

Service
Service
Service



Service Manual

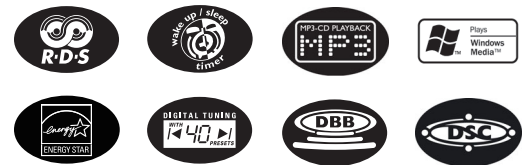


TABLE OF CONTENTS

	Page
Service AIDS & CD playability	1-1...1-4
Specifications	2
Connection & Controls	3
Disassembly Instructions	4
Block & Wiring diagrams	5
MAIN BOARD	6
KEY & USB JACK BOARD	7
POWER & AMP BOARD	8
EXPLODE DIAGRAM	9
SERVICE PARTLIST	10
FACTORY PARTLIST	11

© Copyright 2007 Philips Consumer Electronics B.V. Eindhoven, The Netherlands
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without the prior permission of Philips.

Published by DB Service Audio Printed in The Netherlands Subject to modification

3141 785 32152

Version 1.2



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

GB 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



GB

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 .

**CLASS 1
LASER PRODUCT**

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".

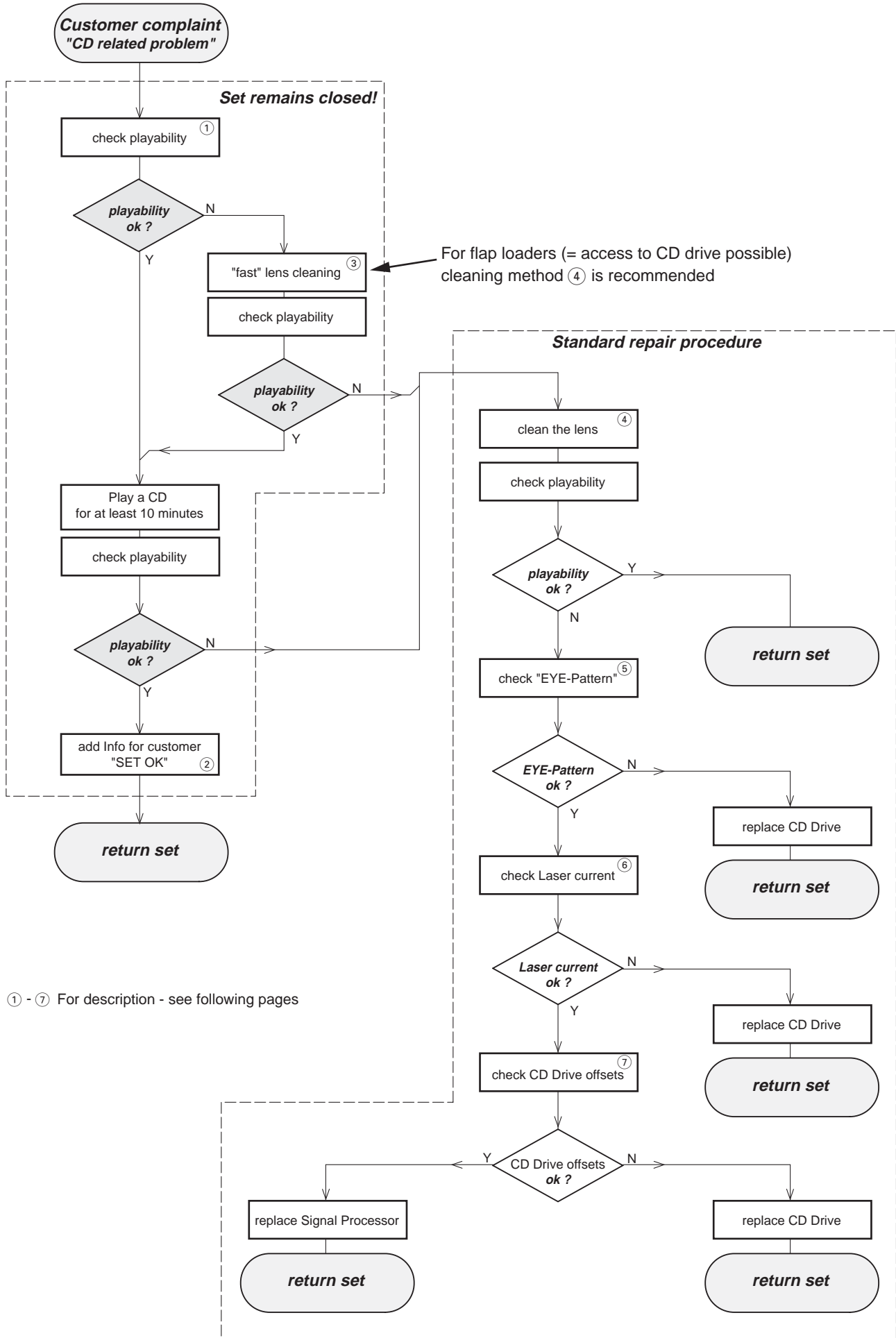
For additional questions please contact your local repair-helpdesk.

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



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 (600µ Black dot) **maximum at 01:00**

- playback of these two tracks without audible disturbance
 playing time for: Fingerprint ≥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 (600µ Black dot) **maximum at 01:15**
 TR 19 (Fingerprint)
 TR 10 (1000µ wedge)

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

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.

④

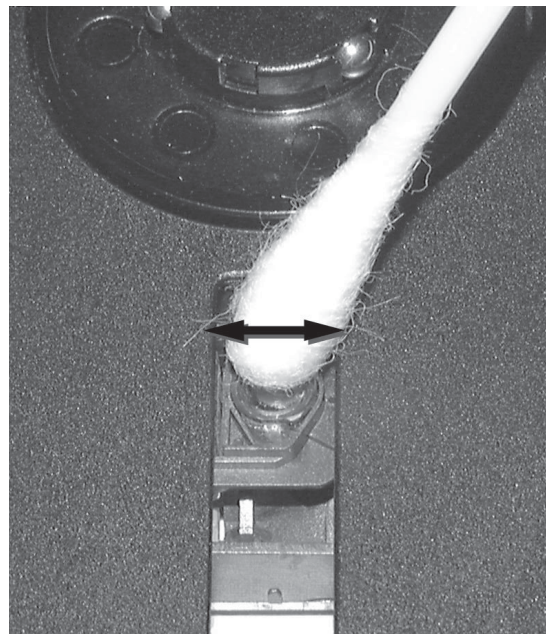
LIQUID LENS CLEANING

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.

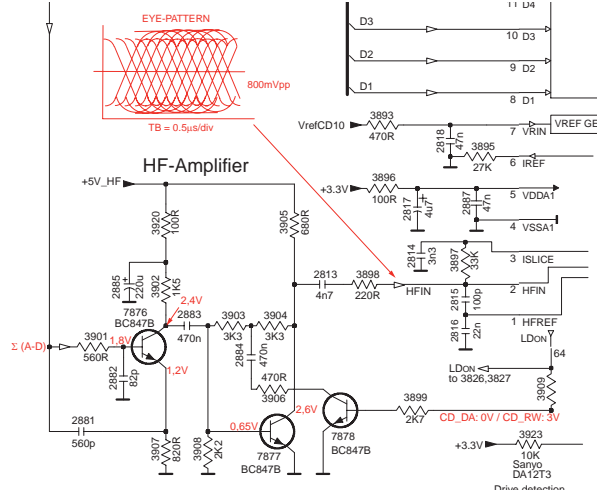


CD PLAYABILITY CHECK

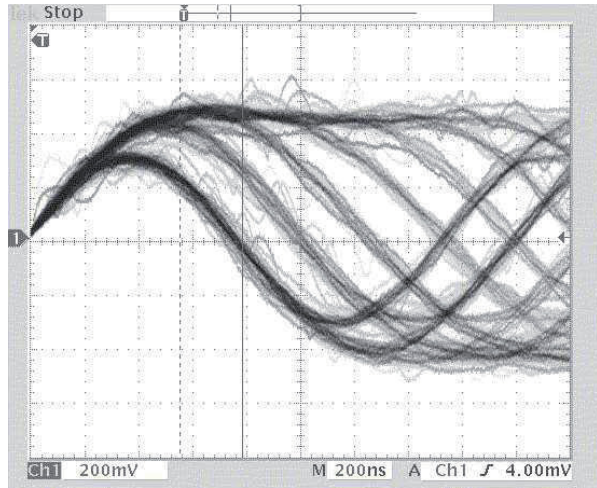
5

EYE-PATTERN SIGNAL – JITTER MEASUREMENT

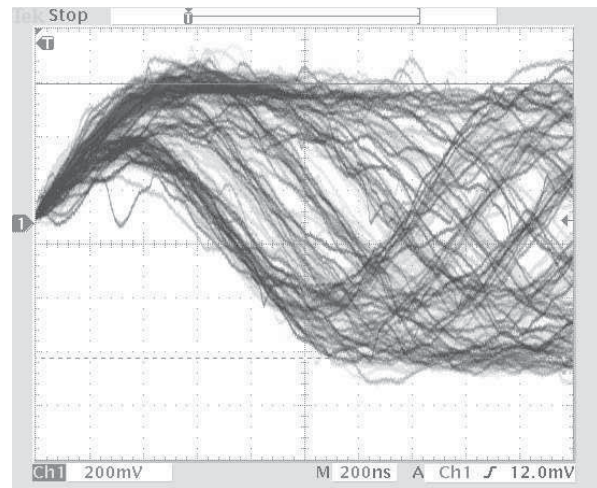
Measure the signal on the input of the Signal processor using an **analog** oscilloscope. Please find the exact measuring point in your Service Manual.



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



good



bad

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

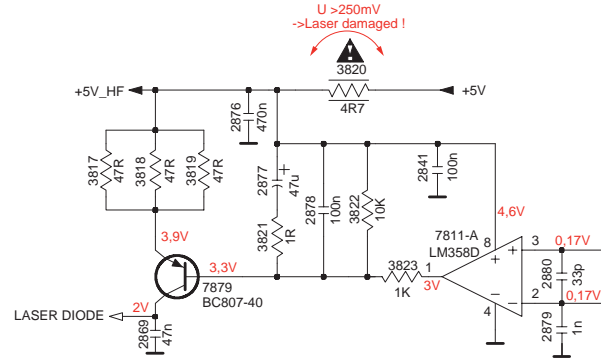
CD DRIVE – LASER CURRENT MEASUREMENT

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 probably defect
VAMxxxx	: 150-230mV	≥350mV
MCDxx	: 170-230mV	≥300mV
DA1x	: 210-250mV	≥350mV
DA2x	: 175-200mV	≥250mV

Use SBC444A (CD-DA) for measurement.

Laser power control



7

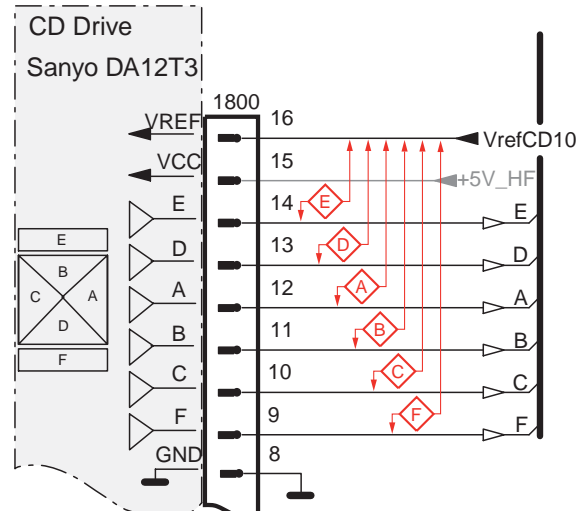
CD DRIVE – OFFSET MEASUREMENT

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 $0 \pm 10mV$. Diodes E and F are less critical.



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

TECHNICAL SPECIFICATIONS

AMPLIFIER

Output power 30 W RMS
 Signal-to-noise ratio ≥ 65 dBA
 Frequency response 100 – 18kHz, ± 3 dB
 Input sensitivity AUX 0.5 V (max. 1 V)
 Impedance loudspeakers $\geq 6 \Omega$
 Impedance headphones 32Ω -1000 Ω
 <15mW

CD PLAYER

Frequency range 100 – 18kHz
 Signal-to-noise ratio 65 dBA

TUNER

FM wave range 87.5 – 108 MHz
 MW wave range 531 – 1602 kHz
 Number of presets 40
 Antenna
 FM 75Ω wire
 MW Loop antenna

USB PLAYER

USB V2.0/V1.1
 support MP3 and WMA files
 Number of albums/ folders maximum 99
 Number of tracks/titles maximum 999

SPEAKERS

Bass reflex system
 Dimensions (w x h x d) .. 158 x 250x 185 (mm)

GENERAL INFORMATION

AC Power 110 – 240V, 50 Hz/60Hz
 Dimensions (w x h x d, with/without the stand)
 211 x 250 x 160/211 x 250 x 126 (mm)
 Weight(with/without speakers) 3.7 / 1.33 kg
 Standby power consumption <2 W
 Eco power standby <1 W

Specifications and external appearance are subject to change without notice.

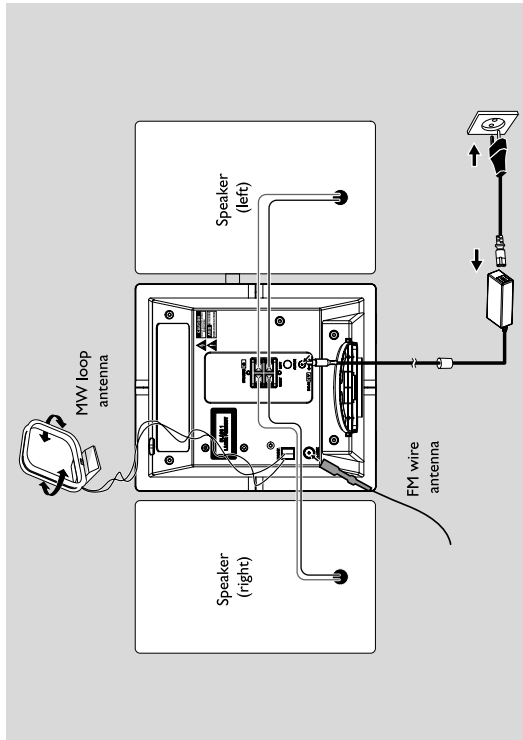
SERVICE TOOLS

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, 1M Ω)	4822 320 11307
extendible cable (2m, 2M Ω , to connect wristband to connection box)	4822 320 11305
connecting cable (3m, 2M Ω , to connect table mat to connection box)	4822 320 11306
earth cable (1M Ω , 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

Connection



Rear connections

- Warning:**
- Never make or change connections with the mains supply switched on.
 - Install your set near the AC outlet and where the AC power plug can be reached easily.

(A) Speaker connections

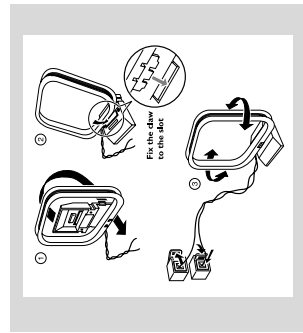
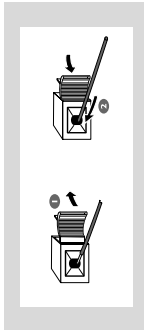
Use the supplied speakers only. Using other speakers can damage the set or the sound quality will be negatively affected.

- Connect the cable of the left speaker to LEFT (red and black) and the cable of the right speaker to RIGHT (red and black) as follows:
 - Press the clip of the red terminal and fully insert the stripped portion of the colored (or marked) speaker cable into the socket, then release the clip
 - Press the clip of the black terminal and fully insert the stripped portion of the black (or unmarked) speaker cable into the socket, then release the clip

(B) Antenna connections

MW antenna

Connect the supplied MW loop antenna to the "AM aerial" terminal. Adjust the position of the antenna for optimal reception.



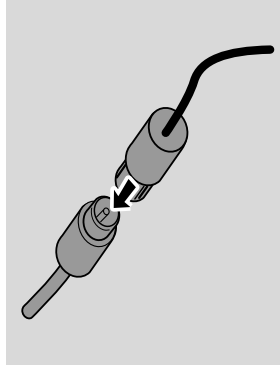
Connection

- Position the antenna as far as possible from a TV, VCR or other radiation source.

FM antenna

The wire antenna supplied can only be used to receive nearby stations. For better reception we recommend using a cable antenna system or an outdoor antenna.

- Extend the wire antenna and fit it to FM ANTENNA as shown below



Note: If you are using a cable antenna system or an outdoor antenna, fit the antenna plug instead of the wire antenna, to FM ANTENNA.

- Move the antenna in different positions for optimal reception (as far away as possible from the TV, VCR, or other radiation sources)
- Fix the antenna's end to the wall.

Helpful hints:

- To receive optimal radio reception, put the main unit and the antennas as far away as possible from the power adaptor.

Connecting an additional appliance

By connecting a USB mass storage device (including USB flash memory, USB flash players or memory cards) to the Hi-Fi system, you can enjoy the music stored on the external device through the powerful speakers of Hi-Fi system.

- Insert the USB device's USB plug into the socket on the front panel of the main set.

Or,

for the devices with USB cable:

- Insert one plug of the USB cable (not supplied) to the socket on the front panel of the main set
- Insert the other plug of the USB cable to the USB output terminal of the USB device.

Or,

for the memory card:

- Insert the memory card into a card reader (not supplied).
- Use a USB cable (not supplied) to connect the card reader to the socket on the front panel of the main set.

Connecting a non-USB device

It is possible to use an additional appliance, e.g. TV/VCR or CD recorder with the set. On MCM279, you can playback music from an external source.

- Insert one plug of the audio cable (not supplied) to the socket **AUX IN** at the rear panel of the main set.
- Connect the other end of the audio cable to the **AUDIO OUT** terminal of the additional appliance.
- Select **AUX** mode on the set.

Helpful hints:

- Always refer to the owner's manual of other equipment for complete connection.

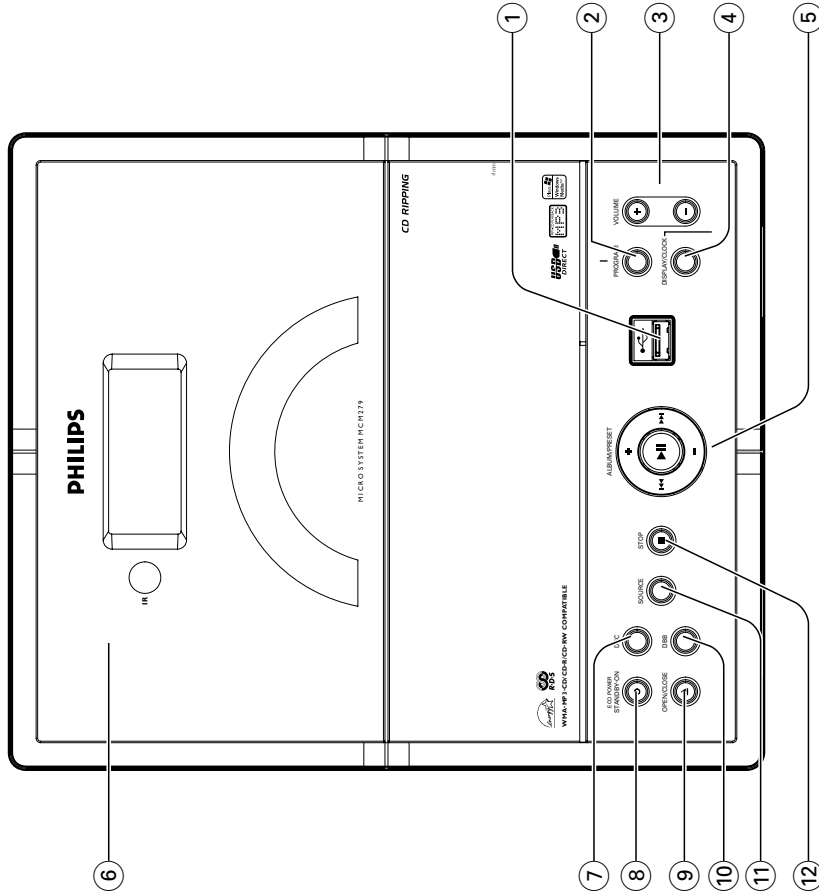
CONNECTION AND CONTROLS

Controls

Controls on the set (illustrations on page 3)

- ① - jack for the external USB mass storage device
- ② **PROGRAM**
- **CD/USB:** programs tracks
- **Tuner:** programs preset radio stations
- ③ **VOLUME**
- adjusts the volume level
- **Clock/Timer:** adjusts the hours and minutes
- ④ **DISPLAY/CLOCK**
- **Clock:**
- displays the set time
- **In standby mode:** enters the clock setting mode (press and hold for more than 2 seconds)
- **TUNER/Audio CD/AUX:** switches between clock display and playback display
- **MP3/WMA files:** displays disc information during playback
- ⑤ **ALBUM/ PRESET +/-**
- **CD/USB:** selects albums (for MP3/WMA only)
- **TUNER:** selects a preset radio station
- /
- **CD/USB:** skips or searches CD tracks/titles backwards/forwards
- **Tuner:** tunes to radio stations
-
- ⑥ **IR**
- sensor for the infrared remote control
Helpful hints: Always point the remote control towards this sensor.
- ⑦ **DSC (Digital Sound Control)**
- selects predefined sound settings: **ROCK, JAZZ, POP, CLASSIC, OFF**
- ⑧ **STANDBY-ON/ ECO POWER**
- press briefly to switch the set on or off (standby/ECO POWER);
- **In standby or Eco Power mode:** press and hold to toggle between Standby and ECO POWER mode (power-saving mode)
- **Red indicator:** lights up red when the set is switched to ECO POWER mode
- ⑨ **OPEN/CLOSE**
- opens/closes the CD door.
- ⑩ **DBB (Dynamic Bass Boost)**
- turns the bass enhancement on/off
- ⑪ **SOURCE**
- selects sound source **CD, USB, TUNER, or AUX**
- **In standby or Eco Power mode:** switches the set on and selects sound source **CD, USB, TUNER or AUX**
- ⑫ **STOP**
- **CD/USB:** stops playback; erase a program

Controls



CONNECTION AND CONTROLS

Controls

14 DISPLAY

- **MP3/WMA files:** displays disc information during playback

15 TIMER ON/OFF

- switches the timer on/off

16 USB REC

- **USB:** copies one file or all files of a disc to an external portable USB storage device/MP3 player.

17 ▲

- opens/closes the CD door.

18 ◀ / ▶

- **CD/USB:** selects previous/next track

19 ■

- **CD/USB:** stops playback; erase a program

20 Numeric keypad (0-9)

- selects track or station number

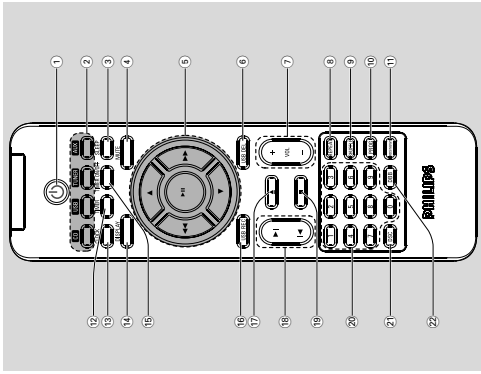
21 DSC (Digital Sound Control)

- selects predefined sound settings: **ROCK, JAZZ, POP, CLASSIC, OFF**

22 DBB (Dynamic Bass Boost)

- turns the bass enhancement on/off

Remote control



Notes for remote control:

- **First select the source you wish to control by pressing one of the source select keys on the remote control (for example CD, TUNER).**
- **Then select the desired function (for example ▶ II, ◀ ▶).**

- ⓪ press briefly to switch the set on or off (standby/ECO POWER);
- In standby or Eco Power mode:** press and hold to toggle between Standby and ECO POWER mode (power-saving mode)

- Source buttons**
- USB** selects **USB** source
- In standby/Eco-power mode:** switches the set on and selects **USB** source.

- CD** selects **CD** source
- In standby/Eco-power mode:** switches the set on and selects **CD** source.

- TUNER** selects **TUNER** source and toggles between the wavebands: FM and MW
- In standby/Eco-power mode:** switches the set on and selects **TUNER** source

Controls

AUX

- selects the audio input from an additional connected appliance

- **In standby/Eco-power mode:** switches the set on and selects the audio input from an additional connected appliance

3 SLEEP

- set the sleep timer

4 MUTE

- switches the sound off temporarily

5 ◀ / ▶

- **CD/USB:** skips or searches CD tracks backwards/forwards

- **Tuner:** tunes to radio stations

▲ / ▼

- **CD/USB:** selects the next/previous album (for MP3/WMA only)

- **Tuner:** selects a preset station

▶ II

- **CD/USB:** starts or pauses playback

6 USB DEL

- deletes one file or all files stored on the external USB device.

7 VOL +/-

- adjusts the volume level

- **Clock/Timer:** adjusts the hours and minutes

8 REPEAT

- selects continuous playback

9 SHUFFLE

- selects random playback

10 PROG

- **CD/USB:** programs tracks

- **Tuner:** programs preset radio stations

11 RDS/NEWS

- **Tuner:** selects RDS (**Radio Data System**) information

- **CD/USB/AUX:** activates/deactivates news

12 TIMER

- enters the timer setting mode (press and hold for more than 2 seconds)

13 CLOCK

- **Clock:** - displays the set time

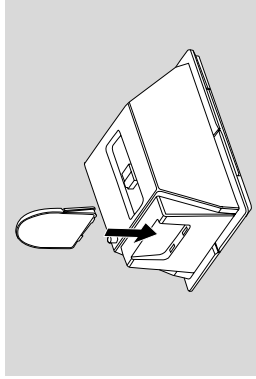
- **In standby mode:** enters the clock setting mode (press and hold for more than 2 seconds)

- **TUNER/Audio CD/AUX:** switches between clock display and playback display

Placing MCM279

- MCM279 is supplied with a stand, you may attach or detach the stand to/from the main set.

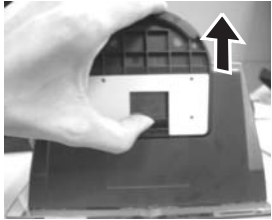
- 1 Locate the bottom of the main unit and find the slot, then slide the stand in the slot until it stops, as indicated in the figure below.



DISASSEMBLY DIADRAMS

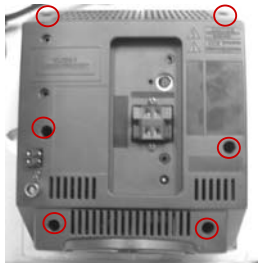
A. Remove stand

Release click and pull it out.



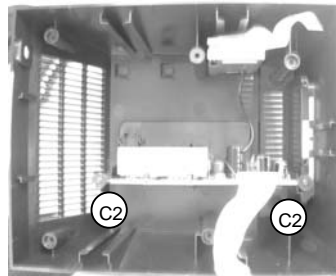
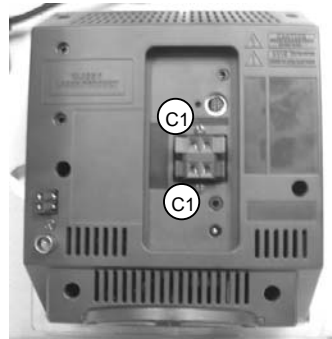
B. Remove Top Cabinet

Remove screws MP 3x10 - 6 pcs.



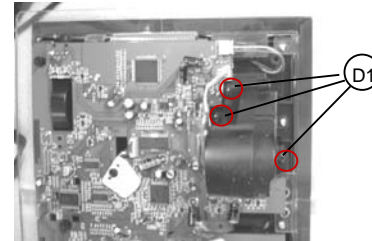
C. Remove Amplifier board

C1: Remove screws 2 pcs.
C2: Remove screws 2 pcs.



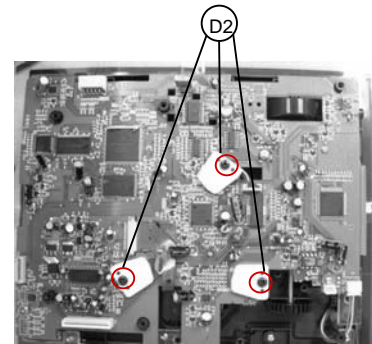
D. Remove Main board

D1: Remove screws MP 3x10 - 3 pcs.



D2: Remove screws MP 3x10 - 3 pcs.

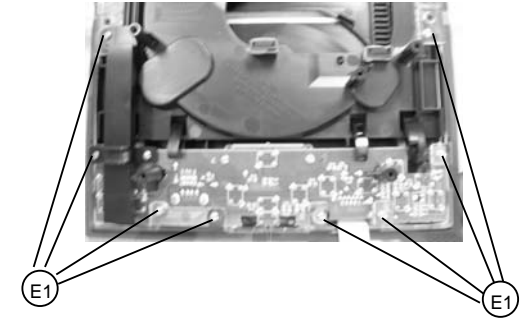
Then remove lens frame cosmetic top_right&left



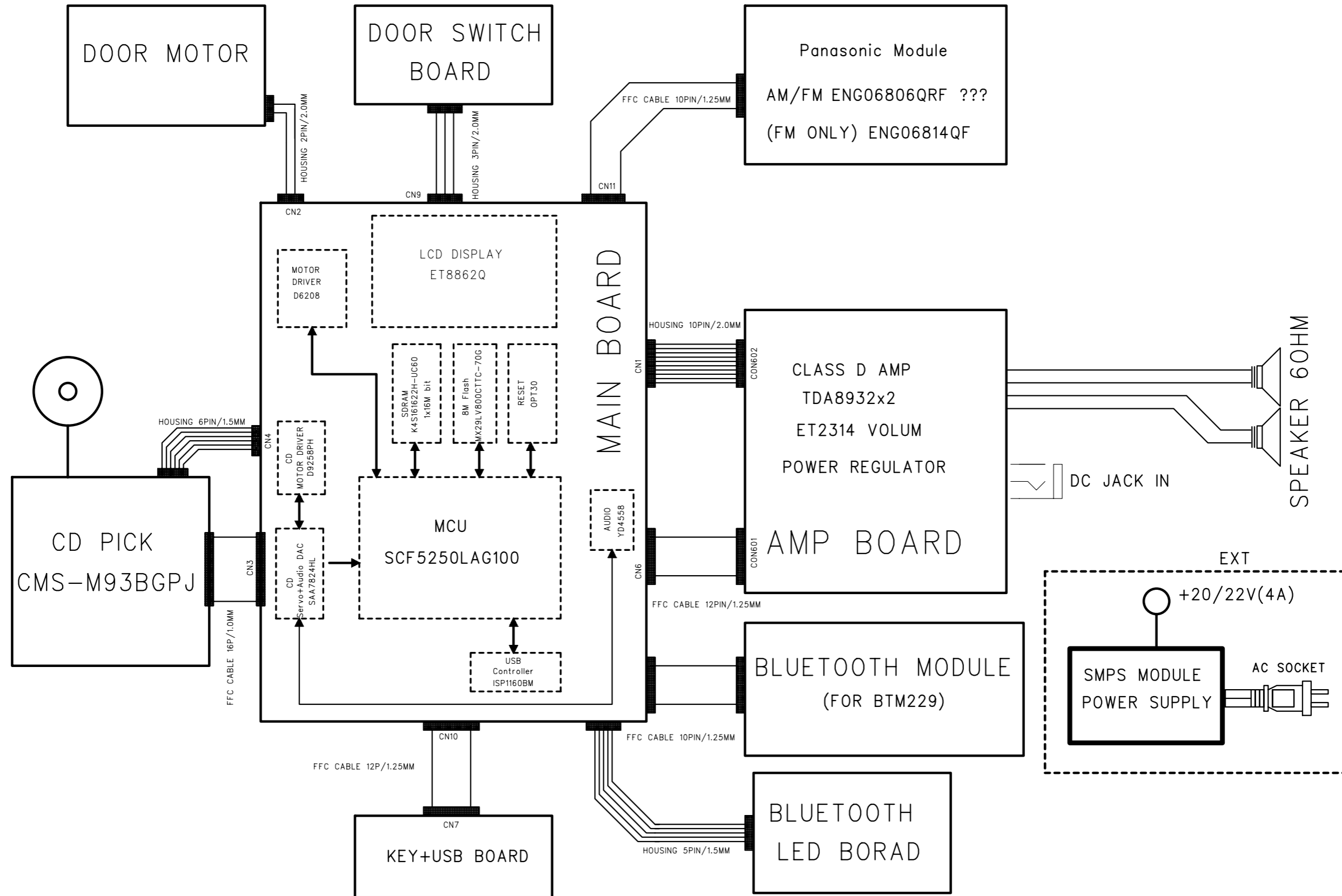
E. Remove Key board

E1: Remove screws MP 2x8 - 8 pcs.

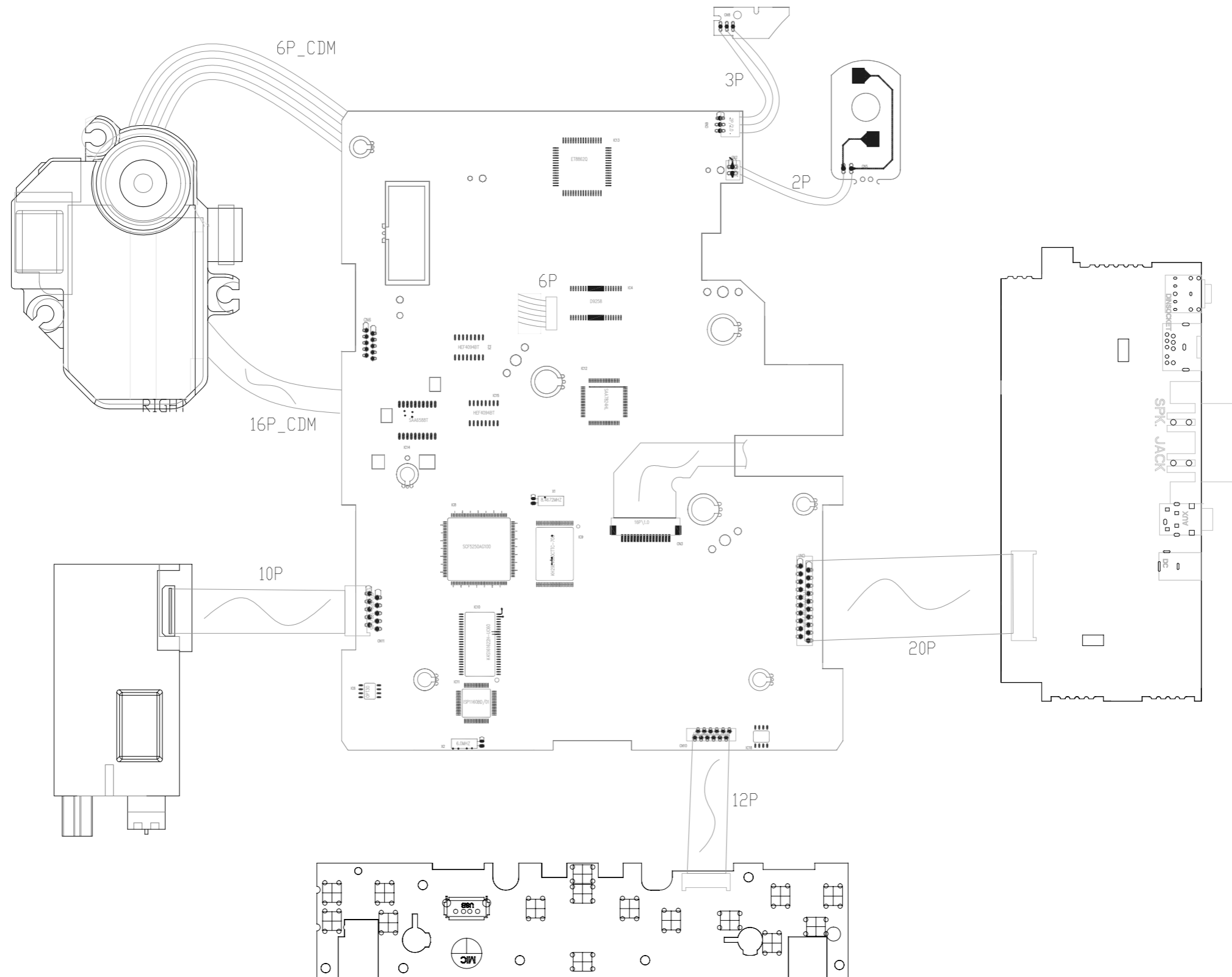
Then remove lens frame cosmetic botom_right&left

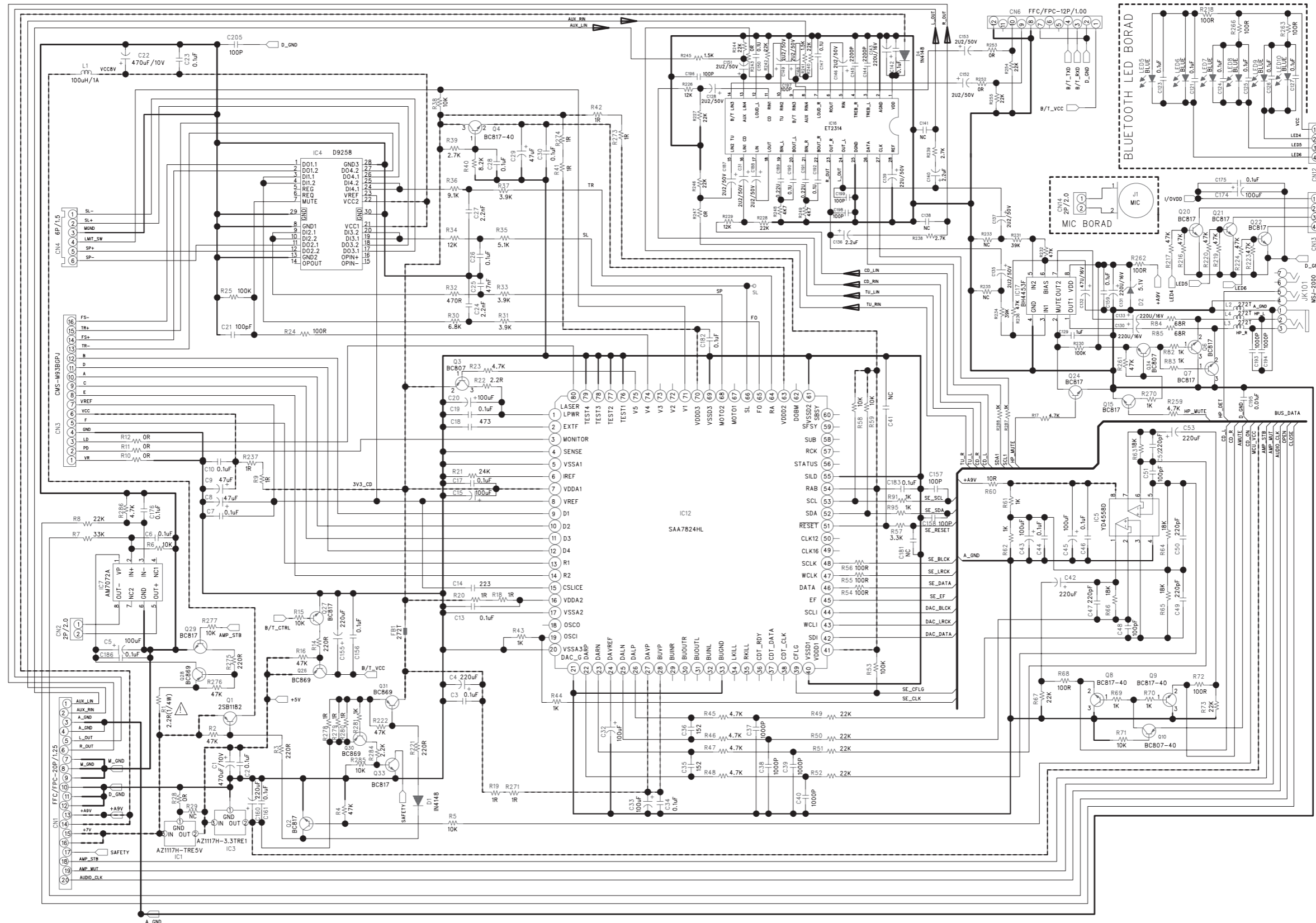


SET BLOCK DIAGRAM

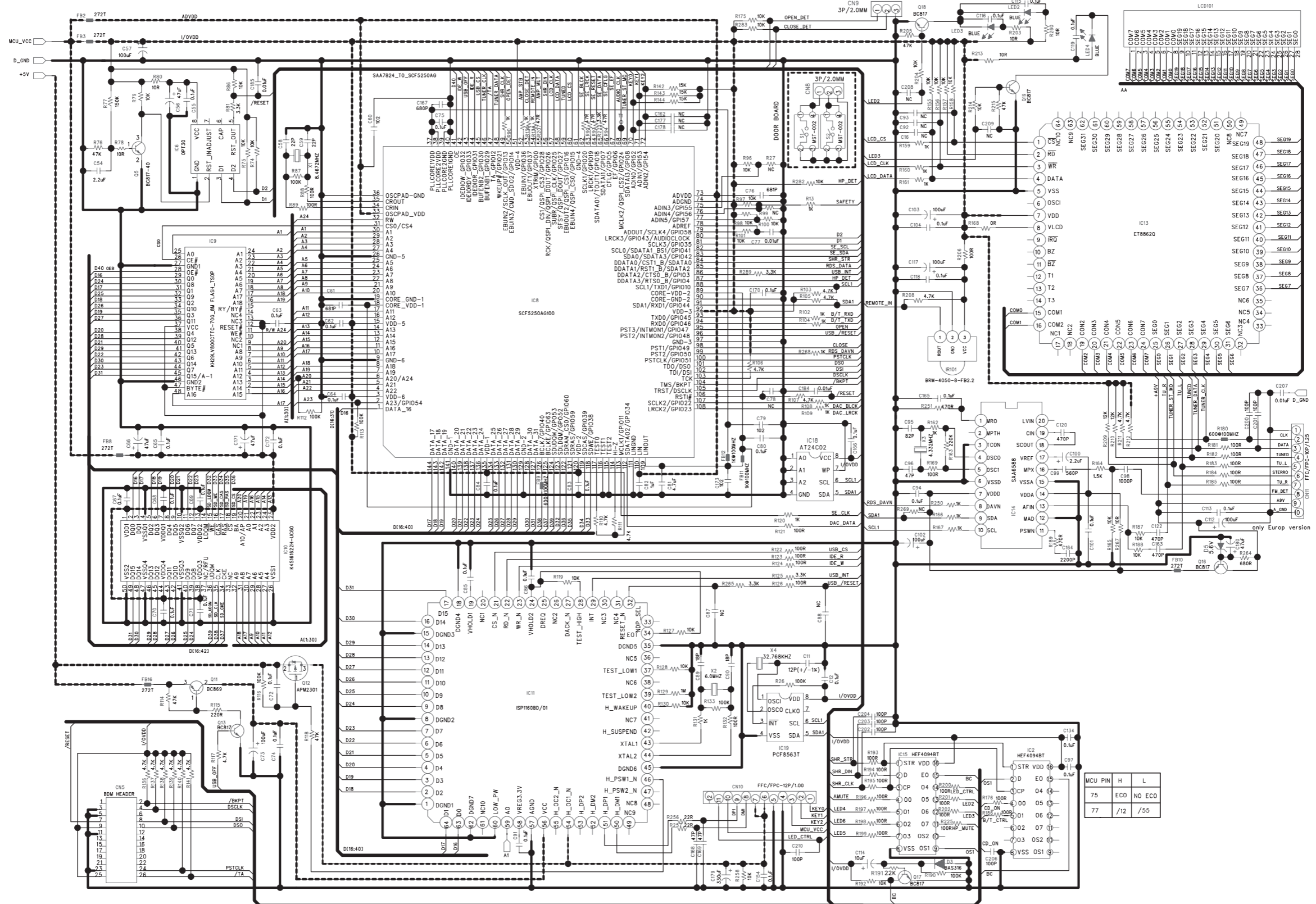


SET WRING DIAGRAM

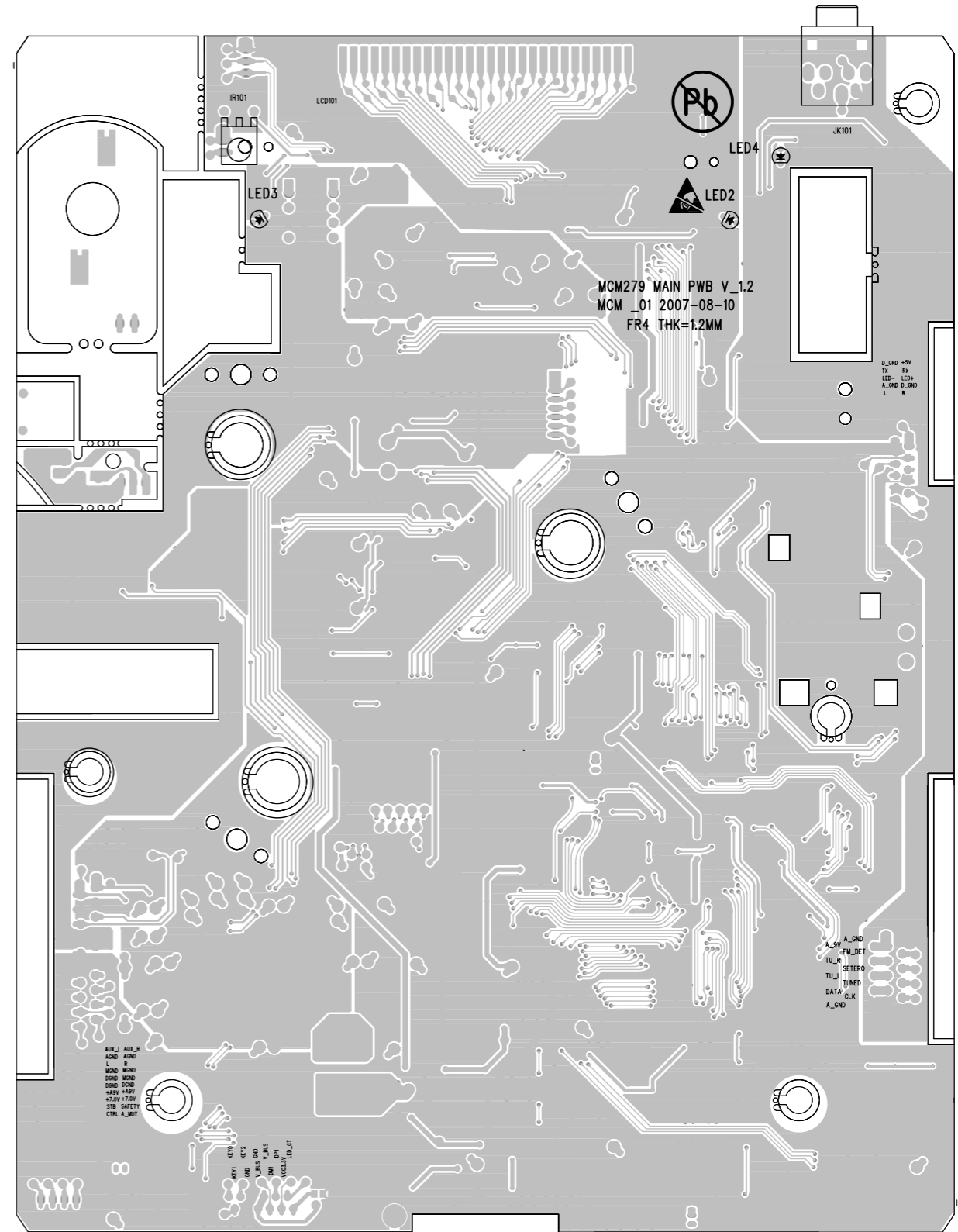
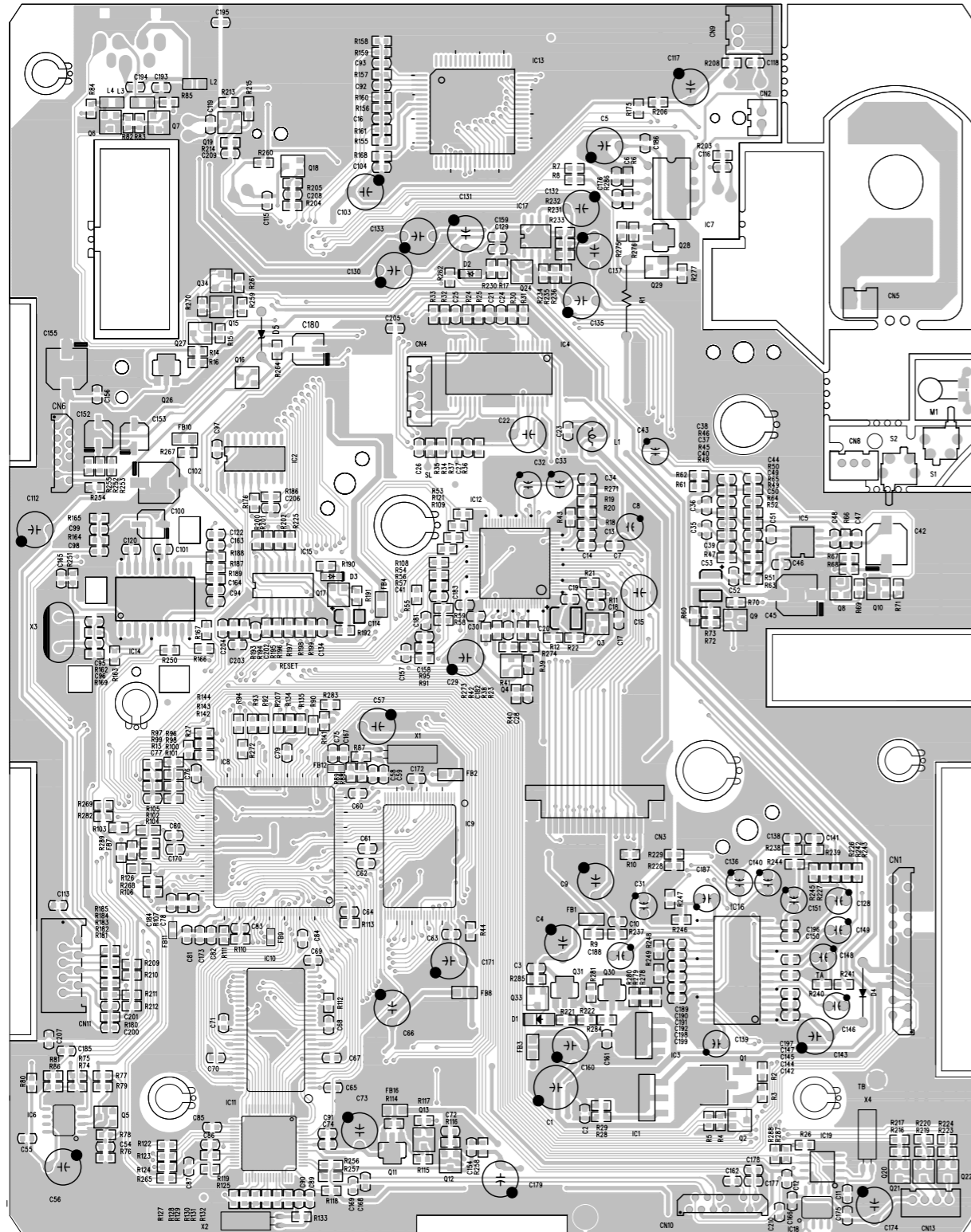




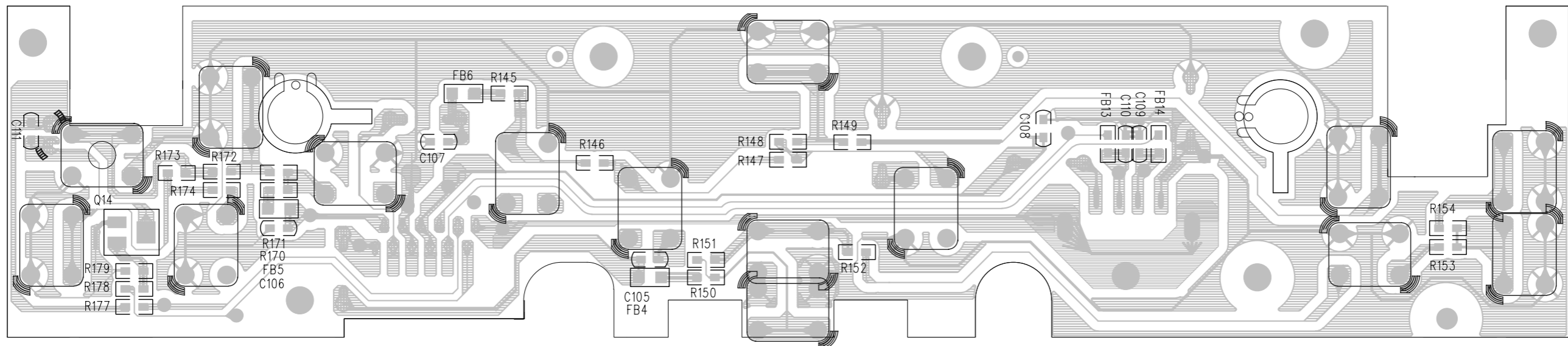
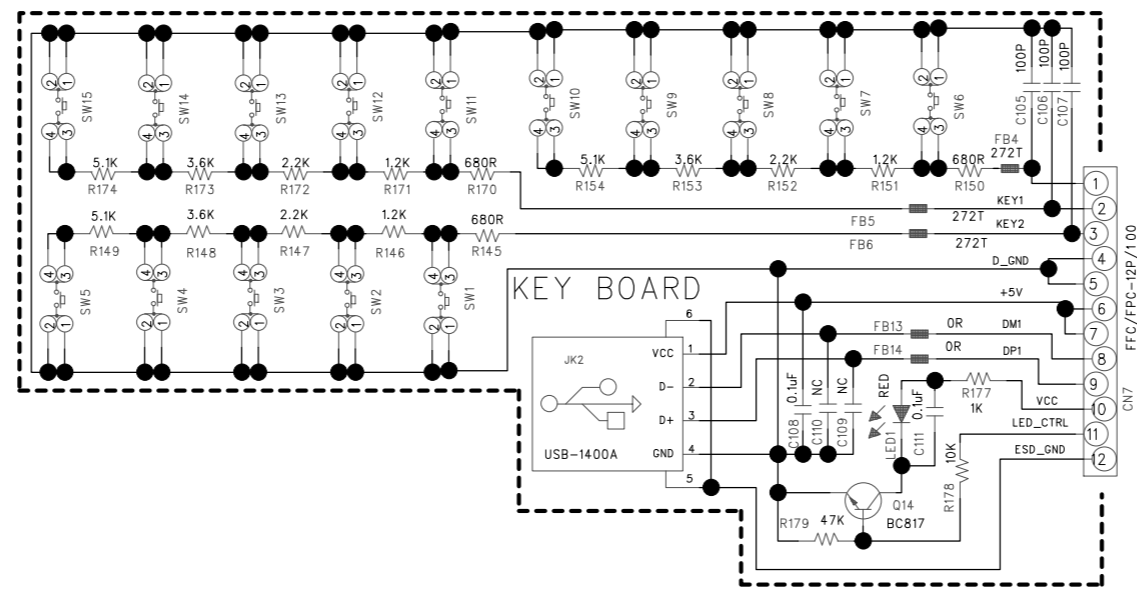
CIRCUIT DIAGRAM - MAIN BOARD - PART 2



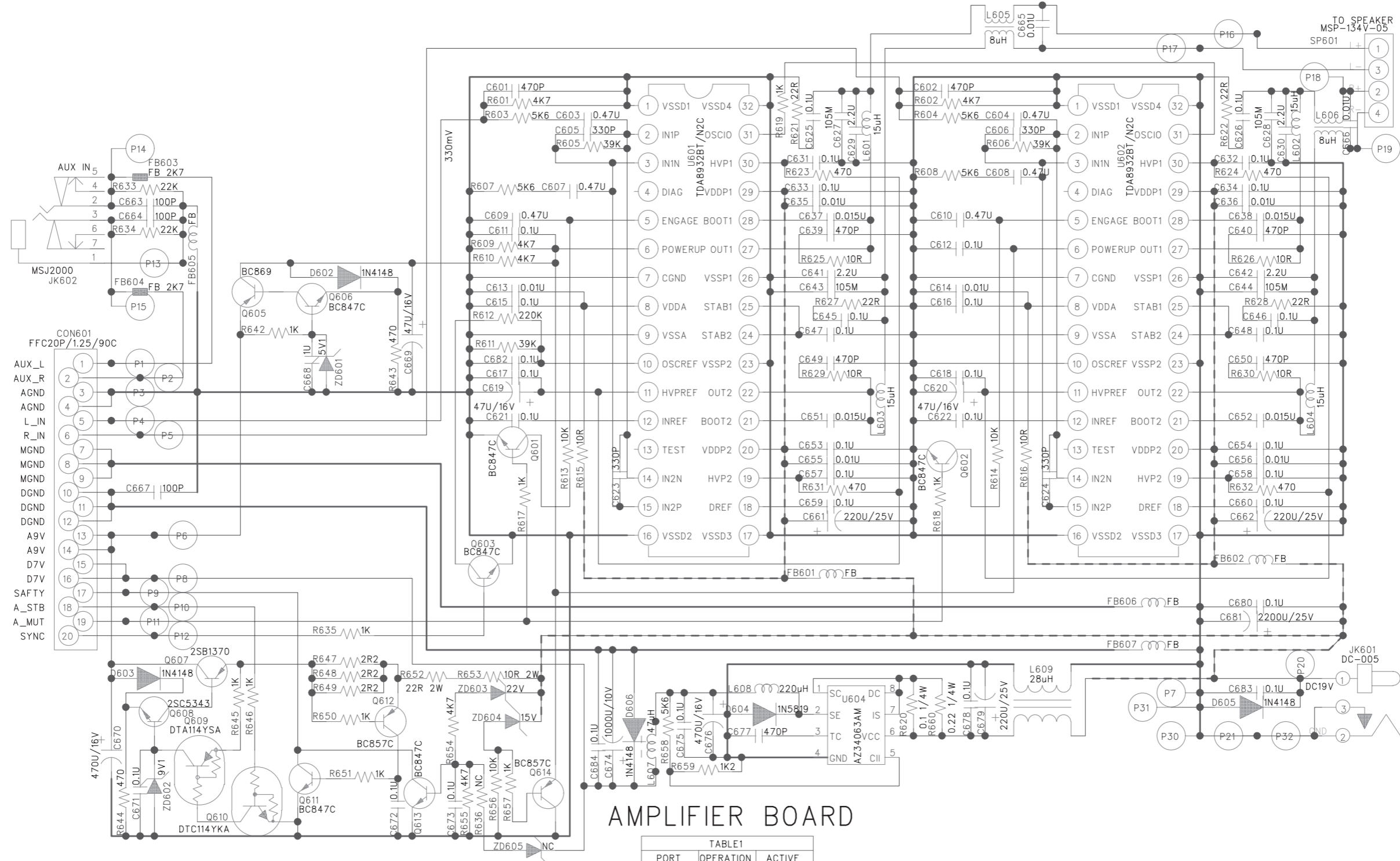
LAYOUT DIAGRAM - MAIN BOARD



KEY & USB JACK BOARD



CIRCUIT DIAGRAM - POWER & AMP BOARD

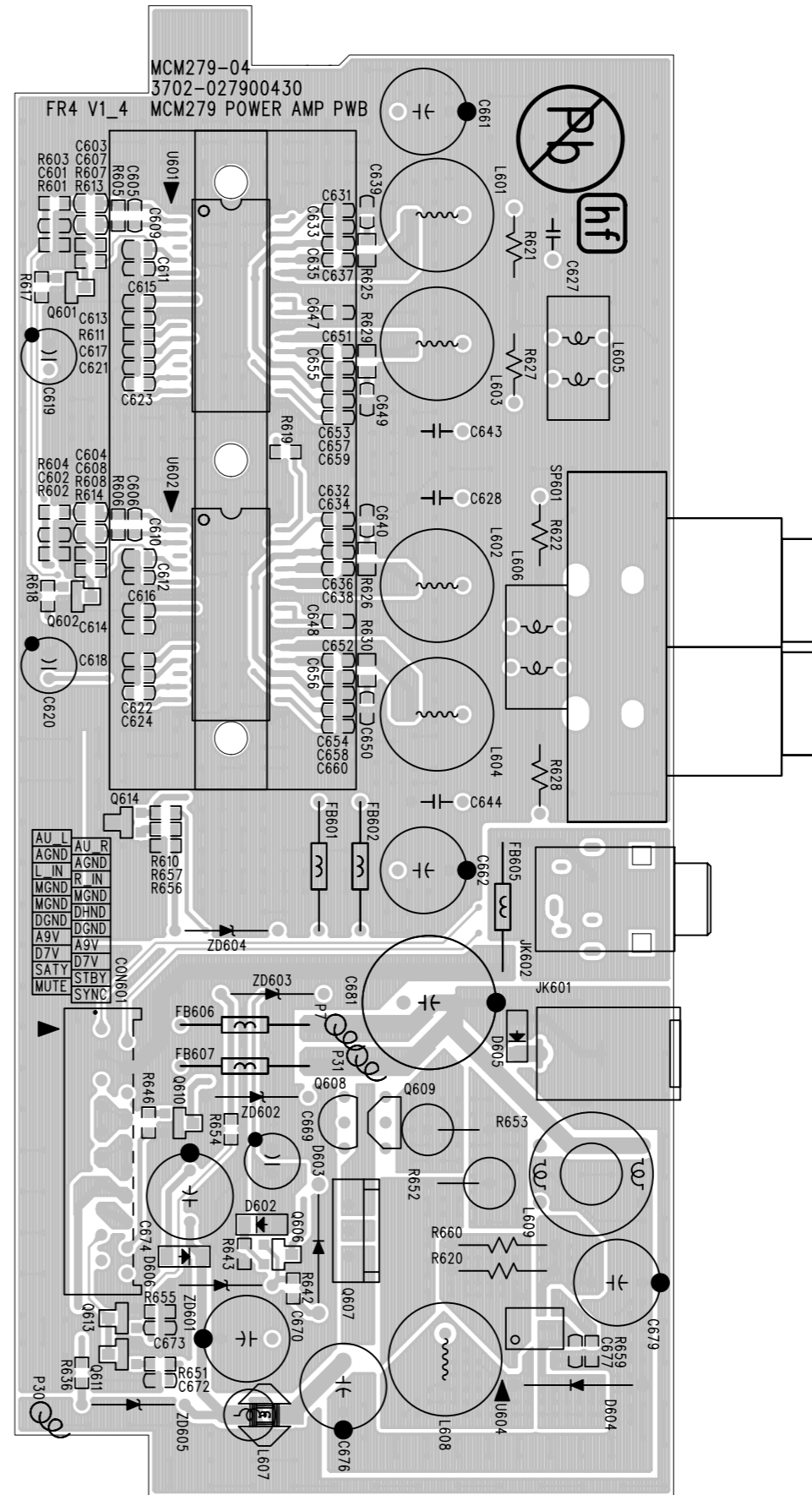
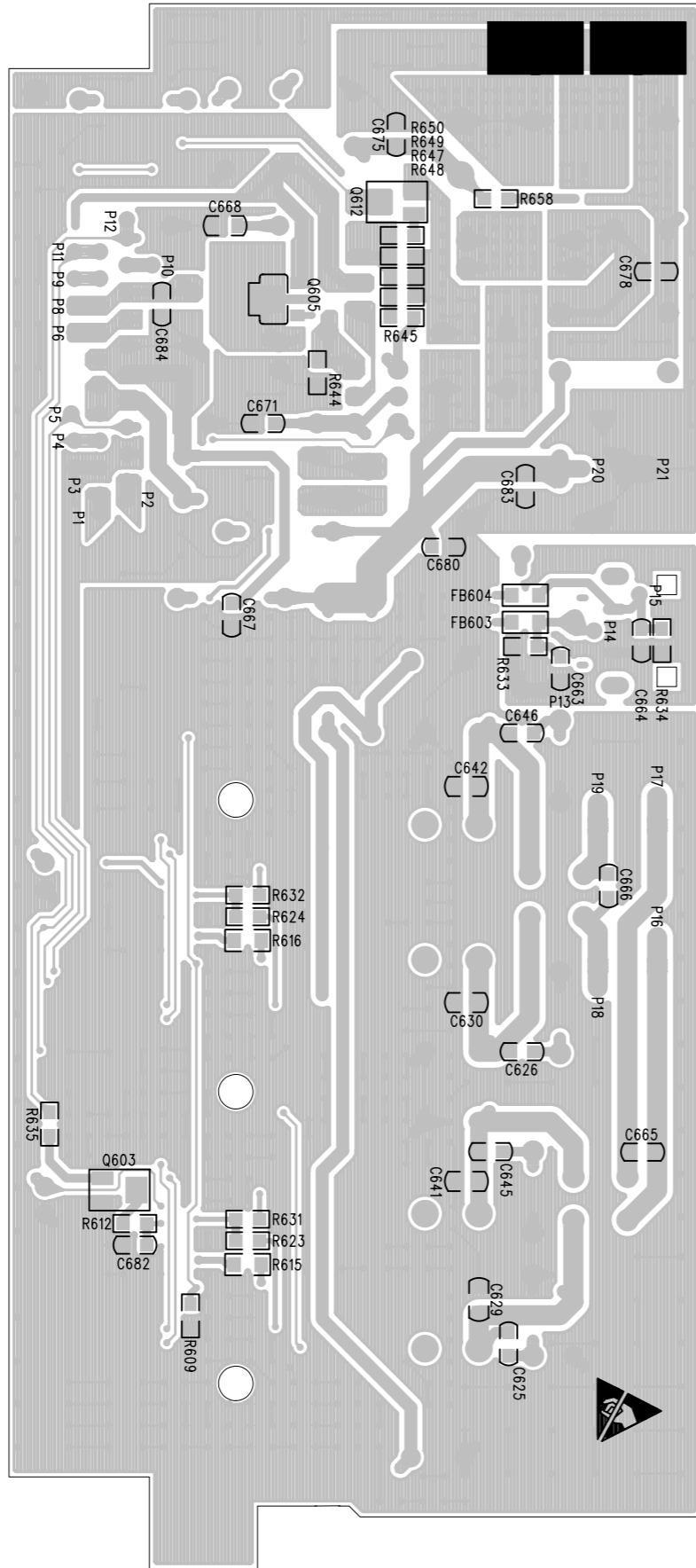


AMPLIFIER BOARD

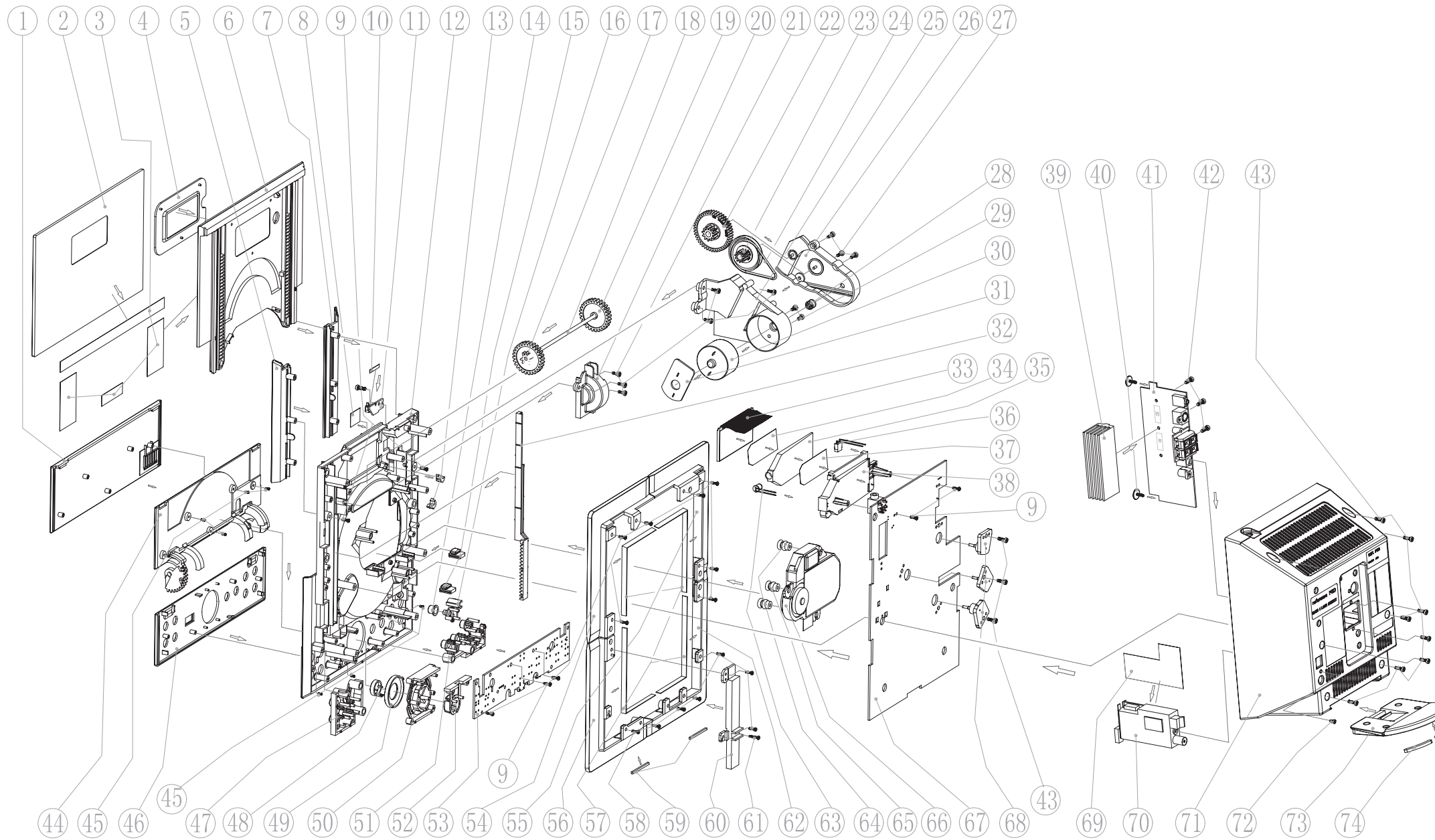
TABLE1

PORT	OPERATION	ACTIVE
SYNC	---	---
AMP_MUT	L	H/ACTIVE
AMP_STB	H	L/ACTIVE
SAFTY	H	L/ACTIVE

LAYOUT DIAGRAM - POWER & AMP BOARD



EXPLODE DIAGRAM



70	FM TUNER MODULE		35		LENS DISPLAY LIGHT GUIDE	1
69	SHIELDING FOIL	1	34		LCD DIFFUSION SHEET	1
68	BRACKET CDM	3	33		LCD DISPLAY	1
67	MAIN PWB ASSEMBLY	1	32		RACK BAR	1
66	CDM	1	31		MAIN PCB SHIELDING	1
65	CD DAMPER (BLUE)	1	30		MOTOR	1
64	CD DAMPER (BLACK)	2	29		SCREW, M 2.6x6 PB	2
63	LED	1	28		PULLEY SERVO MOTOR	1
62	Lens frame cosmetic bottom_l	1	27		SCREW,ST 2.6x6 PB(Black)	3
61	SCREW,ST PB2.0x12 N	1	26		BRACKET-GEAR-HOLDER-B	1
60	BRACKET-RACK HOLDER B	1	25		BRACKET-GEAR-HOLDER-A	1
59	RUBBER-FOOTframe-cosmetic	2	24		BELT MOTOR	1
58	SCREW,ST PB2x10 S	7	23		GEAR WHEEL A	1
57	FELT SHEET 188x9.0x0.3	4	22		GEAR WHEEL B	1
56	Lens frame cosmetic lotom_r	1	21		SCREW,ST 2.6x8 PB black	6
55	Lens frame cosmetic top_l	1	20		BRACKET-RACK HOLDER A	1
54	Lens frame cosmetic top_r	1	19		GEAR-SLIDE DOOR	1
53	KEY PWB ASSEMBLY	1	18		shaft-MCM279	1
52	BRACKET PLAY BUTTON	1	17		GEAR-ROTATED DOOR RACK	1
51	BUTTON SET-FUNCTION-B	1	16		BUTTON POWER	1
50	BUTTON SET-NAVIGATION	1	15		CUSHION CD MECHANISM A	2
49	BUTTON FW/FF	1	14		COVER-POWER BUTTON	1
48	COVER PLAY BUTTON	1	13		LENS-CD AMBI LIGHT GUIDE	2
47	BUTTON SET-FUNCTION-A	1	12		CABINET FRONT	1
46	CONTROL PANEL	1	11		DOOR BORAD ASSEMBLY	1
45	SCREW, ST PB1.7x4B	9	10		Door switch Cover felt	1
44	DOOR CD - ROTATED	1	9		SCREW,ST PB2x8 S	15
43	SCREW,PTTB Black M3x10	11	8		PC SHEET_IR	1
42	SCREW,MB B3x10B	3	7		CARRIER-SLIDE-DOOR-L	1
41	PCB ASM	1	6		DOOR CD - SLIDE	1
40	SCREW,PTTN M 2.6x10 PB	2	5		CARRIER-SLIDE-DOOR-R	1
74	RUBBER-FOOT STAND BASE	2	39		HEATSINK	1
73	STAND BASE	1	38		BRACKET LCD/IR	1
72	SCREW,MB B3x6B	1	37		LCD REFLECT SHEET	1
71	CABINET REAR	1	36		IR RECEIVER	1
					FRAME-LCD CHROME	1
					Nitto 500 double side tape	1
					LENS-SLIDE DOOR	1
					COVER- ROTATED CD DOOR	1

ACCESSORY PARTS

⚠	9940 000 02082	AC CORD VDE 2C L=1.5M
⚠	9965 100 10439	AC CORD VDE 1.83M (2.5A 250V) (only for /55)
	9965 100 00308	FM ANT WIRE 75R L1.0M
⚠	9965 100 07794	SWITCHING POWER ADAPTOR 19V/4A
⚠	9965 100 10440	AC ADAPTOR MCM279/55 19V/3.4A (only for /55)
	9965 100 00134	AM LOOP ANT 18.1uH 8T
	9965 100 07795	SPEAKER BOX FOR MCM279//00(for /55)
	9965 100 10123	SPEAKER BOX FOR MCM279(for /12)
	9965 100 07796	RC "PHILIPS" FOR MCM279
	9965 100 07001	STAND PORTION OF MCM238/12
	99651 000 0132	CONVERSION MAINS PLUG ADAPTOR (for /55)

MECHNICAL&MISCELLANEOUS PARTS

12	99651 000 9789	CABINET FRONT V1
2	9965 100 07777	LENS-SLIDE DOOR
71	9965 100 07778	CABINET REAR
5	9965 100 07798	CARRIER - SLIDE DOOR -R
7	9965 100 07779	CARRIER - SLIDE DOOR -L
32	9965 100 07780	RACK BAR
13	9965 100 07781	LENS-CD AMBI LIGHT GUIDE
16	9965 100 06985	BUTTON POWER
47	9965 100 17133	BUTTON SET FUNCTION-A (W/OPEN)/(12)
51	9965 100 06983	BUTTON SET FUNCTION-B
52	9965 100 06980	BRACKET PLAY BUTTON
50	99651 001 0192	BUTTON SET-NAVIGATION V1
14	9965 100 06981	COVER POWER BUTTON
6	99651 000 9788	DOOR CD - SLIDE V1
44	99651 000 9790	DOOR CD - ROTATED V1
17	9965 100 07784	GEAR-ROTATED DOOR RACK
19	9965 100 07785	GEAR-SLIDE DOOR
46	9965 100 07786	CONTROL PANEL (for /12)
46	9965 100 07950	CONTROL PANEL (for /55)
1	9965 100 07787	COVER- ROTATED CD DOOR(for /12)
1	9965 100 07951	COVER- ROTATED CD DOOR (for /55)
4	9965 100 07788	FRAME-LCD CHROME
48	9965 100 06991	COVER PLAY BUTTON(for /12)
48	9940 000 04315	COVER PLAY BUTTON(for /55)
49	9965 100 06992	COVER NAVIGATION BUTTON(for /12)
49	9940 000 04309	BUTTON FW/FF (for /55)
23	9940 000 04317	GEAR WHEEL A
22	9940 000 04318	GEAR WHEEL B
28	9940 000 04316	PULLEY SERVO MOTOR
15	9965 100 07789	CUSHION CD MECHANISM A
64	9940 000 04323	CD DAMPER (BLACK) 20DEG
65	9965 100 07790	CD DAMPER (BLACK) 30DEGREE
74	9965 100 07791	RUBBER FOOT FOR FRAME-COSMETIC
18	9965 100 07792	SHAFT FOR MCM279
24	9940 000 04325	BELT MOTOR

MECHNICAL&MISCELLANEOUS PARTS

66	9965 100 06482	CD MECHANISM CMS-M93BGPJ
66	9965 100 08773	CD MECHANISM CMS-M93BGPD(alt 9965 100 06482)
FFC1	9965 100 10376	FFC CBL 20PIN P=1.25MM L=120MM
FFC2	9965 100 07773	FFC CABLE10PIN P=1.25MML=130MM
FFC3	9965 100 10375	FFC CABLE 12PIN P=1.0MM L=70MM

ELECTRICAL PARTS - MAIN BOARD

70	9965 100 00946	TUNER MODULE AM/FM ENG07821QF(for /12)
70	9965 100 01360	TUNER MODULE ENG06835QF.(for /55)
IC19	9965 100 07759	IC PCF8563T CLOCK SOP8
X4	9965 100 07758	CRYSTAL 32.768KH Z/3*8 12.5pF
IC7	9965 100 07760	IC AM7072A L/FMOTORDRIVER DIP8
MOTOR	9940 000 04253	DC MOTOR JQ32-55K415 DC3V
Q28	9940 000 05691	TRANSISTOR PNP BC869SOT-89
Q29	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
R1	9940 000 04221	FUSE RES 2.2R 1/4W +/-5%
D3	9965 100 07742	CH-DIODE, HIGHBAS316SOT323
IC10	9940 000 05687	IC 16M SDRAM K4S161622H-UC60
IC15	9965 100 07747	IC, HEF4094BT PHILIPS SO16
IC16	9965 100 01347	IC ET2314 SOUND SO28
IC2	9965 100 07747	IC, HEF4094BT PHILIPS SO16
IC6	9965 100 07745	IC, OPT30 RESET OPTEK SOP-8
IC8	9965 100 07744	IC, SCF5250
IC9	9965 100 07746	IC, 8M FLASH KH29LV800CTTC-70G
Q17	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q5	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
X1	9965 100 06950	CRYSTAL 8.4672MHZ+/-20PPM 30PF
IC12	9965 100 07750	IC, SAA7824HL LQFP80
IC4	9965 100 06955	IC, D9258 MOTOR DRIVERCD
IC5	9965 100 07749	IC, YD4558 SOP8
L1	9965 100 07751	INDUCTOR RTB6046-101K-1A 100UH
Q10	9965 100 07748	CH-TRANSISTOR,BC807-40SOT-23
Q3	9965 100 07748	CH-TRANSISTOR,BC807-40SOT-23
Q4	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q8	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q9	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
D2	9965 100 07752	CH-ZENER DIODE, UDZS 5.1B
IC17	9965 000 41703	IC, BH4453F
JK101	9940 000 03318	HP JACK D3.6MM
Q15	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q24	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q34	9965 100 07748	CH-TRANSISTOR,BC807-40SOT-23
Q6	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q7	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
IC1	9940 000 05675	IC AZ1117H-5.0 TRE1 REGULATOR
IC3	9965 000 41892	IC AZ1117H-3.3 REGULATOR
Q1	9965 100 07753	CH-PWR TRANSISTOR PNP 2SB1182

ELECTRICAL PARTS - MAIN BOARD

Q2	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q30	9940 000 05691	TRANSISTOR PNP BC869SOT-89
Q31	9940 000 05691	TRANSISTOR PNP BC869SOT-89
Q33	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
D5	9965 100 07092	ZENER DIODE 5.6V 1/2W
IC14	9940 000 04239	IC SAA6588T RADIO RECEIVERS
Q16	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
X3	9940 000 04238	CRYSTAL 4.332MHZ +/-20PPM
IC11	9940 000 05692	IC ISP1160BD/01 USB CONTROLLER
Q11	9940 000 05691	TRANSISTOR PNP BC869SOT-89
Q12	9965 100 06966	MOSFET P-CH APM2301 SOT-23
Q13	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
X2	9965 100 07754	CRYSTAL 6MHZ/3*8 20PF +/-20ppm
IC13	9965 100 07755	IC ET8862Q PQFP64 LCD DRIVER
IR101	9965 000 41893	IR RECEIVER BRM-4050-8-FB2.2
LCD101	9965 100 07756	LCD FSTN TRANS 60X31.5X2.8mm
LED2	9940 000 05678	LED 3MM SUPER BLUE
LED3	9940 000 05678	LED 3MM SUPER BLUE
LED4	9965 100 07006	LED 4.8X4.4MM ROUND BLUE XY
Q18	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
Q19	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
FLASH	9965 100 17135	FLASH WITH SOFTWARE MCM279/12

ELECTRICAL PARTS - DOOR BOARD

S1	9965 100 07757	DOOR SWITCH MST-002
S2	9965 100 07757	DOOR SWITCH MST-002

ELECTRICAL PARTS - KEY BOARD

JK1	9940 000 04263	USB JACK USB-1400A 4P
LED1	9965 100 00292	LED 3MM 3R4HD-7(REDF) TAPING
Q14	9965 100 07743	CH-TRANSISTOR,BC817-40 SOT-23
T	9940 000 04259	SWITCH TACT TSA-06430-150

ELECTRICAL PARTS - POWER& BOARD

D604	9965 100 06964	DIODE 1N5819 DO-41
JK601	9965 100 06969	DC JACK 3PIN DC-005 DIA6.3MM
JK602	9940 000 03318	HP JACK D3.6MM
L601	9965 100 07769	INDUCTOR15UH+/-20%DCR=0.045ohm
L602	9965 100 07769	INDUCTOR15UH+/-20%DCR=0.045ohm
L603	9965 100 07769	INDUCTOR15UH+/-20%DCR=0.045ohm
L604	9965 100 07769	INDUCTOR15UH+/-20%DCR=0.045ohm
L605	9965 100 07771	TOROID INDUCTOR 8UH 3.2A
L606	9965 100 07771	TOROID INDUCTOR 8UH 3.2A
L607	9965 100 07770	INDUCTOR47UH 7E05NBSMDIm=960mA
L608	9965 100 07768	INDUCTOR220UH+/-20%DCR=0.45ohm
L609	9965 100 06959	28UH CORE:T9X5X3 6TURNS 715OHM
Q601	9965 100 06953	CH-TRANSISTOR, BC847C SOT-23
Q602	9965 100 06953	CH-TRANSISTOR, BC847C SOT-23
Q603	9965 100 06953	CH-TRANSISTOR, BC847C SOT-23
Q605	9940 000 05691	TRANSISTOR PNP BC869SOT-89
Q606	9965 100 06953	CH-TRANSISTOR, BC847C SOT-23
Q607	9965 000 41725	TRANS. 2SB1370PNP TO-220FP
Q608	9965 000 41726	TRANS. 2SC5343 NPN TO-92
Q609	9940 000 05649	TRANSISTOR DTA114YSAPNP SPT
Q610	9965 000 41700	CH-TRANS. DTC114YKA NPN
Q611	9965 100 06953	CH-TRANSISTOR, BC847C SOT-23
Q613	9965 100 06953	CH-TRANSISTOR, BC847C SOT-23
Q612	9965 100 07765	CH-TRANSISTOR BC857C INFINEON
SP601	9940 000 01619	SP TERMINAL MSP-134V-05
U601	9965 100 07766	IC TDA8932BT/N2C CLASS D POWER
U602	9965 100 07766	IC TDA8932BT/N2C CLASS D POWER
U604	9965 100 07767	IC AZ34063AM-E1 DC-TO-DC CONV
ZD601	9965 100 07761	ZENER DIODE 5V1 1/2W TAPING.
ZD602	9965 100 07762	ZENER DIODE 9V1 1/2W TAPING.
ZD603	9965 100 07764	ZENER DIODE 22V 1/2W TAPING.

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

FACTORY PARTLIST

Level	Item	Component	Desc	Unit	Qty	Location	AppForm		
0	0010	9008-027900012	PHILIPS MCM279//12	SET	1.000				
.1	0010	8900-070400100	ELECTRICAL SECTION OF MCM279//12(W/RDS)	SET	1.000				
.2	0010	8901-070400100	MAIN PWB ASSEMBLY OF MCM279//12	SET	1.000				
...3	0010	3702-027900130	MAIN PWB:DOUBLE 175x204x1.6MM FR4 MCM279-01(for dummy)	PC	1.000				
...3	0020	8903-070400100	MCU SECTION ASSEMBLY OF MCM279/12	SET	1.000				
...4	0010	1123-106033050	TANT. CH-CAP 10UF 6.3V +/-20% 3216-A TYPE	PC	1.000	C114	FA040624, FA051180		
...4	0020	1132-225083020	CAP ELECT, 2.2UF 50V +/-20% 4X5 TAPING	PC	10.000	C31, C128, C136, C140, C146, C148, C149, C151, C187, C188			
...4	0030	1132-226053020	CAP ELECT 22UF 16V +/-20% 4X5MM(TAPING PH=2.5MM)	PC	1.000	C139			
...4	0040	1132-476083100	CAP ELECT, 47UF 50V +/-20% 6.3X11 TAPING	PC	3.000	C56, C66, C171			
...4	0050	1132-107043060	CAP ELECT, 100UF 10V +/-20% 5X11 TAPING	PC	2.000	C57, C112			
...4	0070	1132-227053060	CAP ELECT, 220UF 16V +/-20% 5X11 TAPING	PC	1.000	C143			
...4	0080	1121-102082020	CH-CAP, CER100PF50V+/-10%0603	PC	3.000	C60, C79, C173			
...4	0090	1121-103052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	1.000	C77			
...4	0100	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	26.000	C55, C62, C63, C64, C65, C67, C68, C69, C70, C71, C72, C74, C75, C80, C83, C84, C97, C113, C134, C142, C147, C150, C170, C172, C190, C192			
...4	0110	1121-105044020	CH-CAP, CER1UF10V +80/-20%0603	PC	1.000	C82			
...4	0120	1121-220051020	CH-CAP, CER 22PF16V+/-5%0603	PC	2.000	C58, C59			
...4	0150	1121-222052020	CH-CAP, CER 2200PF 16V+/-10%0603	PC	2.000	C144, C145			
...4	0160	1121-224084030	CH-CAP, CER0.22UF50V+80%-20%0805	PC	2.000	C189, C191			
...4	0170	1121-225032020	CH-CAP, CER2.2UF6.3V+/-10%0603	PC	1.000	C54			
...4	0190	1121-475044020	CH-CAP, CER4.7UF 10V+80%-20%0603	PC	1.000	C81			
...4	0200	1121-681051020	CH-CAP, CER 680PF16V+/-5%0603	PC	3.000	C61, C76, C167			
...4	0210	1221-000052020	CH-RES, 0R1/10W+/-5%0603	PC	4.000	R28, R243, R247, FB7			
...4	0220	1221-100052020	CH-RES, 10R1/10W+/-5%0603	PC	2.000	R78, R80			
...4	0230	1221-470052020	CH-RES, 47R1/10W+/-5%0603	PC	5.000	R92, R93, R94, R207, R272			
...4	0240	1221-101052020	CH-RES, 100R1/10W+/-5%0603	PC	22.000	R88, R89, R121, R176, R180, R181, R182, R183, R184, R185, R186, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R225			
...4	0250	1221-102052020	CH-RES, 1K1/10W+/-5%0603	PC	11.000	R13, R90, R102, R104, R108, R109, R134, R135, R268, R287, R288			
...4	0256	1221-272052020	CH-RES, 2.7K0.1W+/-5%0603	PC	2.000	R238, R239			
...4	0257	1221-332052020	CH-RES, 3.3K1/10W+/-5%0603	PC	2.000	R81, R107			
...4	0260	1221-472052020	CH-RES, 4.7K1/10W+/-5%0603	PC	10.000	R103, R105, R106, R110, R111, R141, R241, R245, R248, R249			
...4	0270	1221-103052020	CH-RES, 10K1/10W+/-5% 0603	PC	14.000	R74, R75, R79, R86, R96, R97, R98, R100, R101, R175, R192, R269, R282, R283			
...4	0280	1221-123052020	CH-RES, 12K1/10W+/-5%0603	PC	4.000	R209, R210, R226, R229			
...4	0290	1221-153052020	CH-RES, 15K1/10W+/- 5% 0603	PC	3.000	R142, R143, R144			
...4	0300	1221-223052020	CH-RES, 22K1/10W+/-5%0603	PC	7.000	R191, R227, R228, R240, R242, R244, R246			
...4	0310	1221-473052020	CH-RES, 47K1/10W+/-5%0603	PC	1.000	R76			
...4	0320	1221-104052020	CH-RES, 100K1/10W+/-5%0603	PC	4.000	R87, R112, R113, R190			
...4	0330	1221-154052020	CH-RES, 150K1/10W+/-5%0603	PC	1.000	R77			
...4	0340	1221-105052020	CH-RES, 1M1/10W+/-5%0603	PC	1.000	R129			
...4	0350	1001-084672220	CRYSTAL, 8.4672MHZ +/-20PPM 30PF 3x8	PC	1.000	X1	FAP070981		
...4	0360	1311-141480010	DIODE 1N4148.	PC	1.000	D4	CA040218, FA050621		
...4	0370	1321-003160010	CH-DIODE, HIGHBAS316SOT323	PC	1.000	D3	FA030154		
...4	0380	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	2.000	Q5, Q17	FA030192		
...4	0390	1502-002314010	IC ET2314 SOUND S028	PC	1.000	IC16	FAP070031		
...4	0400	1506-005250000	IC, SCF5250	PC	1.000	IC8	FA050919		
...4	0410	1508-000030000	IC, OPT30 RESET OPTEK SOP-8	PC	1.000	IC6	FA050727		
...4	0420	1511-829800160	IC, 8M FLASH KH29LV800CTTC-70G (OPT48) TSOP48	PC	1.000	IC9			
...4	0430	1511-164161020	IC, 16M SDRAM TSOP(II)50 K4S161622H-UC60	PC	1.000	IC10	FAP060871		
...4	0450	1513-004094000	IC, HEF4094BT PHILIPS S016	PC	2.000	IC2, IC15	FA050381		
...4	0460	2721-102020020	FERRITE BEAD SMD 1K+/-25%/100MHZ GZ1608U102	PC	2.000	FB11, FB12	FA060072		
...4	0470	2721-272030010	CH-FB, 2700OHM+/-25% 0805 SZ2012K272T(LF).	PC	4.000	FB2, FB3, FB4, FB8	FA040575		
...4	0475	2721-601020020	FERRITE BEAD 100MHz/600 OHM 0603.	PC	1.000	FB9	FAP060920 FAP070117		
...4	0480	3106-101221000	FPC CONNECTOR 12PIN PH=1.0MM STRAIGHT WHITE	PC	1.000	CN10	FAP071095		
...3	0030	8903-070400200	CD SECTION ASSEMBLY OF MCM279/12.	SET	1.000				
...4	0010	1123-107033060	TANT. CH-CAP 100UF 6.3V +/-20% 3528-BTYPE	PC	1.000	C20	FA040624, FA051180		
...4	0015	1123-227013060	TANT. CH-CAP 220UF 4V +/-20% 3528-BTYPE	PC	1.000	C53	FA040624, FA051180		

FACTORY PARTLIST

Level	Item	Component	Desc	Unit	Qty	Location	AppForm	
...	4	0020	1132-107044040	CAP ELECT 100UF10V+80%-20% 5X5(TAPING PH=2.5MM)	PC	1.000	C43	
...	4	0025	1132-476033030	CAP ELECT, 47UF 6.3V +/-20% 4x7 TAPING	PC	2.000	C9, C29	
...	4	0030	1132-476034020	CAP ELECT, 47UF6.3V+80%-20% 4x5(TAPING PH=2.5MM)	PC	1.000	C8	
...	4	0035	1132-107043060	CAP ELECT, 100UF 10V +/-20% 5X11 TAPING	PC	1.000	C15	
...	4	0040	1132-107044040	CAP ELECT 100UF10V+80%-20% 5X5(TAPING PH=2.5MM)	PC	2.000	C32, C33	
...	4	0060	1132-227053060	CAP ELECT, 220UF 16V +/-20% 5X11 TAPING	PC	2.000	C42, C45	
...	4	0065	1132-477043100	CAP ELECT, 470UF 10V +/-20%6.3X11 TAPING	PC	1.000	C22	
...	4	0070	1121-101051020	CH-CAP, CER 100P16V+/-5%0603	PC	5.000	C21, C48, C51, C157, C158	
...	4	0080	1121-152052020	CH-CAP, CER 0.0015uF16V +/-10%0603	PC	2.000	C35, C36	
...	4	0090	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	15.000	C7, C10, C13, C17, C19, C23, C26, C28, C30, C34, C41, C44, C46, C182, C183	
...	4	0100	1121-221051020	CH-CAP, CER 220PF16V+/-5%0603	PC	4.000	C47, C49, C50, C52	
...	4	0105	1121-102052020	CH-CAP, CER 1000PF16V+/-10%0603	PC	4.000	C37, C38, C39, C40	
...	4	0110	1121-222052020	CH-CAP, CER 2200PF 16V+/-10%0603	PC	2.000	C24, C27	
...	4	0120	1121-223052020	CH-CAP, CER 0.022UF16V+/-10%0603	PC	1.000	C14	
...	4	0130	1121-473052020	CH-CAP, CER 0.047UF16V+/-10%0603	PC	2.000	C18, C25	
...	4	0140	1221-000052020	CH-RES, 0R1/10W+/-5%0603	PC	3.000	R10, R11, R12	
...	4	0150	1221-010052020	CH-RES, 1R1/10W+/-5%0603	PC	10.000	R9, R18, R19, R20, R41, R42, R237, R271, R273, R274	
...	4	0160	1221-022052020	CH-RES, 2.2R1/10W+/-5%0603	PC	1.000	R22	
...	4	0170	1221-100052020	CH-RES, 10R1/10W+/-5%0603	PC	1.000	R60	
...	4	0180	1221-101052020	CH-RES, 100R1/10W+/-5%0603	PC	6.000	R24, R54, R55, R56, R68, R72	
...	4	0185	1221-471052020	CH-RES, 470R1/10W+/-5%0603	PC	1.000	R32	
...	4	0190	1221-102052020	CH-RES, 1K1/10W+/-5%0603	PC	6.000	R43, R44, R61, R62, R69, R70	
...	4	0195	1221-222052020	CH-RES, 2.2K1/10W+/-5%0603	PC	2.000	R91, R95	
...	4	0196	1221-332052020	CH-RES, 3.3K1/10W+/-5%0603	PC	1.000	R57	
...	4	0200	1221-272052020	CH-RES, 2.7K0.1W+/-5%0603	PC	1.000	R39	
...	4	0220	1221-392052020	CH-RES, 3.9K1/10W+/-5%0603	PC	3.000	R31, R33, R37	
...	4	0230	1221-472052020	CH-RES, 4.7K1/10W+/-5%0603	PC	5.000	R23, R45, R46, R47, R48	
...	4	0240	1221-512052020	CH-RES, 5.1K 1/10W +/-5% 0603	PC	1.000	R35	
...	4	0260	1221-682052020	CH-RES, 6.8K1/10W+/-5%0603	PC	1.000	R30	
...	4	0270	1221-822052020	CH-RES, 8.2K1/10W+/-5%0603	PC	1.000	R40	
...	4	0275	1221-912052020	CH-RES, 9.1K1/10W+/-5%0603	PC	1.000	R36	
...	4	0280	1221-103052020	CH-RES, 10K1/10W+/-5% 0603	PC	4.000	R38, R58, R59, R71	
...	4	0290	1221-123052020	CH-RES, 12K1/10W+/-5%0603	PC	1.000	R34	
...	4	0300	1221-183052020	CH-RES, 18K1/10W+/-5%0603	PC	4.000	R63, R64, R65, R66	
...	4	0310	1221-223052020	CH-RES, 22K1/10W+/-5%0603	PC	6.000	R49, R50, R51, R52, R67, R73	
...	4	0320	1221-243052020	CH-RES, 24K1/10W+/-5%0603	PC	1.000	R21	
...	4	0330	1221-104052020	CH-RES, 100K1/10W+/-5%0603	PC	2.000	R25, R53	
...	4	0340	1421-807400010	CH-TRANSISTOR, BC807-40SOT-23	PC	2.000	Q3, Q10	FA030193
...	4	0350	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	3.000	Q4, Q8, Q9	FA030192
...	4	0360	1502-004558010	IC, YD4558 SOP8	PC	1.000	IC5	FA050479
...	4	0370	1503-009258000	IC, D9258 MOTOR DRIVERCD	PC	1.000	IC4	FA030166
...	4	0380	1509-007824000	IC, SAA7824HL LQFP80	PC	1.000	IC12	FA030165
...	4	0390	1614-101110000	POWER INDUCTOR RTB6046-101K-1A 100UH+/-10% 1.1 OHM TAPING	PC	1.000	L1	FA050703
...	4	0400	3101-150621010	HEADER 6PIN 1.5MM STRAIGHT	PC	1.000	CN4	FAP060670
...	4	0410	3106-101621060	FPC CONNECTOR PH=1.0MM 16P 1.0S-10S-16PWB SMT	PC	1.000	CN3	FAP071216
...	3	0040	8918-070400100	EARPHONE SECTION ASSEMBLY OF MCM279/12	SET	1.000		
...	4	0010	1132-225083020	CAP ELECT, 2.2UF 50V +/-20% 4X5 TAPING	PC	2.000	C135, C137	
...	4	0020	1132-476034020	CAP ELECT, 47UF6.3V+80%-20% 4x5(TAPING PH=2.5MM)	PC	1.000	C132	
...	4	0030	1132-227034080	CAP ELECT 220UF6.3V+80%-20%6.3X5MM(TAPING PH=2.5MM)	PC	3.000	C130, C131, C133	
...	4	0040	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	1.000	C159	
...	4	0050	1121-105044020	CH-CAP, CER1UF10V +80%/-20%0603	PC	1.000	C129	
...	4	0055	1221-680052020	CH-RES, 68R1/10W+/-5%0603	PC	2.000	R84, R85	
...	4	0060	1221-101052020	CH-RES, 100R1/10W+/-5%0603	PC	1.000	R262	
...	4	0070	1221-102052020	CH-RES, 1K1/10W+/-5%0603	PC	3.000	R82, R83, R270	
...	4	0080	1221-472052020	CH-RES, 4.7K1/10W+/-5%0603	PC	2.000	R17, R259	
...	4	0110	1221-473052020	CH-RES, 47K1/10W+/-5%0603	PC	3.000	R232, R236, R261	
...	4	0120	1221-104052020	CH-RES, 100K1/10W+/-5%0603	PC	3.000	R230, R231, R234	
...	4	0125	1323-000510030	CH-ZENER DIODE, UDZS 5.1B SOD-323	PC	1.000	D2	FAP061066
...	4	0130	1421-807400010	CH-TRANSISTOR, BC807-40SOT-23	PC	1.000	Q34	FA030193
...	4	0140	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	4.000	Q6, Q7, Q15, Q24	FA030192
...	4	0150	1502-004453000	IC, BH4453F	PC	1.000	IC17	FA040704
...	4	0160	2721-272030010	CH-FB, 2700OHM+/-25% 0805 SZ2012K272T(LF).	PC	3.000	L2, L3, L4	FA040575
...	4	0170	3202-070236000	HP JACK MSJ2000 (ST) 7P DIA. 3.6MM 1800	PC	1.000	JK101	FA030079

FACTORY PARTLIST

Level	Item	Component	Desc	Unit	Qty	Location	AppForm
... 3	0050	8905-070400300	CD POWER SUPPLY SECTION ASSEMBLY OF MCM279/12	SET	1.000		
... 4	0010	1132-227053060	CAP ELECT, 220UF 16V +/-20% 5X11 TAPING	PC	2.000	C4, C160	
... 4	0015	1132-477043100	CAP ELECT, 470UF 10V +/-20% 6.3X11 TAPING	PC	1.000	C1	
... 4	0030	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	3.000	C2, C3, C161	
... 4	0040	1221-010052020	CH-RES, 1R1/10W+/-5%0603	PC	3.000	R278, R279, R280	
... 4	0050	1221-221052020	CH-RES, 220R1/10W+/-5%0603	PC	2.000	R3, R221	
... 4	0060	1221-102052020	CH-RES, 1K1/10W+/-5%0603	PC	1.000	R281	
... 4	0070	1221-222052020	CH-RES, 2.2K1/10W+/-5%0603	PC	1.000	R284	
... 4	0080	1221-103052020	CH-RES, 10K1/10W+/-5% 0603	PC	2.000	R5, R285	
... 4	0090	1221-473052020	CH-RES, 47K1/10W+/-5%0603	PC	3.000	R2, R4, R222	
... 4	0100	1321-041480020	CH-DIODE RLS4148 LL-34	PC	1.000	D1	FA060300, FAP060547
... 4	0110	1421-211820000	CH-POWER TRANSISTOR PNP 2SB1182 CPT3	PC	1.000	Q1	FAP071213
... 4	0120	1421-008690000	CH-TRANSISTOR PNP BC869 SOT-89	PC	2.000	Q30, Q31	FAP060729
... 4	0130	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	2.000	Q2, Q33	FA030192
... 4	0140	1512-001117070	IC AZ1117H-5.0 TRE1 REGULATOR SOT-223	PC	1.000	IC1	FA060249
... 4	0150	1512-001117130	IC, AZ1117H-3.3TRE1 REGULATOR SOT-223	PC	1.000	IC3	FAP061574
... 4	0160	2721-272030010	CH-FB, 2700OHM+/-25% 0805 SZ2012K272T(LF).	PC	1.000	FB1	FA040575
... 4	0170	3106-122021000	FFC CONNECTOR 20P P=1.25MM 180DEGREE	PC	1.000	CN1	FA060288, FAP070895
... 3	0060	8915-070400100	RDS ASSEMBLY OF MCM279/12	SET	1.000		
... 4	0010	1122-225083130	ALUM. EL- CAP 2.2UF 50V +/-20% SMT 5x5.4MM	PC	1.000	C100	
... 4	0015	1122-476033130	ALUM. EL- CAP 47UF 6.3V +/-20% SMT5x5.4MM	PC	1.000	C180	FA040659
... 4	0020	1122-107033110	ALUM.EL-CAP 100UF 6.3V +/-20% SMT6.3X5.4MM	PC	1.000	C102	FA040659
... 4	0030	1121-470081020	CH-CAP, CER47PF50V+/-5%0603	PC	1.000	C96	
... 4	0040	1121-471081020	CH-CAP, CER470PF50V+/-5%0603	PC	3.000	C120, C122, C163	
... 4	0050	1121-561081020	CH-CAP, CER560PF50V+/-5%0603	PC	1.000	C99	
... 4	0055	1221-681052020	CH-RES, 680R1/10W+/-5%0603	PC	1.000	R264	
... 4	0060	1121-820081020	CH-CAP, CER82PF50V+/-5%0603 NPO	PC	1.000	C95	
... 4	0070	1121-102082020	CH-CAP, CER100PF50V+/-10%0603	PC	1.000	C98	
... 4	0080	1121-222082020	CH-CAP, CER 2200PF50V+/-10%0603	PC	1.000	C164	
... 4	0090	1121-104084020	CH-CAP, CER0.1UF50V+80%-20%0603	PC	3.000	C94, C101, C165	
... 4	0100	1221-100052020	CH-RES, 10R1/10W+/-5%0603	PC	1.000	R267	
... 4	0110	1221-101052020	CH-RES, 100R1/10W+/-5%0603	PC	1.000	R169	
... 4	0120	1221-471052020	CH-RES, 470R1/10W+/-5%0603	PC	2.000	R189, R251	
... 4	0130	1221-102062020	CH-RES, 1K1/16W+/-5%0603	PC	4.000	R162, R166, R167, R250	
... 4	0140	1221-152062020	CH-RES, 1.5K1/16W+/-5%0603	PC	1.000	R164	
... 4	0150	1221-103062020	CH-RES, 10K1/16W+/-5%0603	PC	3.000	R165, R187, R188	
... 4	0160	1221-224062020	CH-RES, 220K1/16W+/-5%0603	PC	1.000	R163	
... 4	0165	1313-000560000	ZENER DIODE 5.6V 1/2W	PC	1.000	D5	FAP060929
... 4	0170	1001-043320200	CRYSTAL, HC-49/U 4.332MHZ +/-20PPM	PC	1.000	X3	FA030238
... 4	0175	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	1.000	Q16	FA030192
... 4	0180	1501-006588000	IC , SAA6588TRADIO RECEIVERS	PC	1.000	IC14	FA030235
... 4	0190	2721-272030010	CH-FB, 2700OHM+/-25% 0805 SZ2012K272T(LF).	PC	1.000	FB10	FA040575
... 3	0070	8931-070400100	USB SECTION ASSEMBLY OF MCM279/12	SET	1.000		
... 4	0010	1121-180051020	CH-CAP, CER18PF16V+/-5%0603	PC	2.000	C89, C90	
... 4	0020	1121-101051020	CH-CAP, CER 100P16V+/-5%0603	PC	1.000	C87	
... 4	0030	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	3.000	C85, C86, C91	
... 4	0035	1121-106044030	CH-CAP, CER 10UF 10V +80%/-20% 0805	PC	1.000	C154	
... 4	0040	1132-107043060	CAP ELECT, 100UF 10V +/-20% 5X11 TAPING	PC	2.000	C73, C179	
... 4	0050	1221-220052020	CH-RES, 22R1/10W+/-5%0603	PC	2.000	R256, R257	
... 4	0060	1221-101052020	CH-RES, 100R1/10W+/-5%0603	PC	5.000	R122, R123, R124, R126, R132	
... 4	0065	1221-221052020	CH-RES, 220R1/10W+/-5%0603	PC	1.000	R115	
... 4	0066	1221-102052020	CH-RES, 1K1/10W+/-5%0603	PC	1.000	R131	
... 4	0067	1221-332052020	CH-RES, 3.3K1/10W+/-5%0603	PC	2.000	R125, R265	
... 4	0070	1221-472052020	CH-RES, 4.7K1/10W+/-5%0603	PC	1.000	R117	
... 4	0080	1221-103052020	CH-RES, 10K1/10W+/-5% 0603	PC	5.000	R119, R127, R128, R130, R258	
... 4	0090	1221-473052020	CH-RES, 47K1/10W+/-5%0603	PC	2.000	R114, R118	
... 4	0110	1221-104052020	CH-RES, 100K1/10W+/-5%0603	PC	2.000	R116, R133	
... 4	0120	1001-600000200	CRYSTAL 6MHZ/3*8 20PF +/-20ppm TEMPERATURE: 260C +/-5C	PC	1.000	X2	FAP071219
... 4	0130	1421-008690000	CH-TRANSISTOR PNP BC869 SOT-89	PC	1.000	Q11	FAP060729
... 4	0140	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	1.000	Q13	FA030192
... 4	0150	1424-023010010	MOSFET P-CHANNEL APM2301 SOT-23	PC	1.000	Q12	FAP071073
... 4	0160	1509-001160000	IC, ISP1160BD/01 LQFP64 USB HOST CONTROLLER	PC	1.000	IC11	FA060235
... 4	0170	2721-272030010	CH-FB, 2700OHM+/-25% 0805 SZ2012K272T(LF).	PC	1.000	FB16	FA040575

FACTORY PARTLIST

Level	Item	Component	Desc	Unit	Qty	Location	AppForm
... 3	0080	8907-070400100	DISPLAY SECTION ASSEMBLY OF MCM279/12	SET	1.000		
... 4	0010	1132-107043060	CAP ELECT, 100UF 10V +/-20% 5X11 TAPING	PC	2.000	C103, C117	
... 4	0020	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	5.000	C104, C115, C116, C118, C119	
... 4	0050	1221-100062020	CH-RES, 10R1/16W+/-5%0603	PC	3.000	R203, R213, R260	
... 4	0060	1221-101052020	CH-RES, 100R1/10W+/-5%0603	PC	1.000	R206	
... 4	0070	1221-102052020	CH-RES, 1K1/10W+/-5%0603	PC	3.000	R159, R160, R161	
... 4	0080	1221-472052020	CH-RES, 4.7K1/10W+/-5%0603	PC	3.000	R208, R211, R212	
... 4	0090	1221-103052020	CH-RES, 10K1/10W+/-5% 0603	PC	6.000	R155, R156, R157, R158, R204, R214	
... 4	0095	1221-000052020	CH-RES, 0R1/10W+/-5%0603	PC	1.000	R168	
... 4	0100	1221-473052020	CH-RES, 47K1/10W+/-5%0603	PC	2.000	R205, R215	
... 4	0110	1316-030410000	LED 3MM SUPER BLUE LA304B1CT-2A/01	PC	2.000	LED2, LED3	FA060293
... 4	0120	1316-048300000	LED 4.8X4.4MM ROUND BLUE XY-048BLL30	PC	1.000	LED4	FAP071069
... 4	0130	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	2.000	Q18, Q19	FA030192
... 4	0140	1513-008862000	IC ET8862Q PQFP64 LCD DRIVER	PC	1.000	IC13	FAP071093
... 4	0150	1801-000000150	IR RECEIVER BRM-4050-8-FB2.2	PC	1.000	IR101	FAP061109
... 4	0160	2403-000000680	LCD FSTN TRANSMISSIVE 60X31.5X2.8mm FC1005/ Heat seal=42x51.5mm CT0802(Yeebo)	PC	1.000	LCD101	
... 4	0170	3106-121011010	FFC CONNECTOR 10PIN P=1.25MM 90DEGREE WHITE	PC	1.000	CN11	FAP071094 FAP071240
... 4	0180	5603-070400100	BRACKET - LCD /IR	PC	1.000		
... 4	0190	5502-061100100	LENS - DISPLAY LIGHT GUIDE	PC	1.000		FAP071139
... 4	0200	6214-061100100	LCD DIFFUSION SHEET	PC	1.000		FAP071123
... 4	0210	6214-061100200	LCD REFLECT SHEET	PC	1.000		FAP071125
... 4	0220	6011-220080300	SCREW, ST P B 2X8 S A222008003	PC	2.000	2-FOR BRACKET-LCD/IR	FAP061778
... 3	0090	8914-070400100	DOOR BORAD ASSEMBLY OF MCM279/12	SET	1.000		
... 4	0010	3309-010134010	DOOR SWITCH MST-002	PC	2.000	S1, S2	FAP071218
... 4	0020	3101-200311010	HEADER 3PIN P=2.0MM 90DEGREE WHITE	PC	1.000	CN9	FA051712
... 4	0030	3501-030072020	HOUSING 3P DISCRETE WIRE P=2.0 L=75MM UL1007 AWG#28 SINGLE HEADER GREY/GREY/BLACK	PC	1.000	CN9 TO CNS	FAP071292
... 3	0100	8960-070400100	REAL TIME CLOCK SECTION ASSEMBLY OF MCM279/12	SET	1.000		
... 4	0010	1121-120057020	CH-CAP, CER 12PF 16V +/-1% 0603	PC	1.000	C11	
... 4	0020	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	1.000	C12	
... 4	0030	1221-104052020	CH-RES, 100K1/10W+/-5%0603	PC	1.000	R26	
... 4	0040	1001-032768210	CRYSTAL 32.768KH Z/3*8 12.5pF +/-20ppmTEMPERATURE: 260C +/-5C	PC	1.000	X4	FAP071220
... 4	0050	1508-008563000	IC PCF8563T CLOCK SOPS	PC	1.000	IC19	FA040303
... 3	0110	8925-070400100	OPEN/CLOSE MOTOR DRIVER SECTION ASSEMBLY OF MCM279/12	SET	1.000		
... 4	0010	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	3.000	C6, C176, C186	
... 4	0020	1132-107053060	CAP ELECT, 100UF 16V +/-20% 5X11 TAPING	PC	1.000	C5	
... 4	0030	1221-221052020	CH-RES, 220R1/10W+/-5%0603	PC	1.000	R275	
... 4	0040	1221-472052020	CH-RES, 4.7K1/10W+/-5%0603	PC	1.000	R286	
... 4	0050	1221-103052020	CH-RES, 10K1/10W+/-5% 0603	PC	2.000	R6, R277	
... 4	0060	1221-223052020	CH-RES, 22K1/10W+/-5%0603	PC	1.000	R8	
... 4	0070	1221-333052020	CH-RES, 33K1/10W+/-5%0603	PC	1.000	R7	
... 4	0080	1221-473052020	CH-RES, 47K1/10W+/-5%0603	PC	1.000	R276	
... 4	0090	1233-022022000	FUSE RES, 2.2 1/4W +/-5% TAPING	PC	1.000	R1	FA051333
... 4	0100	1421-008690000	CH-TRANSISTOR PNP BC869 SOT-89	PC	1.000	Q28	FAP060729
... 4	0110	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	1.000	Q29	FA030192
... 4	0120	1513-007072000	IC AM7072A L/F MOTOR DRIVER DIP8 (AMTEK) (932219636682)	PC	1.000	IC7	FA050352
... 4	0130	2201-000030000	DC MOTOR JQ32-55K415 DC3V.	PC	1.000		FA051640
... 4	0140	3101-200221010	HEADER 2PIN 2.0MM STRAIGHT	PC	1.000	CN2	FA030083, FAP061602
... 4	0150	3501-020102010	HOUSING 2P DISCRETE WIRE P=2.0 L=100MM UL1007 AWG#26 SINGLE HEADER BLACK, GREY	PC	1.000	CN2 TO MOTOR CN5	FAP071293
... 2	0020	8910-070400100	KEY PWB ASSEMBLY OF MCM279//12	SET	1.000		
... 3	0010	3701-062800310	KEY PWB 260x177x1.6MM/7 94V0 BTM628-03 REV1.0	PC	1.000		
... 3	0020	1221-000052020	CH-RES, 0R1/10W+/-5%0603	PC	2.000	FB13, FB14	
... 3	0030	1221-102052020	CH-RES, 1K1/10W+/-5%0603	PC	1.000	R177	
... 3	0040	1221-681052020	CH-RES, 680R1/10W+/-5%0603	PC	3.000	R145, R150, R170	
... 3	0050	1221-122052020	CH-RES, 1.2K1/10W+/-5%0603	PC	3.000	R146, R151, R171	
... 3	0060	1221-222052020	CH-RES, 2.2K1/10W+/-5%0603	PC	3.000	R147, R152, R172	
... 3	0070	1221-362052020	CH-RES, 3.6K1/10W+/-5%0603	PC	3.000	R148, R153, R173	
... 3	0080	1221-512052020	CH-RES, 5.1K 1/10W +/-5% 0603	PC	3.000	R149, R154, R174	
... 3	0090	1221-103062020	CH-RES, 10K1/16W+/-5%0603	PC	1.000	R178	
... 3	0100	1221-473052020	CH-RES, 47K1/10W+/-5%0603	PC	1.000	R179	
... 3	0110	1121-101051020	CH-CAP, CER 100P16V+/-5%0603	PC	3.000	C105, C106, C107	
... 3	0120	1121-104052020	CH-CAP, CER 0.1UF16V+/-10%0603	PC	2.000	C108, C111	

FACTORY PARTLIST

Level	Item	Component	Desc	Unit	Qty	Location	AppForm		
...	3	0130	1316-033470000	LED 3MM 3R4HD-7 (RED) TAPING	PC	1.000	LED1	FA050484	
...	3	0140	1422-817400010	CH-TRANSISTOR, BC817-40 SOT-23	PC	1.000	Q14	FA030192	
...	3	0160	2721-272030010	CH-FB, 2700HM+/-25% 0805 SZ2012K272T (LF).	PC	3.000	FB4, FB5, FB6	FA040575	
...	3	0170	3106-101211000	FFC CONNECTOR 12PIN PH=1.0MM 90DEGREE WHITE	PC	1.000	CN7	FA050574	
...	3	0180	3209-040200000	USB JACK USB-1400A 4P	PC	1.000	JK1	FA051716	
...	3	0190	3302-010143020	SWITCH TACT TSA-06430-150 LUP FUNG	PC	15.000	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10, SW11, SW12, SW13, SW14, SW15	FA051538	
...	3	0200	3005-000000000	JUMPER WIRE	PC	4.000	JW1, JW2, JW3, JW4		
..	2	0030	8905-070400100	POWER AMP PWB ASSEMBLY OF MCM279//12	SET	1.000			
...	3	0005	1112-108043160	CAP, ELECT, 1000UF10V+/-20%10X20	PC	1.000	C674		
...	3	0007	1112-228063180	CAP, ELECT, 2200UF25V+/-20%12X25	PC	1.000	C681		
...	3	0010	3702-027900430	POWER PWB:DOUBLE 141x145x1.6MM/2 FR4 MCM279-04	PC	1.000			
...	3	0020	1121-103082020	CH-CAP, CER0.01UF50V+/-10%0603	PC	8.000	C613, C614, C635, C636, C655, C656, C665, C666		
...	3	0040	1121-101081020	CH-CAP, CER100PF50V+/-5%0603	PC	3.000	C663, C664, C667		
...	3	0060	1121-331081020	CH-CAP, CER330PF50V+/-5%0603	PC	4.000	C605, C606, C623, C624		
...	3	0070	1121-471081020	CH-CAP, CER470PF50V+/-5%0603	PC	7.000	C601, C602, C639, C640, C649, C650, C677		
...	3	0100	1121-153082020	CH-CAP, CER15NF50V+/-10%0603	PC	4.000	C637, C638, C651, C652		
...	3	0110	1121-104082020	CH-CAP, CER0.1UF50V+/-10%0603	PC	33.000	C611, C612, C615, C616, C617, C618, C621, C622, C625, C626, C631, C632, C633, C634, C645, C646, C647, C648, C653, C654, C657, C658, C659, C660, C671, C672, C673, C675, C678, C680, C682, C683, C684		
...	3	0115	1121-225082030	CH-CAP, CER2.2UF50V+/-10%0805	PC	4.000	C629, C630, C641, C642		
...	3	0120	1121-474084030	CH-CAP, CER0.47UF50V+80%-20%0805	PC	6.000	C603, C604, C607, C608, C609, C610		
...	3	0130	1121-105082030	CH-CAP, CER 1UF50V+/-10%0805	PC	1.000	C668		
...	3	0140	1132-476053040	CAP ELECT, 47UF 16V +/-20% 5x5 TAPING	PC	3.000	C619, C620, C669		
...	3	0160	1132-227063220	CAP ELECT, 220UF 25V +/-20% 8X12 TAPING	PC	3.000	C661, C662, C679		
...	3	0170	1132-477053060	CAP ELECT, 470UF 16V +/-20% 5X11 TAPING	PC	2.000	C670, C676		
...	3	0190	1138-105082490	CAP MMF HMFS 5 1UF 50V +/-10% 11x6.5 TAPING	PC	4.000	C627, C628, C643, C644		
...	3	0210	1221-022062020	CH-RES, 2.2R1/16W+/-5%0603	PC	3.000	R647, R648, R649		
...	3	0220	1221-100052030	CH-RES, 10R1/10W+/-5%0805	PC	6.000	R615, R616, R625, R626, R629, R630		
...	3	0240	1221-471062020	CH-RES, 470R1/16W+/-5%0603	PC	6.000	R623, R624, R631, R632, R643, R644		
...	3	0250	1221-102062020	CH-RES, 1K1/16W+/-5%0603	PC	10.000	R617, R618, R619, R635, R642, R645, R646, R650, R651, R657		
...	3	0260	1221-122062020	CH-RES, 1.2K1/16W+/-5%0603	PC	1.000	R659		
...	3	0280	1221-472062020	CH-RES, 4.7K1/16W+/-5%0603	PC	6.000	R601, R602, R609, R610, R654, R655		
...	3	0290	1221-562062020	CH-RES, 5.6K1/16W+/-5%0603	PC	5.000	R603, R604, R607, R608, R658		
...	3	0310	1221-103062020	CH-RES, 10K1/16W+/-5%0603	PC	3.000	R613, R614, R656		
...	3	0320	1221-223062020	CH-RES, 22K1/16W+/-5%0603	PC	2.000	R633, R634		
...	3	0330	1221-393062020	CH-RES, 39K1/16W+/-5%0603	PC	3.000	R605, R606, R611		
...	3	0335	1221-224062020	CH-RES, 220K1/16W+/-5%0603	PC	1.000	R612		
...	3	0340	1211-022002201	RES, 0.22R 1/4W +/-5%	PC	1.000	R660		
...	3	0350	1211-100082000	RES 10R 2W +/-5%	PC	1.000	R653		
...	3	0360	1211-220082000	RES, 22R 2W +/-5%	PC	1.000	R652		
...	3	0370	1231-220062000	RES, 22R 1/16W +/-5% TAPING	PC	4.000	R621, R622, R627, R628		
...	3	0375	1311-141480020	DIODE 1N4148 TAPING.	PC	1.000	D603	FAP061872	
...	3	0380	1312-158190000	DIODE 1N5819 DO-41	PC	1.000	D604	FA051721	
...	3	0390	1313-000510000	ZENER DIODE 5V1 1/2W TAPING.	PC	1.000	ZD601	FAP061320 FAP070562	
...	3	0400	1313-000910010	ZENER DIODE 9V1 1/2W TAPING.	PC	1.000	ZD602	FAP071212	
...	3	0410	1313-055150000	ZENER DIODE BZX55C15V TAPING.	PC	1.000	ZD604	FA051709	
...	3	0420	1313-002200010	ZENER DIODE 22V 1/2W TAPING.	PC	1.000	ZD603	FAP071211	
...	3	0440	1321-041480000	CH-DIODE, 1N4148 FDLL4148SILICON DIODE DO-35	PC	3.000	D602, D605, D606		
...	3	0450	1411-001140000	TRANSISTOR, DTA114YSAPNP SPT	PC	1.000	Q609	FA040354	
...	3	0460	1411-213700000	TRANSISTOR, 2SB1370PNP TO-220FP	PC	1.000	Q607	FA040357	
...	3	0470	1412-253430000	TRANSISTOR, 2SC5343 NPN TO-92	PC	1.000	Q608	FA040359	
...	3	0480	1421-008570040	CH-TRANSISTOR BC857C INFINEON	PC	2.000	Q612, Q614	FAP061734	
...	3	0490	1421-008690000	CH-TRANSISTOR PNP BC869 SOT-89	PC	1.000	Q605	FAP060729	
...	3	0500	1422-008470010	CH-TRANSISTOR, BC847C SOT-23.	PC	6.000	Q601, Q602, Q603, Q606, Q611, Q613	FA030190	
...	3	0510	1422-001140000	CH-TRANSISTOR, DTC114YKA NPN SMT3	PC	1.000	Q610	FAP061391	
...	3	0520	1502-008932000	IC TDA8932BT/N2C CLASS D POWER AMPLIFIER.	PC	2.000	U601, U602	FAP071209	
...	3	0530	1505-034063020	IC AZ34063AM-E1 DC-TO-DC CONVERTER SO8.	PC	1.000	U604	FAP061651	
...	3	0550	1614-221045000	POWER INDUCTOR 220UH +/-20% DCR=0.45ohm1.2A RT1014-221M DIP	PC	1.000	L608	FAP071210	
...	3	0560	1614-150004000	POWER INDUCTOR 15UH +/-20% DCR=0.045ohm 3.65A RTB1014-150M DIP	PC	4.000	L601, L602, L603, L604	CAP070100	
...	3	0570	1606-470012000	POWER INDUCTOR 47UH 7E05NB SMD DCR=0.26OHM Im=960mA	PC	1.000	L607	FAP061733	

FACTORY PARTLIST

Level	Item	Component	Desc	Unit	Qty	Location	AppForm		
...	3	0580	1608-080001000	TOROID INDUCTOR SUH CORE:T9*5*3 4.5T DCR:0.015 OHM 3.2A	PC	2.000	L605, L606	FAP071208	
...	3	0590	1703-000000090	28UH CORE:T9X5X3 6TURNS 715OHM 1.2A (TX2409033628LF)	PC	1.000	L609	FA060002	
...	3	0610	2105-000000010	FILTER BEAD RH3.5X6X0.8	PC	5.000	FB601, FB602, FB605, FB606, FB607	FA040323	
...	3	0620	2721-272030010	CH-FB, 2700OHM+/-25% 0805 SZ2012K272T(LF).	PC	2.000	FB603, FB604	FA040575	
...	3	0630	3106-122011000	FFC CONNECTOR 20P P=1.25MM 90DEGREE	PC	1.000	C0N601	FA060289, FAP070896	
...	3	0640	3401-000000010	SP TERMINAL MSP-134V-05 LF	PC	1.000	SP601	FA030245	
...	3	0650	3201-030163000	DC JACK 3PIN DC-005 DIA6.3MM 90DEGREE.	PC	1.000	JK601	FAP071107	
...	3	0660	3202-070236000	HP JACK MSJ2000 (ST) 7P DIA.3.6MM 1800	PC	1.000	JK602	FA030079	
...	3	0670	8016-000000100	FM ANT CONTACT PIN	PC	1.000	P7	FA030149	
...	3	0680	8031-000001000	OIL CLOTH TUBE DIA:1.5MM L=5MM	PC	2.000			
..1		0020	8900-070400300	ELECTRICAL ENCASING ASSEMBLY OF MCM279/12.	SET	1.000			
..2		0010	3002-200090900	FFC CABLE 20PIN P=1.25MM L=90MM WHITE SAME SIDE	PC	1.000	CN1 TO CN601	FAP071215	
..2		0020	3002-100130910	FFC CABLE 10PIN P=1.25MM L=130MM WHITE OTHER SIDE	PC	1.000	CN1 TO TUNER	FAP071221	
..2		0030	3002-120050910	FFC CABLE 12PIN P=1.0MM L=50MM WHITE SAME SIDE	PC	1.000	CN7 TO CN10	FAP071214	
..2		0040	3801-000000090	TUNER MODULE AM/FM ENG07821QF (EUROPE).	PC	1.000		CAP070087	
..2		0050	3801-000000220	TUNER MODULE KST-MT004MS1-6 AM/FM CE VERSION	PC	1.000			
..2		0060	4401-120009320	CD MECHANISM CMS-M93BGPJ (SAMSUNG, FORROHM SOLUTION)	PC	1.000		FAP070555	
..2		0070	3001-000100160	WIRE 1P UL1007 AWG#24 L=100MM BLACK	PC	1.000		FAP071140	
..2		0080	2712-081140000	FERRITE CORE: RP26X9.5X5G 100MHz>/=800HM.	PC	1.000		FAP071249	
..1		0030	8940-070400100	MECHANICAL SECTION OF MCM279//12	SET	1.000			
..2		0010	8941-070400100	PLASTIC PART OF MCM279//12	SET	1.000			
...	3	0010	5001-070400100	CABINET FRONT	PC	1.000			
...	3	0020	5506-061100100	LENS FRAME COSMETIC TOP_LEFT	PC	1.000		FAP071121	
...	3	0030	5506-061100200	LENS FRAME COSMETIC TOP_RIGHT	PC	1.000		FAP071122	
...	3	0040	5506-061100300	LENS FRAME COSMETIC BOTTOM_LEFT	PC	1.000		FAP071120	
...	3	0050	5506-061100400	LENS FRAME COSMETIC BOTTOM_RIGHT	PC	1.000		FAP071118	
...	3	0060	5503-070400100	LENS-SLIDE DOOR	PC	1.000			
...	3	0070	5002-070400100	CABINET REAR	PC	1.000			
...	3	0080	5903-070400100	CARRIER - SLIDE DOOR -R	PC	1.000			
...	3	0090	5903-070400200	CARRIER - SLIDE DOOR -L	PC	1.000			
...	3	0100	5705-070400100	RACK BAR	PC	1.000			
...	3	0110	5502-070400100	LENS-CD AMBI LIGHT GUIDE	PC	2.000			
...	3	0120	5408-061100200	BUTTON POWER	PC	1.000		FAP071130	
...	3	0130	5403-061100200	BUTTON SET FUNCTION-A	PC	1.000		FAP071077	
...	3	0140	5404-061100200	BUTTON SET FUNCTION-B	PC	1.000		FAP071081	
...	3	0150	5618-061100300	BRACKET PLAY BUTTON	PC	1.000		FAP071083	
...	3	0160	5417-061100100	BUTTON SET NAVIGATION	PC	1.000		FAP071087	
...	3	0170	5902-061100400	COVER POWER BUTTON	PC	1.000		FAP071080	
...	3	0180	5608-061100100	BRACKET CDM	PC	3.000		FAP071124	
...	3	0190	5629-061100100	BRACKET-FM TUNER MODULE	PC	1.000			
...	3	0220	5201-070400100	DOOR CD - SLIDE	PC	1.000			
...	3	0230	5201-070400200	DOOR CD - ROTATED	PC	1.000			
...	3	0240	5705-070400200	GEAR-ROTATED DOOR RACK	PC	1.000			
...	3	0250	5705-070400300	GEAR-SLIDE DOOR	PC	1.000			
...	3	0260	5101-070400100	CONTROL PANEL	PC	1.000			
...	3	0270	5904-070400100	COVER- ROTATED CD DOOR	PC	1.000			
...	3	0280	6307-070400100	BRACKET - GEAR HOLDER A	PC	1.000			
...	3	0290	6307-070400200	BRACKET - GEAR HOLDER B	PC	1.000			
...	3	0300	5618-070400100	BRACKET-RACK HOLDER A	PC	1.000			
...	3	0310	5618-070400200	BRACKET-RACK HOLDER B	PC	1.000			
...	3	0320	5913-070400100	FRAME-LCD CHROME	PC	1.000			
...	3	0340	5902-050700200	COVER PLAY BUTTON	PC	1.000		FA060025	
...	3	0350	5403-050700100	BUTTON FW/FF	PC	1.000		FA060015	
...	3	0360	5703-050700100	GEAR WHEEL A	PC	1.000		FA060011	
...	3	0370	5703-050700200	GEAR WHEEL B	PC	1.000		FA060007	
...	3	0380	5704-050700100	PULLEY SERVO MOTOR	PC	1.000		FA060012	
..2		0020	8942-070400100	METAL PART OF MCM279//12	SET	1.000			
...	3	0010	6802-061100100	STEEL FOR CABINET REAR.	PC	1.000			
...	3	0020	6600-070400100	HEATSINK	PC	1.000			
...	3	0030	6406-050700101	CUSHION CD MECHANISM A	PC	2.000		FA060144	
...	3	0040	6405-050700100	CD DAMPER (BLACK) 20DEGREE	PC	2.000		FA060277	
...	3	0045	6405-071100100	CD DAMPER (BLACK) 30DEGREE	PC	1.000			
...	3	0050	6404-061100100	RUBBER FOOT FOR FRAME-COSMETIC	PC	2.000		FAR071063	
...	3	0080	6818-070400100	SHAFT FOR MCM279	PC	1.000		FAP071253	

FACTORY PARTLIST

Level	Item	Component	Desc	Unit	Qty	Location	AppForm		
...	3	0090	6816-070400100	MAIN PCB SHIELDING FOR MCM-79	PC	1.000			
...	3	0100	6402-050700100	BELT MOTOR	PC	1.000		FA051544	
...	3	0110	6210-070400300	PC SHEET_IR	PC	1.000			
..	2	0030	8946-070400100	SCREW PART OF MCM279//12	SET	1.000			
...	3	0010	6011-230100100	SCREW, ST 3.0X10 PB	PC	11.000	6-CABINET REAR, 2-SPEAKER JACK, 3-FOR BRACKET CDM	FAP061541	
...	3	0020	6023-230100100	SCREW, M B B3X10B (TOYO:A023010002)	PC	3.000	HEATSINK FIXING	FA051216	
...	3	0030	6011-226060100	SCREW, ST 2.6X6 PB (BLACK)	PC	9.000	3-BRACKET-RACK HOLDER A&CABINET FRONT, 3-BRACKET-GEAR HOLDER A&CABINET FRONT, 3-BRACKET-GEAR HOLDER A&BRACKET-GEAR HOLDER B	FA040269F AP071085	
...	3	0040	6011-220080300	SCREW, ST P B 2X8 S A222008003	PC	20.000	13-FOR FRAME COSMETIC FIX, 5-FOR KEY-PCB FIX, 2-FOR CARRIER- SLIDE DOOR-L/R FIX	FAP061778	
...	3	0050	6012-226100110	SCREW, PITN M 2.6X10 PB(DIA.:12.0)	PC	4.000	2-REAR CABINET STEEL, 2-POWER PCB&REAR CABINET	FA050971	
...	3	0060	6021-226060100	SCREW, M2.6X6 PB	PC	2.000	FOR MOTO FIX	FAP060818	
...	3	0070	6023-230060100	SCREW, M B B3X6B	PC	1.000	FOR RADIO MODULE FIX	FA051219	
...	3	0080	6011-217040100	SCREW ST P B1.7X4 B	PC	9.000	4-FOR FRONT CABINET&CONTROL PANEL, 5-FOR DOOR-CD-ROTATED &COVER-ROTATED-CD DOOR	FAP060819 FAP061877	
...	3	0090	6011-220120200	SCREW ST P B2.0X12 N	PC	1.000	FOR BRACKET-RACK-HOLDER-BFIX	FA060181	
..	2	0040	8945-070400100	MINISTRANT PART OF MCM279//12	SET	1.000			
...	3	0010	7902-070400100	NITTO 500 DOUBLE SIDE TAPE 184x55MM	PC	1.000		FAP071252	
...	3	0020	8036-000000200	CABLE TIE	PC	4.000			
..	2	0050	8943-070400100	PACKING PART OF MCM279/12	SET	1.000			
...	3	0010	7103-030300100	LABEL DON'T TOUCH THE LENS	PC	1.000		FA040034, FAP070872	
...	3	0020	7107-030600100	LABEL (QC)	PC	1.000		FA040038	
...	3	0030	7111-070400100	LABEL TYPE PLATE 37X60MM (MCM279/12).	PC	1.000			
...	3	0040	7111-070400200	LABEL CARTON BOX 83x103MM (MCM279/12).	PC	1.000			
...	3	0050	7112-050700100	LABEL "UWAGA!	PC	1.000		FA060197	
...	3	0060	7112-050700200	LABEL "VIGYAZAT!	PC	1.000		FA060195	
...	3	0070	7112-050700300	LABEL "CHRANTE SE	PC	1.000		FA060193	
...	3	0080	7202-070400100	INSTRUCTION BOOK-11 LANGUAGE (MCM279/12).	PC	1.000			
...	3	0090	7202-070400200	INSTRUCTION BOOK-5 LANGUAGE (MCM279/12).	PC	1.000			
...	3	0100	7203-070400100	QUICK START GUIDE ENG+PRE LANGUAGE.	PC	1.000			
...	3	0110	7203-070400200	QUICK START GUIDE SPA+GER LANGUAGES.	PC	1.000			
...	3	0120	7203-070400300	QUICK START GUIDE DUT+ITA LANGUAGES.	PC	1.000			
...	3	0130	7201-041900200	GUARANTEE LEAFLET 10/07/2006 (9965 000 38986)	PC	1.000		FAP061187	
...	3	0140	7603-070400100	DISPLAY BOX W=A.	PC	1.000			
...	3	0150	7401-070400200	POLYFOAM TOP (MCM279).	PC	1.000			
...	3	0160	7402-070400100	POLYFOAM BOTTOM (MCM279)	PC	1.000			
...	3	0190	7903-061100100	EPE BAG L370xW330MM W/PE-LD04 MARK	PC	1.000			
...	3	0200	7502-050700100	POLYBAG FOR I/B 203x305x0.04MM W/PE-LD04.	PC	3.000	1-IFU, 1-ACCESSORIES	FA051563	
...	3	0210	7502-042200100	POLYBAG 9 x 14" W/WARNING & RECYCLE MARK	PC	1.000	1-QSG	FA050411	
...	3	0220	7905-030600200	POLYBAG FOR AM RING 155X203MM	PC	2.000	1-AM AND FM ANTENNA, 1-STAND	FA030070	
...	3	0230	7905-061100100	POLYBAG 110x130x0.04MM W/PE-LD04	PC	1.000	1-STAND		
...	3	0240	7907-042500100	ACETATE CLOTH ADHESIVE TAPE L95xW9MM	PC	1.000	STICK ON CD DOOR		
...	3	0250	7206-030800100	SLIP SHEET 1400X1250MM	PC	0.044		FA051273	
...	3	0260	7206-042500100	FITTING PALLET 46.125"X38.75" (3140 10638732)	PC	0.044		FA050791	
...	3	0270	7206-030500200	WRAP FILM	M	0.420			
..	1	0040	8944-070400200	ACCESSORIES OF MCM279//12	SET	1.000			
..	2	0005	2902-125007040	AC CORD VDE H03VVH2-F 0.75MM2 2C L=1.5MLP-21/LS-7 (2.5A 250V)	PC	1.000		CA050094	
..	2	0010	3009-001000100	FM ANT WIRE 75OHM L=1.0M BLACK W/STV8-IH	PC	1.000		FAP061702	
..	2	0020	4011-080700000	SWITCHING POWER ADAPTOR 19V/4A	PC	1.000			
..	2	0030	5926-060300100	AM LOOP ANT 18.1uH 8T	PC	1.000		FAP061474	
..	2	0040	8919-070400100	SPEAKER BOX FOR MCM279//00	PAA	1.000			
..	2	0050	1901-000004000	REMOTE CONTROL "PHILIPS" FOR MCM279	PC	1.000		FAP071163	
..	2	0060	8951-061100100	STAND PORTION OF MCM238/12	SET	1.000			
...	3	0010	5912-061100100	AND BASE	PC	1.000		FAP071088	
...	3	0030	6404-061100200	RUBBER FOOT FOR STAND BASE	PC	2.000		FAR071066	