K1/16W+/-5%0603	PC	1.000	RD054			
... 3	0620	1221-272062020	CH-RES, 2. 7K1/16W+/-5%0603	PC	1.000	R13			
... 3	0630	1221-332062020	CH-RES, 3. 3K1/16W+/-5%0603	PC	2.000	R64, R65			
... 3	0640	1221-362061020	CH-RES, 3. 6K1/16W+/-1%0603	PC	1.000	R66			
... 3	0650	1221-472062020	CH-RES, 4. 7K1/16W+/-5%0603	PC	12.000	R6, R7, R263, R264, RD001, RD002, RD005, RD042, RD047, RD049, RD081, RD103			
... 3	0660	1221-512062020	CH-RES, 5. 1K 1/16W+/-5%0603	PC	2.000	RD097, RD104			
... 3	0670	1221-562062020	CH-RES, 5. 6K1/16W+/-5%0603	PC	5.000	R268, R269, RD099, RD101, RD102			
... 3	0680	1221-822062020	CH-RES, 8. 2K1/16W+/-5%0603	PC	2.000	R254, R256			
... 3	0690	1221-103061020	CH-RES, 10K1/16W+/-1%0603	PC	1.000	R45			
... 3	0700	1221-103062020	CH-RES, 10K1/16W+/-5%0603	PC	31.000	R5, R10, R11, R12, R23, R24, R47, R53, R54, R58, R63, R67, R68, R70, R74, R75, R78, R79, R80, RD024, RD026, RD45, RD46, RD048, RD50, RD061, RD071, RD110, RD153, RD158, RD179			
... 3	0710	1221-153062020	CH-RES, 15K1/16W+/-5%0603	PC	6.000	R27, R28, RD091, RD098, RD180, RD181			
... 3	0720	1221-203062020	CH-RES, 20K1/16W+/-5%0603	PC	1.000	RD096			
... 3	0730	1221-223062020	CH-RES, 22K1/16W+/-5%0603	PC	3.000	R260, R261, RD031			
... 3	0740	1221-303061021	CH-RES, 30. 9K1/16W+/-1%0603	PC	1.000	R46			
... 3	0745	1221-303062020	CH-RES, 30K1/16W+/-5%0603	PC	1.000	R51			
... 3	0750	1221-333061020	CH-RES, 33K1/16W+/-1%0603	PC	1.000	RD064			
... 3	0760	1221-333062020	CH-RES, 33K1/16W+/-5%0603	PC	4.000	R252, R253, R258, R259			
... 3	0765	1221-363062020	CH-RES, 36K1/16W+/-5% 0603	PC	2.000	R201, R202			
... 3	0770	1221-393062020	CH-RES, 39K1/16W+/-5%0603	PC	3.000	R203, R204, RD053			
... 3	0780	1221-513051020	CH-RES, 51K1/10W+/-1%0603	PC	1.000	R52			
... 3	0790	1221-563062020	CH-RES, 56K1/16W+/-5%0603	PC	1.000	RD062			
... 3	0800	1221-104062020	CH-RES, 100K1/16W+/-5%0603	PC	9.000	R50, R246, R247, R255, R257, RD028, RD044, RD067, RD086			
... 3	0810	1221-124062020	CH-RES, 120K1/16W+/-5%0603	PC	1.000	RD063			
... 3	0820	1221-154062020	CH-RES, 150K1/16W+/-5%0603	PC	3.000	RD022, RD027, RD105			
... 3	0830	1221-474062020	CH-RES, 470K1/16W+/-5%0603	PC	2.000	RD025, RD033			
... 3	0840	1221-105062020	CH-RES, 1M1/16W+/-5%0603	PC	2.000	R55, R69			
... 3	0850	1221-000012090	CH-RES, 0.1W +/-5% 1812	PC	2.000	R21, R89			
... 3	0860	1225-330062020	CH-ARRAY-RES 33 OHMx4 1/16W +/-5% 0603	PC	4.000	RND01, RND02, RND03, RND04			
... 3	0870	1311-140070000	DIODE RECT 1N4007 1A/1000V D041.	PC	1.000	DD008			
... 3	0875	1313-000680000	ZENER DIODE MTZ6.8B 1/2W	PC	1.000	Z1			
... 3	0880	1321-000990030	CH-SW DIODE, BAV99 SOT23	PC	2.000	D1, D5			
... 3	0890	1321-041480020	CH-DIODE RLS418 LL-34	PC	3.000	DD001, DD002, DD003			
... 3	0900	1322-000014000	SCHOTTKY BARRIER RECTIFIER, DIODE SX14, DO-214AC	PC	1.000	Z24			
... 3	0910	1322-000034000	SCHOTTKY BARRIER RECTIFIER, DIODE SX34, DO-214AC	PC	1.000	Z26			
... 3	0920	1323-001500000	CH-ZENER DIODE UDVSTE-1715B	PC	1.000	Z21			
... 3	0930	1412-380500010	TRANSISTOR, 3DA8050CS HFE=120-180 NPN TO-92	PC	2.000	QF1, QF3			
... 3	0940	1421-085500010	CH-TRANSISTOR PNP SS8550LT1 SOT-23	PC	1.000	QF5			

FACTORY BOM

Level	Item	Component	Desc	Unit	Qty	Location			
... 3	0941	1421-385500000	CH-TRANSISTOR PNP 3CA8550M SOT-23	PC	1.000	QF5			
... 3	0950	1421-211320010	CH-TRANSISTOR, 2SB1132RSOT-89	PC	2.000	QD007, QD008			
... 3	0970	1422-380500000	CH-TR. NPN 3DA8050 hFE=120-220 SOT-23	PC	6.000	QF2, QF4, QF7, QF8, QD006, QD009			
... 3	0980	1424-023050020	CH-MOSFET, AP2305GN SOT-23	PC	1.000	U10			
... 3	0990	1424-023130000	CH-MOSFET, CES2313 SOT-23	PC	1.000	U9			
... 3	1000	1424-230180010	MOSFET2SK3018SMD UMT3	PC	2.000	QD003, QD004			
... 3	1010	1502-002314010	IC ET2314 SOUND S028	PC	1.000	IC201			
... 3	1020	1502-003120000	IC, TPA3120D2PWPR 25W STEREO CLASS-D AUDDIO POWER AMPLIFIER, TSSOP	PC	1.000	U1			
... 3	1030	1502-004558030	IC, AZ4558 OPERATIONALL AMP. CD	PC	2.000	UD006, IC204			
... 3	1040	1509-008281000	IC, SUNPLUS MPEG DECODER SPHE8281D-U 216PIN LQFP	PC	1.000	UD007			
... 3	1050	1511-002402030	IC, BR24L02F-WE2	PC	1.000	UD005			
... 3	1060	1511-464163000	IC K4S641632K-UC75 TSOP54L SDRAM	PC	1.000	UD008			
... 3	1061	1511-464163010	IC K4S641632K-UC60 SDRAM 64MBIT 60nS SMD TSOP54(II)	PC	1.000	UD008			
... 3	1062	1511-986466700	IC, W9864G6EH-6 TSOP54L SDRAM	PC	1.000	UD008			
... 3	1063	1511-986467000	IC, W9864G6EH-7 TSOP54L SDRAM	PC	1.000	UD008			
... 3	1070	1511-829008010	IC 8M S29AL008D70TFI01 FLASH SMD TSOP	PC	1.000	UD009			
... 3	1080	1512-001117080	IC AZ1117H-ADJ TRE1 REGULATOR SOT-223	PC	2.000	UD001, UD003			
... 3	1090	1512-001117130	IC, AZ1117H-3..3TRE1 REGULATOR SOT-223	PC	1.000	UD002			
... 3	1100	1512-001580000	IC, MP1580HS, 2A 380KHz STEP DOWN CONVERTTER SOIC8	PC	1.000	U6			
... 3	1110	1512-002357000	IC, MP2357DJ, 0.5A 1.4MHz STEP DOWN CONVERTER TSOT-23-6	PC	1.000	U8			
... 3	1130	1513-005669000	IC, AM5669M28-E1 MOTOR DRIVER HSOP28	PC	1.000	UD004			
... 3	1140	1606-010040000	CH-INDUCTOR, 1UH 0805 DCR:0.4R	PC	8.000	LD006, LD013, LD018, LD022, LD023, LD024, LD025, LD042			
... 3	1160	1606-047016000	CH-INDUCTOR 4.7uH +/-20% DCR:0.16R.	PC	1.000	L9			
... 3	1170	1606-100115000	CHOCK COIL 10UH Q=50 DCR=1.150HM 0805	PC	2.000	LD011, LD012			
... 3	1180	1606-220004000	CH-INDUCTOR 22UH 1KHz +/-20% DCR:40mOHM3.6A	PC	1.000	L4			
... 3	1190	1608-300025000	TORODIDAL COIL 30uH +/-30% DCR:0.025R.	PC	1.000	L601			
... 3	1200	1614-330010000	INDUCTOR, 33uH DCR:0.10HMS +/-20%	PC	2.000	L1, L2			
... 3	1210	2721-101020000	FERRITE BEAD SMD 100OHM +/-25%/100MHZ 0603 GZ1608D101	PC	2.000	LA1, LA10			
... 3	1220	2721-300020000	FERRITE BEAD SMD 300HM +/-25%/100MHZ 0603 GZ1608U300T	PC	12.000	RD141, LD003, LD019, LD020, LD021, LD027, LD029, LD030, LD031, LD033, LD034, LD038			
... 3	1230	2721-471020000	CH-FERRITE BEAD 470 OHM +/-25% 100MHz 0603	PC	8.000	LA2, LA3, LA4, LA5, LA6, LA7, LA8, LA9			
... 3	1240	3101-200221010	HEADER 2PIN 2.0MM STRAIGHT	PC	1.000	CND008			
... 3	1250	3101-200621010	HEADER 6PIN 2.0MM STRAIGHT	PC	2.000	CND003, CND009			
... 3	1260	3106-052421000	CONNECTOR, FFC P=24PIN P=0.5MM STRAIGHT	PC	1.000	CND004			
... 3	1261	3106-052411020	FFC CONNECTOR 24P PH=0.5MM FC201-24 (UPPER CONTACT TYPE)	PC	1.000	CND004			
... 3	1270	3106-122111000	FFC CONNECTOR 21PIN P=1.25MM 90DEGREE	PC	1.000	CON3			
... 3	1280	3201-030125000	DC-JACK DCJ-12 3P D=2.5MM 90 DEGREEGREE	PC	1.000	J60			
... 3	1290	3204-080183000	RCA JACK 8PINS D=8.3MM 90DEGREE RCA-813P-07	PC	1.000	J4			
... 3	1300	3401-000000290	SPK TERMINAL MSP-134V-04	PC	1.000	J7			
... 3	1310	3702-011900630	DVD MPEG PWB D.S. FR4 264X195X1.2MM/2 MCD119-06 V1.0	PC	1.000				
... 3	1320	8022-000000600	PULSE GUARD 0603ESDA-TR1	PC	10.000	GD001, GD002, GD004, GD005, GD006, GD007, GD008, GD009, GD010, GD011			
... 2	0020	8907-070900100	DISPLAY PWB ASSEMBLY OF MCD119/12	SET	1.000				
... 3	0010	1001-000327200	CRYSTAL, 32.768KHZ +/-20PPM 12PF	PC	1.000	YS02			
... 3	0020	1001-083800200	CRYSTAL 8.38MHZ +/-20PPM LOADER CAP=20PF	PC	1.000	YS01			
... 3	0030	1121-180081020	CH-CAP, CER18PF50V+/-5%0603 NPO	PC	2.000	C1, C43			
... 3	0040	1121-200081020	CH-CAP, CER20PF50V+/-5%0603	PC	2.000	C44, C45			
... 3	0050	1121-330081020	CH-CAP, CER33PF50V+/-5%0603	PC	2.000	C40, C41			
... 3	0060	1121-101081020	CH-CAP, CER100PF50V+/-5%0603	PC	9.000	C36, C39, C48, C49, C50, C51, C52, C53, C55			
... 3	0070	1121-221081020	CH-CAP, CER220PF50V+/-5%0603	PC	3.000	C25, C26, C27			
... 3	0080	1121-102081020	CH-CAP, CER 1000PF50V+/-5%0603	PC	1.000	C31			
... 3	0090	1121-222082020	CH-CAP, CER 2200PF50V+/-10%0603	PC	2.000	C2, C4			
... 3	0100	1121-104081020	CH-CAP CER 0.1UF50V+/-5%0603	PC	17.000	C3, C19, C20, C22, C23, C24, C28, C29, C33, C34, C35, C37, C38, C42, C46, C54, C56			
... 3	0110	1121-105082020	CH-CAP, CER 1UF50V+/-10%0603	PC	1.000	C47			
... 3	0120	1132-106083710	CAP ELECT 10UF 50V +/-20% 5X8 85C TAPING	PC	4.000	EC4, EC5, EC8, EC9			
... 3	0140	1123-476043060	TANT. CH-CAP 47uF 10V +/-20% 3528-B	PC	1.000	EC3			
... 3	0150	1132-476083720	CAP ELECT 47UF 50V +/-20% 6.3X8 85C TAPING	PC	3.000	EC10, EC11, EC12			
... 3	0160	1132-107053710	CAP ELECT 100UF 16V +/-20% 85C 5X8 TAPING	PC	3.000	EC2, EC6, EC7			
... 3	0165	1221-000042050	CH-RES, OR 1/8W +/-5% 1206	PC	1.000	R130			
... 3	0170	1221-000062020	CH-RES, 0 OHM/16W+/-5%0603	PC	6.000	R12, R13, R35, R104, R105, R124			
... 3	0180	1221-022062020	CH-RES, 2.2R/16W+/-5%0603	PC	1.000	R38			
... 3	0190	1221-470062020	CH-RES, 47R/16W+/-5%0603	PC	3.000	R116, R120, R121			
... 3	0200	1221-101022050	CH-RES, 100R1/4W+/-5%1206	PC	1.000	R49			

FACTORY BOM

Level	Item	Component	Desc	Unit	Qty	Location			
... 3	0210	1221-101062020	CH-RES, 100R1/16W+/-5%0603	PC	8.000	R33, R66, R67, R68, R87, R93, R94, R99			
... 3	0220	1221-221062020	CH-RES, 220R1/16W+/-5%0603	PC	3.000	R39, R40, R41			
... 3	0230	1221-471062020	CH-RES, 470R1/16W+/-5%0603	PC	11.000	R46, R47, R50, R81, R82, R88, R89, R90, R91, R92, R122			
... 3	0235	1221-681022050	CH-RES, 680R1/4W+/-5%1206	PC	1.000	R43			
... 3	0240	1221-102062020	CH-RES, 1K1/16W+/-5%0603	PC	8.000	R45, R62, R63, R64, R97, R98, R127, R128			
... 3	0250	1221-182062020	CH-RES, 1.8K1/16W+/-5%0603	PC	1.000	R51			
... 3	0260	1221-222062020	CH-RES, 2, 2K1/16W+/-5%0603	PC	2.000	R58, R59			
... 3	0270	1221-272062020	CH-RES, 2, 7K1/16W+/-5%0603	PC	1.000	R52			
... 3	0280	1221-332062020	CH-RES, 3, 3K1/16W+/-5%0603	PC	1.000	R53			
... 3	0290	1221-392062020	CH-RES, 3, 9K1/16W+/-5%0603	PC	1.000	R54			
... 3	0300	1221-472062020	CH-RES, 4, 7K1/16W+/-5%0603	PC	6.000	R8, R9, R57, R117, R119			
... 3	0310	1221-752062020	CH-RES, 7, 5K1/16W+/-5%0603	PC	1.000	R55			
... 3	0320	1221-103062020	CH-RES, 10K1/16W+/-5%0603	PC	43.000	R1, R2, R3, R4, R5, R6, R7, R25, R26, R27, R28, R32, R34, R37, R60, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R65, R83, R84, R85, R86, R95, R100, R101, R102, R103, R106, R108, R109, R110, R111, R123, R125, RD61			
... 3	0330	1221-123062020	CH-RES, 12K1/16W+/-5%0603	PC	2.000	R48, R56			
... 3	0350	1221-104062020	CH-RES, 100K1/16W+/-5%0603	PC	2.000	R44, R96			
... 3	0360	1313-000240000	ZENER DIODE 2.4V 1/2W	PC	1.000	Z3			
... 3	0370	1313-055330000	DIODE ZENER BZX55-C3.3V1/2W +/-5% DO-35.	PC	1.000	Z1			
... 3	0380	1313-055470000	DIODE ZENER BZX55/C4V7 1/2W +/-5% DO-35.	PC	1.000	Z2			
... 3	0390	1316-334010030	LED 3MM SUPER BLUE DIFFUSED 33B4SDA01.	PC	1.000	LED201			
... 3	0400	1321-041480020	CH-DIODE RLS4148 LL-34	PC	1.000	D1			
... 3	0405	1322-005200020	SCHOTTKY BARRIER DIODE, SS0520 SOD-123.	PC	2.000	D2, D202			
... 3	0410	1323-015220000	CH-ZENER DIODE D01-BZT52C2V4S-TR	PC	1.000	Z3			
... 3	0420	1411-385500000	TRANSISTOR, PNP 3CA8550 hFE=120-220 TO-92	PC	2.000	Q5, Q11			
... 3	0430	1422-380500000	CH-TR. NPN 3DA8050 hFE=120-220 SOT-23	PC	6.000	Q1, Q2, Q3, Q4, Q9, Q10			
... 3	0440	1506-780535000	IC, MCU UPD78F0535 NEC	PC	1.000	U3			
... 3	0450	1511-002402030	IC, BR24L02F-WE2	PC	1.000	U4			
... 3	0460	1513-006315000	IC, VFD DRIVER PT6315 LQFP44	PC	1.000	U2			
... 3	0470	1801-000000150	IR RECEIVER BRM-4050-8-FB2, 2	PC	1.000	IR201			
... 3	0480	2401-000000050	VFD VFD33-1106N (BOE).	PC	1.000	VFD201			
... 3	0490	2721-101020000	FERRITE BEAD SMD 1000HM +/-25%/100MHZ 0603 GZ1608D101	PC	9.000	FB2, FB3, FB4, FB6, FB7, FB8, FB9, FB10, FB11			
... 3	0500	2721-272020000	CH-FERRITE BEAD, 2K70HM@100MHZ 0603	PC	10.000	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10			
... 3	0510	2721-300020000	FERRITE BEAD SMD 300HM +/-25%/100MHZ 0603 GZ1608U300T	PC	4.000	FB1, FB5, FB12, FB801			
... 3	0520	2721-601020020	FERRITE BEAD 100MHz/600 OHM 0603.	PC	2.000	LA1, LA2			
... 3	0530	3101-200211010	HEADER 2PIN 2.0MM 90 DEGREE WHITE	PC	1.000	CN1			
... 3	0540	3101-200711010	HEADER 7PIN 2.0MM 90ANGLE	PC	1.000	CON803			
... 3	0550	3106-121011010	FFC CONNECTOR 10PIN P=1.25MM 90DEGREE WHITE	PC	1.000	CON301			
... 3	0560	3106-122111000	FFC CONNECTOR 21PIN P=1.25MM 90DEGREE	PC	1.000	CON802			
... 3	0570	3302-010115020	TACT SWITCH TSJ-065001-300 6x6x5MM 1P1T	PC	8.000	SW201, SW202, SW203, SW204, SW205, SW206, SW207, SW208			
... 3	0580	3505-060182000	HOUSING 6PIN P=2.0MM AWG#30 L=180MM PLUG TO BOARD IN	PC	1.000	CON801			
... 3	0590	3601-106000010	CH-MULT. VAR. EZJ1V120KA 10.6-15.4V 0603	PC	2.000	M203, M204			
... 3	0600	3702-011900730	DISPLAY PWB D. S. FR4 141x195x1.6MM/2 MCD119-07 V1.0	PC	1.000				
... 3	0610	6302-060400100	BRADKET VFD(SPTE T=0.5MM)	PC	1.000	FORVFD			
... 3	0620	6401-060400200	RUBBER PAD 6x8x8.4MM	PC	1.000	FORIR			
.2	0030	8910-060400100	KEY PWB ASSEMBLY OF MCM119/12	SET	1.000				
... 3	0010	1121-102081020	CH-CAP, CER 1000PF50V+/-5%0603	PC	1.000	C208			
... 3	0020	1221-471062020	CH-RES, 470R1/16W+/-5%0603	PC	1.000	R214			
... 3	0030	1221-182062020	CH-RES, 1.8K1/16W+/-5%0603	PC	1.000	R215			
... 3	0040	1221-272062020	CH-RES, 2, 7K1/16W+/-5%0603	PC	1.000	R216			
... 3	0050	1221-332062020	CH-RES, 3, 3K1/16W+/-5%0603	PC	1.000	R217			
... 3	0060	1221-392062020	CH-RES, 3, 9K1/16W+/-5%0603	PC	1.000	R218			
... 3	0070	2721-272030010	CH-FB, 2700OHM+/-25% 0805 SZ2012K272T(LF).	PC	2.000	L209, L210			
... 3	0080	3302-010115000	SWITCH TACT TS-03-BS-180G 5MM	PC	6.000	SW209, SW210, SW211, SW212, SW213, SW214			
... 3	0090	3501-020122010	HOUSING 2PIN P=2.0MM L=120MM AWG#30 UL1571 SINGLE PLUG (RED/BLACK)	PC	1.000	CN202			
... 3	0095	3501-020122020	HOUSING 2PIN P=2.0MM L=120MM AWG#30 UL1007 SINGLE PLUG (RED/BLACK)	PC	1.000	CN202			
... 3	0100	3701-011900210	PWB 141x161x1.6MM/5 94VO MCM119-02 (KEY).	PC	1.000				
.1	0020	8900-070900200	ELECTRICAL ENCASING ASSY. OF MCD119/12	SET	1.000				
.2	0010	3801-000000160	TUNER MODULE KST-MT004FS1-6 (EUR).	PC	1.000				
.2	0020	4405-120031300	DVD MECHANISM KHM-313AHC	PC	1.000				

FACTORY BOM

Level	Item	Component	Desc	Unit	Qty	Location			
.. 2	0030	3002-240190900	FFC CABLE 24PIN P=0.5MM L=190MM WHITE	PC	1.000	CND004TOLoader			
.. 2	0040	3502-060152000	HOUSING, 6P P=2.0MM AWG#30 L=150MM PLUG TO PLUG	PC	1.000	CND003TOLoader			
.. 2	0050	3002-210110900	FFC CABLE 21P P=1.25MM L=110MM C TYPE WHITE	PC	1.000	CN3TOCON802			
.. 2	0060	3002-100300900	FFC CABLE 10P P=1.25MM L=300MM C TYPE WHITE	PC	1.000	CON301TOTUNER			
.. 2	0070	3501-020202000	HOUSING 2PIN P=2.0MM L=200MM AWG#30 UL1571 SINGLE PLUG (RED/BLACK)	PC	1.000	CND008TODOORSWITCH			
.. 2	0080	3312-010100040	DETECTOR SWITCH DTS-10-70 1P1T.	PC	1.000	DOOR-SWITCH			
. 1	0030	8940-070900100	MECHANICAL SECTION OF MCD119/12	SET	1.000				
.. 2	0010	8941-070900100	PLASTIC PART OF MCD119/12	SET	1.000				
... 3	0010	5001-070900100	TOP CABINET	PC	1.000				
... 3	0020	5002-071000200	BOTTOM CABINET.	PC	1.000				
... 3	0030	5001-071000200	FRONT CABINET	PC	1.000				
... 3	0040	5403-060400100	RING BUTTON	PC	2.000				
... 3	0050	5408-060400100	BUTTON POWER	PC	1.000				
... 3	0060	5403-060400200	BUTTON STOP	PC	1.000				
... 3	0070	5402-060400100	BUTTON PLAY	PC	1.000				
... 3	0080	5406-060400100	BUTTON VOLUME	PC	1.000				
... 3	0090	5404-060400100	BUTTON FUNCTION	PC	1.000				
... 3	0100	5201-060400100	DOOR CD	PC	1.000				
... 3	0110	5501-070900100	LENS DISPLAY	PC	1.000				
... 3	0120	5509-060400100	LENS BUTTON POWER	PC	1.000				
... 3	0130	5503-060400100	LENS DOOR CD	PC	1.000				
... 3	0140	5703-030600200	DAMPER GEAR ASSEMBLY	SET	1.000				
.. 2	0020	8942-070900100	METAL PART OF MCD119/12	SET	1.000				
... 3	0010	6304-060400100	BRACKET MICRO DETECTOR SWITCH (SECC T=0.8MM)	PC	1.000				
... 3	0020	6405-070900100	CD DAMPER 1278 IIR BLACK 38DEGREE	PC	4.000				
... 3	0030	6105-060400100	SPRING DOOR CD (DIA. 1.2mm SUS 304)	PC	1.000				
... 3	0040	6404-060400100	RUBBER FOOT (DIA. 18.5X2MM)	PC	4.000				
... 3	0050	6829-060400300	DOOR LOCK	PC	1.000				
... 3	0060	6828-070900100	DUST COVER (SPITE T=0.3MM).	PC	1.000				
... 3	0070	6209-060400100	PLATE COPPER FOIL A 270x45x8	PC	1.000	FORTOP-CABINET			
... 3	0080	6209-060400200	PLATE COPPER FOIL B 60x8	PC	1.000	FORUSB-JACK			
.. 2	0030	8946-070900100	SCREW PART OF MCD119/12	SET	1.000				
... 3	0010	6013-230080100	SCREW, ST B B 3X8 B	PC	7.000	7-DISPLAYPCB+FRONTCABINET			
... 3	0020	6011-226080100	SCREW , ST 2.6X8 PB (BLACK)	PC	10.000	6-KEYBOARD+BUTTONFUNCTION+TOPCABINET, 4-DUSTCOVER+TOPCABINET			
... 3	0030	6012-226040400	SCREW,ST PW B2.6x4 Y WASHER P=DIA. 6.5MM	PC	2.000	2-FRONTCABINET+TOPCABINET			
... 3	0040	6021-214060100	SCREW M 3P 1.4X6(BLACK) (B951406002)	PC	1.000	1-MICRODETECTORSWITCH+BRACKETMICRODETECTORSWITCH			
... 3	0050	6012-230100120	SCREW,ST PW B3x10B WASHER P=DIA. 12.0MM	PC	5.000	1-DAMPERGEARASSEMBLY+TOPCABINET, 4-CDDECK,+TOPCABINET			
... 3	0060	6033-226080100	HARDNESS SCREW B B2.6X8 B (A022608002)	PC	2.000	2-TOPCABINET+15PJACK			
... 3	0070	6013-230100100	SCREW, PTTB BLACK M 3X10 A223010002	PC	7.000	4-TOP CABINET+JACK, 1-BRACKET MICRODETECTOR SWITCH+TOP CABINET, 2-MAINBOARD+TOP CABINET			
... 3	0080	6013-230120100	SCREW, ST B B 3X12B (TOYO:A223012002)	PC	6.000	6-BOTTOMCABINET+TOPCABINET			
... 3	0090	6023-230100100	SCREW, M B B3X10B (TOYO:A023010002)	PC	1.000	1-TOPCABINET+TUNINGMODULE			
.. 2	0040	8943-070900100	PACKING PART OF MCD119/12	SET	1.000				
... 3	0010	7603-070900100	DISPLAY BOX W=A	PC	1.000				
... 3	0020	7401-070900100	POLYFOAM TOP FOR UNIT	PC	1.000				
... 3	0030	7402-070900100	POLYFOAM BOTTOM FOR UNIT	PC	1.000				
... 3	0040	7502-060400400	POLYBAG FOR 350x350x0.02MM W/PE-HD02.	PC	1.000				
... 3	0050	7502-060400200	POLYBAG FOR 102x483x0.04MM W/PE-LD04.	PC	1.000				
... 3	0060	7502-050700100	POLYBAG FOR I/B 203x305x0.04MM W/PE-LD04.	PC	1.000	FORIB			
... 3	0070	7905-030600200	POLYBAG FOR AM RING 155X203MM	PC	1.000	FORAMANTENNA			
... 3	0080	7501-070100100	E.P. E SHEET L180xW200 W/RED MARK PE-LD04	PC	1.000	FORDVDDOOR			
... 3	0090	7201-041900200	GUARANTEE LEAFLET 10/07/2006 (9965 000 38986)	PC	1.000				
... 3	0100	7202-070900100	INSTRUCTION BOOK-11 LANGUAGE (MCD119/12)	PC	1.000				
... 3	0110	7202-070900200	INSTRUCTION BOOK-5 LANGUAGE (MCD119/12)	PC	1.000				
... 3	0120	7203-070900100	QUICK START GUIDE SHEET 1 ENG+FRE (MCD119/12)	PC	1.000				
... 3	0130	7203-070900200	QUICK START GUIDE SHEET 2 SPA+GRE (MCD119/12)	PC	1.000				
... 3	0140	7203-070900300	QUICK START GUIDE SHEET 3 DUT +ITA (MCD119/12)	PC	1.000				
... 3	0150	7121-041100300	LABEL "RISK OF ELEC. SHOCK" (HUNGARY, CZECH)	PC	1.000				
... 3	0160	7121-041100200	LABEL "RISK OF ELEC. SHOCK" (SLOVAKIAN, POLAND)	PC	1.000				
... 3	0170	7112-041100200	LABEL WARNING TEXT ON THE BOTTOM CABINT	PC	1.000				

FACTORY BOM

Level	Item	Component	Desc	Unit	Qty	Location			
... 3	0180	7124-041200101	LABEL "DOLBY" 39x21MM	PC	1.000				
... 3	0190	7111-070900100	LABEL TYPE PLATE (MCD119/12) 52X37MM.	PC	1.000				
... 3	0200	7101-070900100	LABEL CARTON BOX (MCD119/12) 83x103MM.	PC	1.000				
... 3	0210	7103-030300100	LABEL DON' T TOUCH THE LENS	PC	1.000				
... 3	0220	7110-030700100	LABEL "DESIGNED BY PHILIPS"	PC	1.000				
... 3	0230	7107-042500100	LABEL QC (TAI CHUNG LAM)	PC	1.000				
... 3	0240	7111-060400300	LABEL TYPE PLATE FOR SPEAKER (MCM119/12) 42x30MM	PC	1.000	ONLEFTSPEAKERBOX			
... 3	0250	7102-030600100	BLANK LABEL WHITE 101x101MM FOR PALLET	PC	0.070				
... 3	0260	7206-030800100	SLIP SHEET 1400X1250MM	PC	0.030				
... 3	0270	7206-030500200	WRAP FILM	M	0.600				
... 3	0280	7206-042500100	FITTING PALLET 46.125"X38.75" (3140 10638732)	PC	0.030				
. 2	0050	8945-070900100	MINISTRANT PART OF MCD119/12	SET	1.000				
... 3	0010	7902-060400200	DOUBLE SIDE TAPE 127.8x57.2	PC	1.000	FORLENSDISPLAY			
... 3	0020	7902-042000100	NITTO 500 DOUBLE SIDE TAPE 12x120MM	PC	1.000	FORLENSDOORCD			
... 3	0030	7902-042500100	DOUBLE SIDE TAPE 20X12MM	PC	2.000	FORLENSDOORCD			
... 3	0040	7908-060400100	UL ADHESIVE PLASTER 17X30MM (BLACK)	PC	1.000				
. 1	0040	8944-070900100	ACCESSORIES OF MCD119/12	SET	1.000				
. 2	0010	1901-000004600	REMOTE CONTROL "PHILIPS" (MCD119) (12NC:3139 XXXXXXXX)	PC	1.000				
. 2	0020	3001-001000100	FM ANT WIRE 750HM 1.0M	PC	1.000				
. 2	0030	3007-001500500	RCA CABLE FOR COMPOSITE VIDEO (YELLOW) 1C L=1500MM	PC	1.000				
. 2	0040	3007-021500000	RCA CABLE FOR AUDIO (RED/WHITE) 2C L=1500MM	PC	1.000				
. 2	0050	3007-031500000	RCA CABLE FOR COMPONENT VIDEO (RED/BLUE/GREEN) 3C L=1500MM	PC	1.000				
. 2	0060	8919-070900100	SPEAKER BOX 40HM 20W FOR MCD119/12 W/POS.	PAA	1.000				
. 2	0070	4011-050800000	AC/DC ADAPTOR 18V 3.2A 50/60Hz (I/P 230V).	PC	1.000				