Docking speaker

DS8550/all

Service Service Service

Service Manual

PureDigital Bluetooth® Made for iPod iPhone iPad

TABLE OF CONTENTS

Page

**CLASS 1
LASER PRODUCT**

3141 785 35454

Version 1.4

PHILIPS

TECHNICAL SPECIFICATION

iPad compatibility
• Compatible with: iPad

iPhone compatibility
• Compatible with: iPhone, iPhone 3G, iPhone 3GS, iPhone 4

iPod compatibility
• Compatible with: iPod, iPod mini, iPod with color display, iPod 5th Generation, iPod nano 2nd Generation, iPod nano 3rd Generation, iPod classic, iPod touch, iPod nano 1st Generation, iPod nano 4th Generation, iPod nano 5th Generation, iPod touch 2nd Generation, iPod touch 2nd Gen 8/16/32GB

iPhone/ iPod APP
• Free download from App store
• App name: Fidelio+
• Compatibility: Fidelio docking speaker
• Playback: Album/track navigation, Playback controls
• Sound settings: 5 band equalizer, DBB, DSC-Flat,Pop,Rock,Jazz,Classic
• Clock: Analog display, Digital display
• Alarm: Multiple alarms, Sleep timer, Wake up to music, Wake up to nature sounds, Wake up to photo
• Battery status: Speaker battery status

Connectivity
• Bluetooth
• Bluetooth profiles: A2DP, AVRCP
• Bluetooth range: Line of sight, 10M or 30FT
• Aux in

Audio Playback
• Cradle playback mode: Charging iPhone, Charging iPod, Play and Pause, Next and Previous track

Sound
• Output power (RMS): 2x15 W
• Sound System: Stereo
• Loudspeaker types: Bass Reflex Speaker System
• Volume Control: Volume Control up/down

Loudspeakers
• Speaker Drivers: 2 x 3" full range woofers

Convenience
• Backlight
• Remote Control: Multi-functional

Power
• Power supply: 100-240VAC, 50/60Hz, Battery
• Battery Type: Built-in battery
• Operating time on battery: 5 hr

Accessories
• Included accessories: AC Power Cord, Remote Control, 3.5mm stereo line in cable, Warranty certificate, World Wide Warranty leaflet, Quick install guide, User Manual

Dimensions
• Product dimensions (W x H x D): 421 x 158 x 139 mm
• Packaging dimensions (W x H x D): 484 x 220 x 158 mm

VERSION VARIATION

Board in used: / Type /Versions: Service policy	DS8550							
	/10 (APAC)	/10 (EUROPE)		/93 (APAC)	/79 (APAC)		/37 (LATAM)	
Main BOARD	C/M	C		C/M	C/M		C/M	
key BOARD	C	C		C/M	C/M		C/M	
Jack BOARD	C	C		C/M	C/M		C	
Ipod BOARD	C	C		C/M	C/M		C	
IR BOARD	C	C		C/M	C/M			

Features / Type /Versions: Feature diffrence	DS8550							
	/05	/05		/93			/37	
RDS								
VOLTAGE SELECTOR								
ECO STANDBY - DARK								

* TIPS : C -- Component Lever Repair.
       M -- Module Lever Repair
      √ -- Used
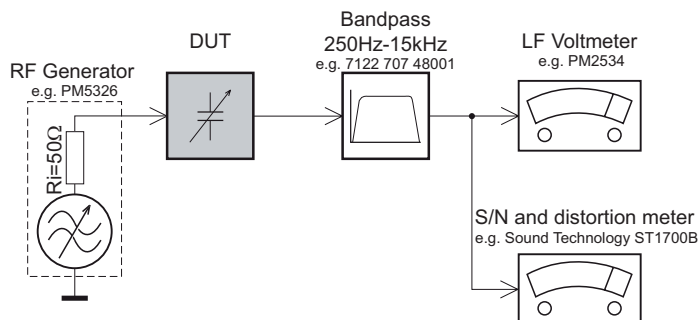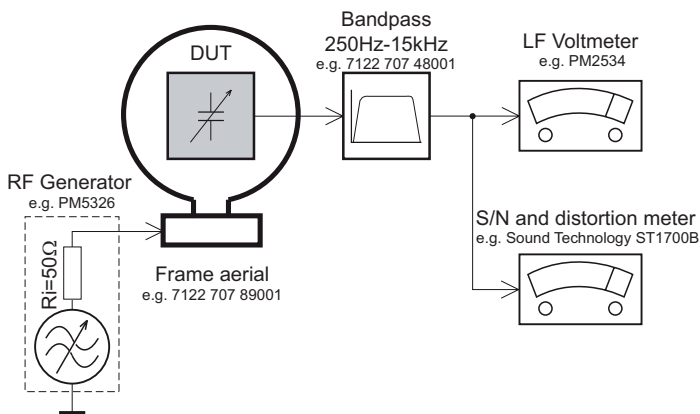
MEASUREMENT SETUP

Tuner FM

Use a bandpass filter to eliminate hum (50Hz, 100Hz) and disturbance from the pilottone (19kHz, 38kHz).
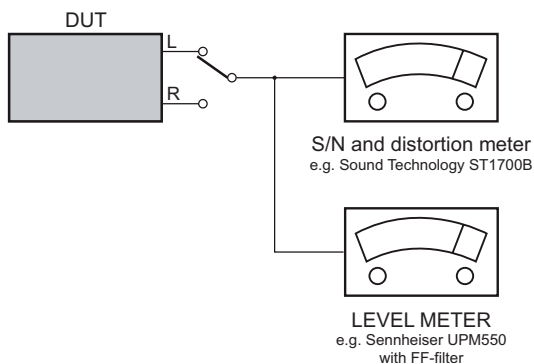
Tuner AM (MW,LW)

To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday´s cage.
Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).
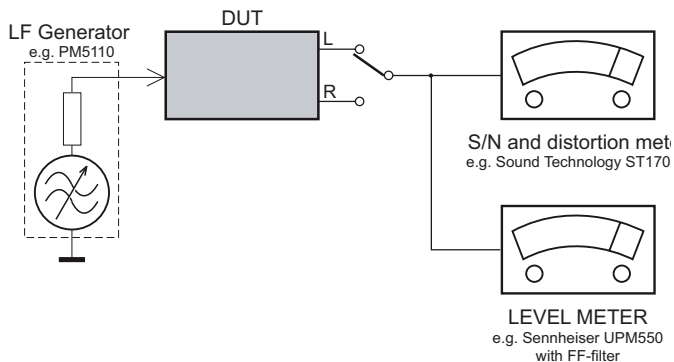
CD

Use Audio Signal Disc   SBC429   4822 397 30184
(replaces test disc 3)

Recorder

Use Universal Test Cassette **CrO2**   SBC419   4822 397 30069
  or Universal Test Cassette **Fe**   SBC420   4822 397 30071

SERVICE AIDS

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.

2.1 SAFETY INSTRUCTIONS

Battery Handling Guideline

Since the battery is packed in soft package, to ensure its better performance, it's very important to carefully handle the battery

2.1.1 Soft Aluminium foil

The soft aluminum packing foil is very easily damaged by sharp edge parts such as Ni-tabs, pins and needles.

- Don't strike battery with any sharp edge parts
- Trim your nail or wear glove before taking battery
- Clean worktable to make sure no any sharp particle

2.1.2 Sealed edge

Sealing edge is very flimsy

- Don't bend or fold sealing edge

2.1.3 Folding edge

The folding edge is form in battery process and passed all hermetic test.

- Don't open or deform folding edge

2.1.4 Tabs

The battery tabs are not so stubborn especially for aluminum tab.

- Don't bend tab

2.1.5 Mechanical shock

- Don't Fall, hit, bend battery body

2.1.6 Short

Short terminals of battery is strictly prohibited, it may damage battery.

Caution

Danger of explosion if battery is incorrectly replaced.Replace only with the same or equivalent type.

BLOCK DIAGRAM
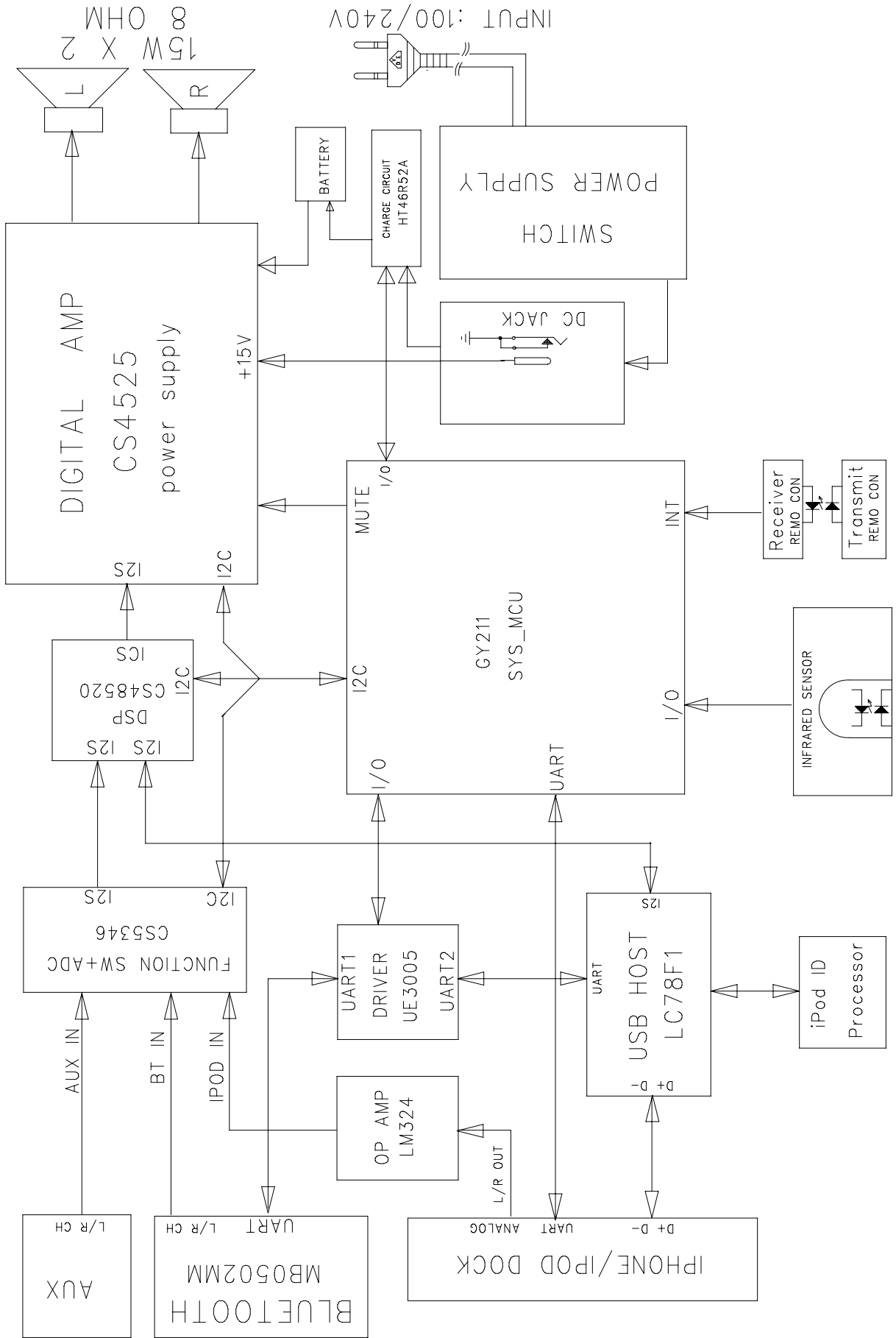
WIRING DIAGRAM
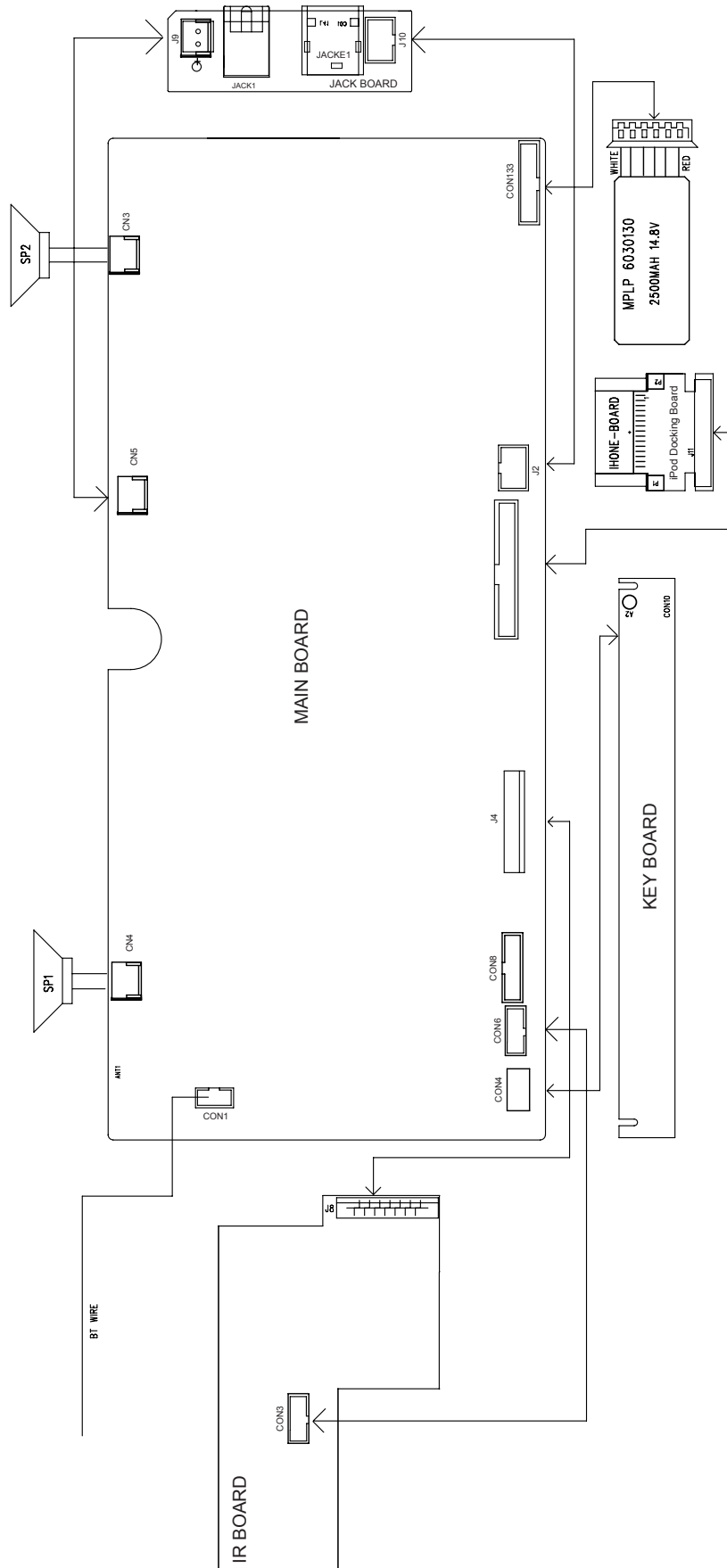
DISASSEMBLY DIAGRAM

Dismantling of the Bottom Cabinet

1) Remove the speaker grill as indicated.

2) Remove 11 screws A as indicated to loosen the Bottom Cabinet.

SPEAKER GRILL

A

BOTTOM CAB.

FRONT CAB.
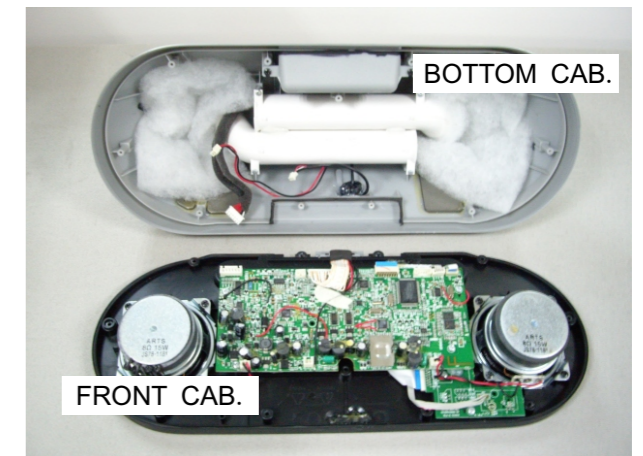
Dismantling of the PCB Board.

1）Remove 4 screws B as indicated to loosen the Main Board.

2）Remove 2 screws C as indicated to loosen the IR Board.

3）Remove 4 screws D as indicated to loosen the Key Board.

B

C

D
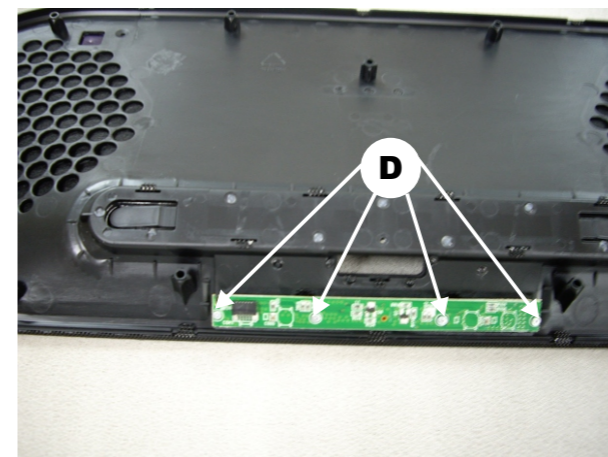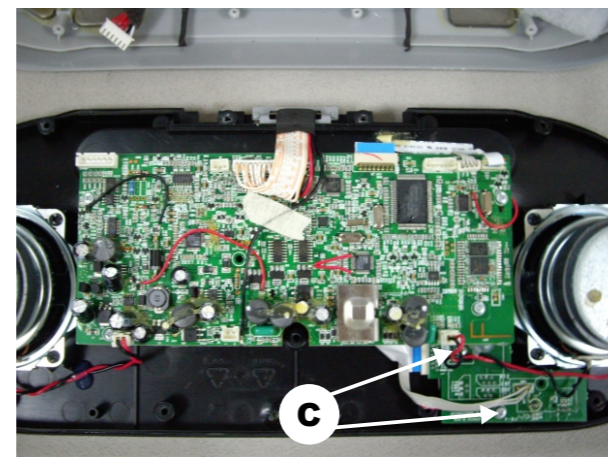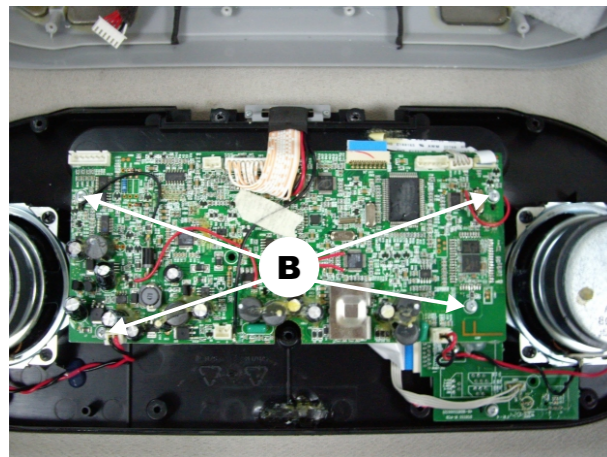
CIRCUIT DIAGRAM - MAIN BOARD
MCU PART

CIRCUIT DIAGRAM - MAIN BOARD
iPod DOCKING AND BLUETOOTH PART
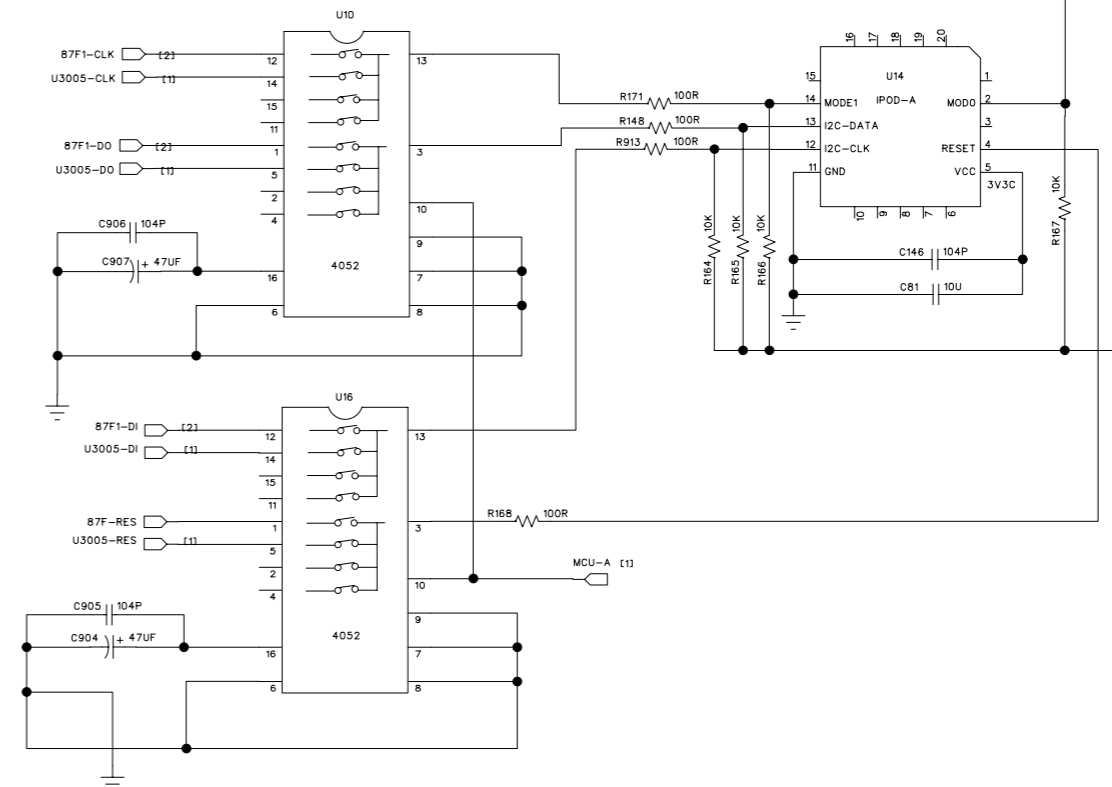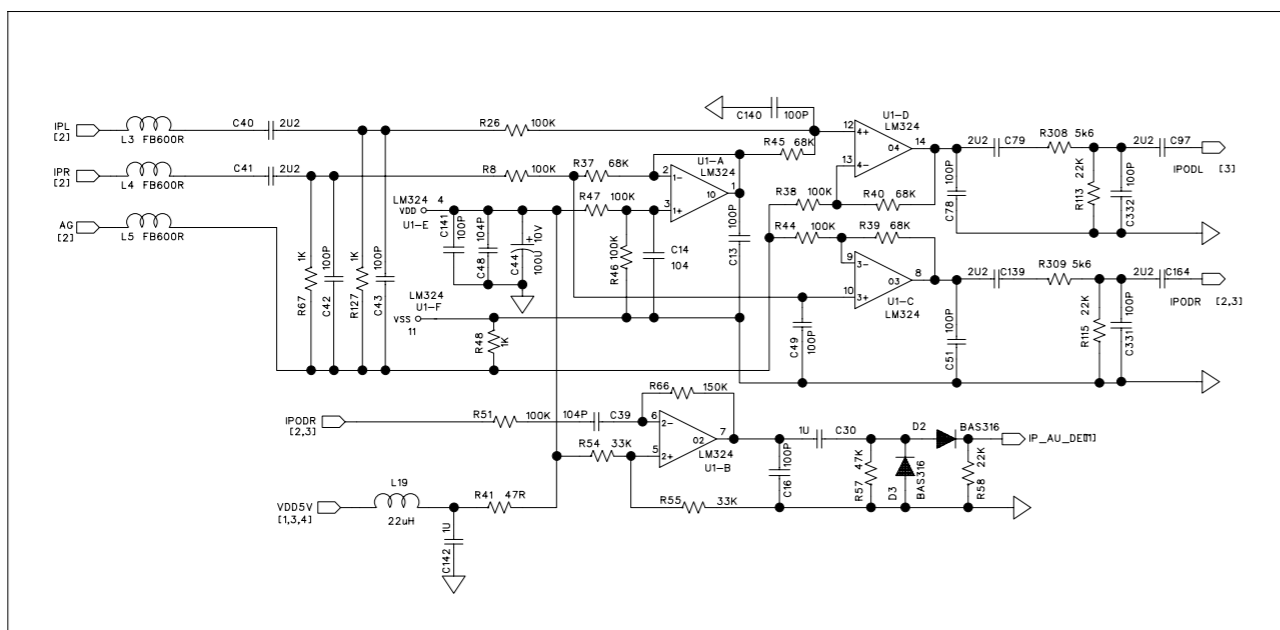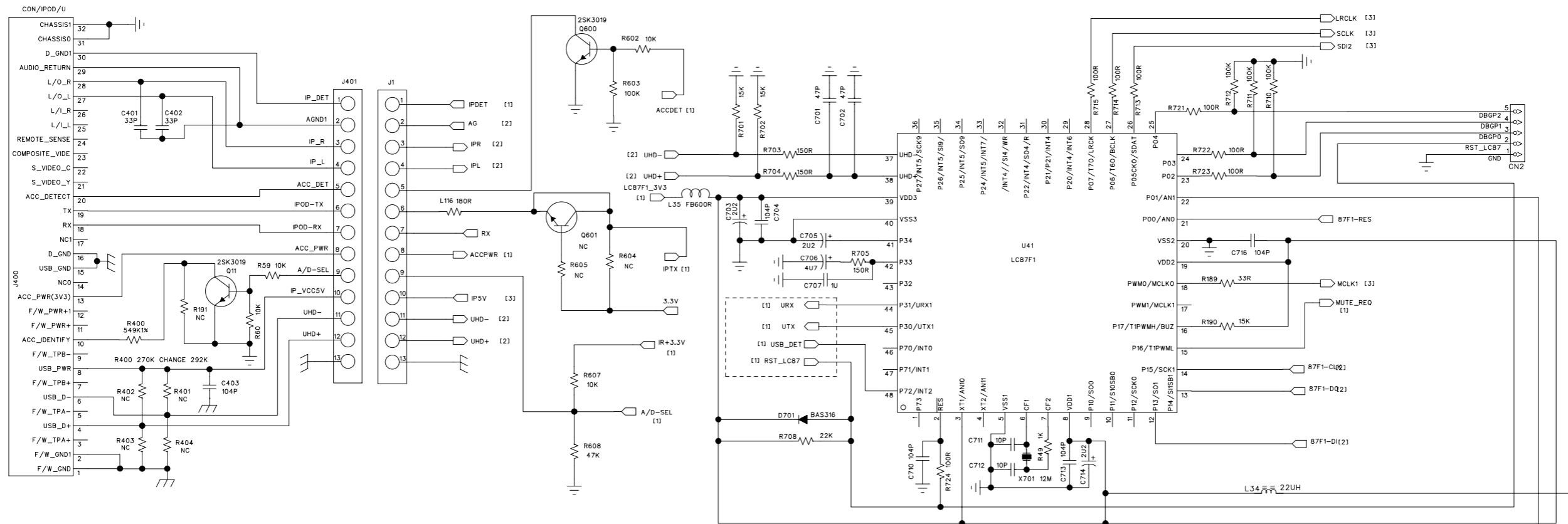
CIRCUIT DIAGRAM - MAIN BOARD
POWER AMP
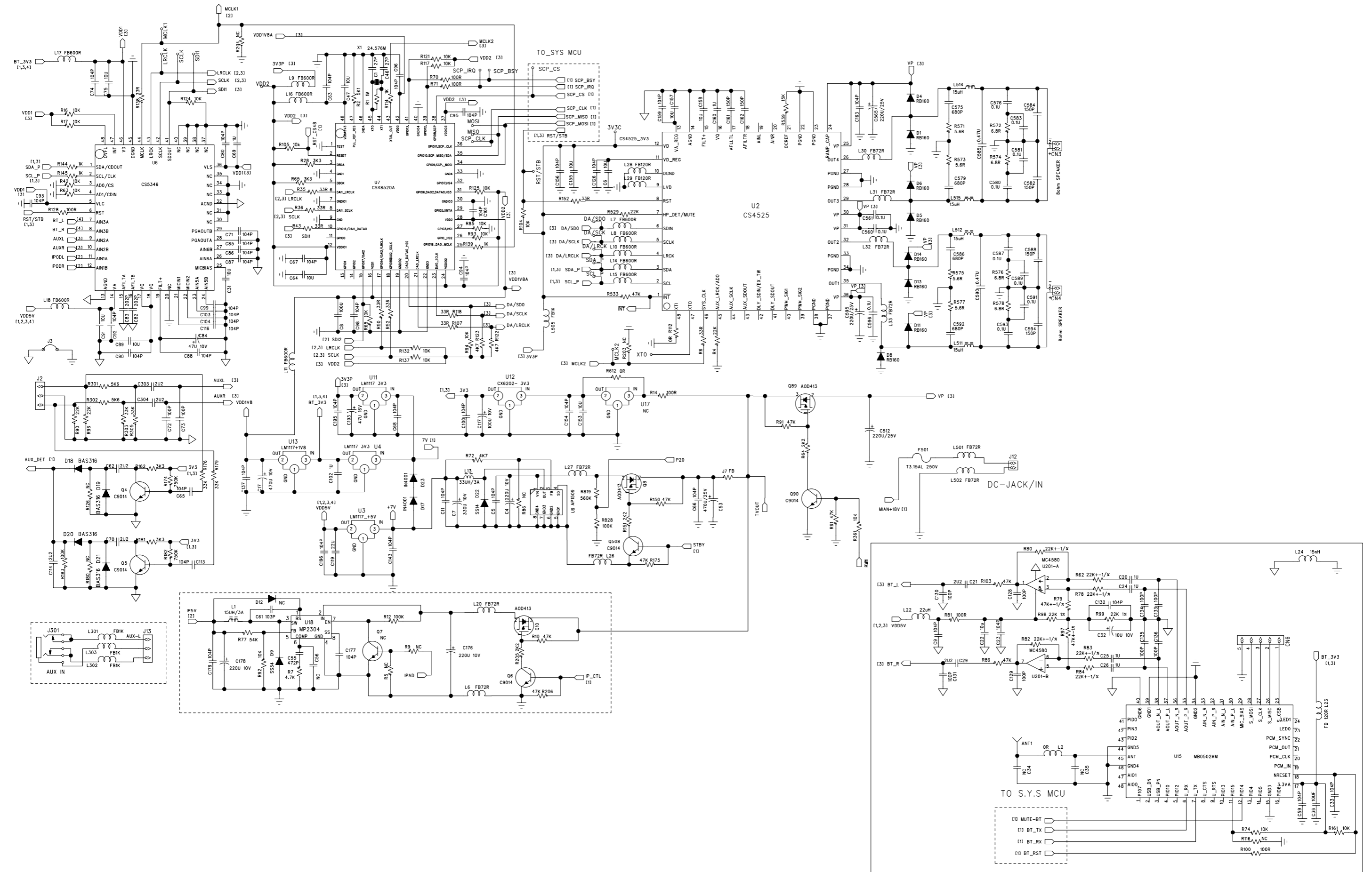
CIRCUIT DIAGRAM - MAIN BOARD
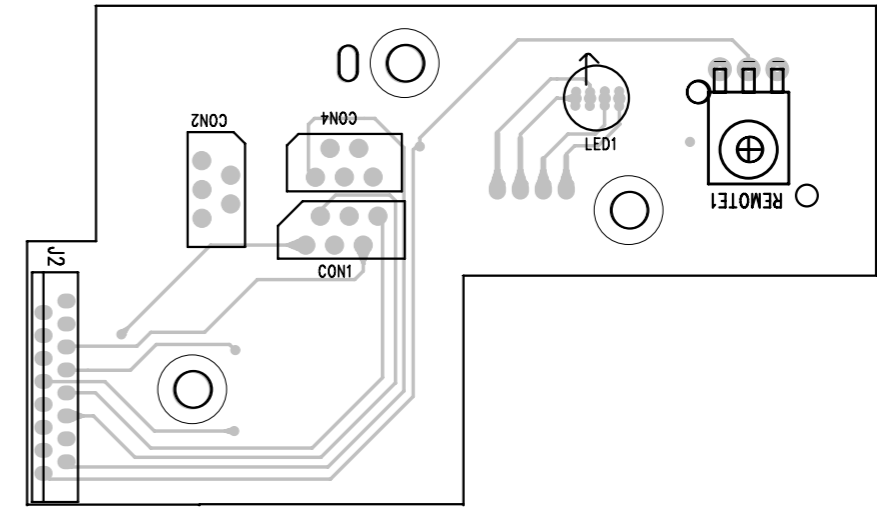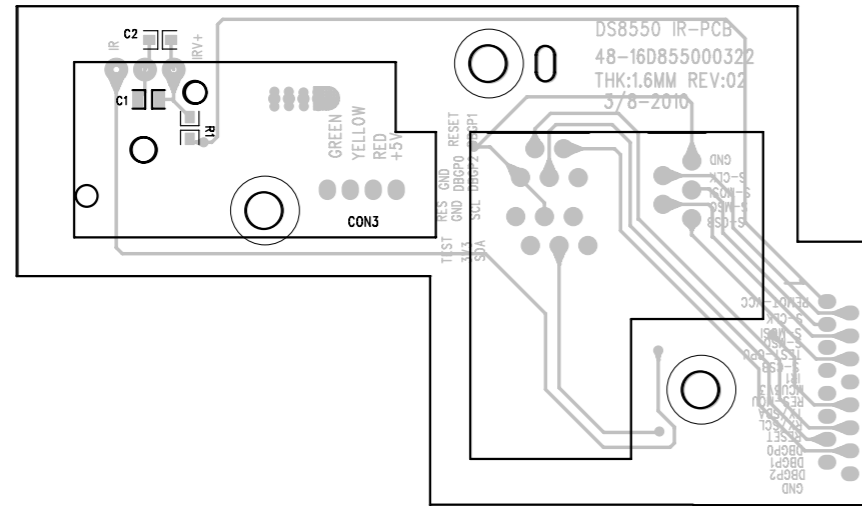## CHARGE PART
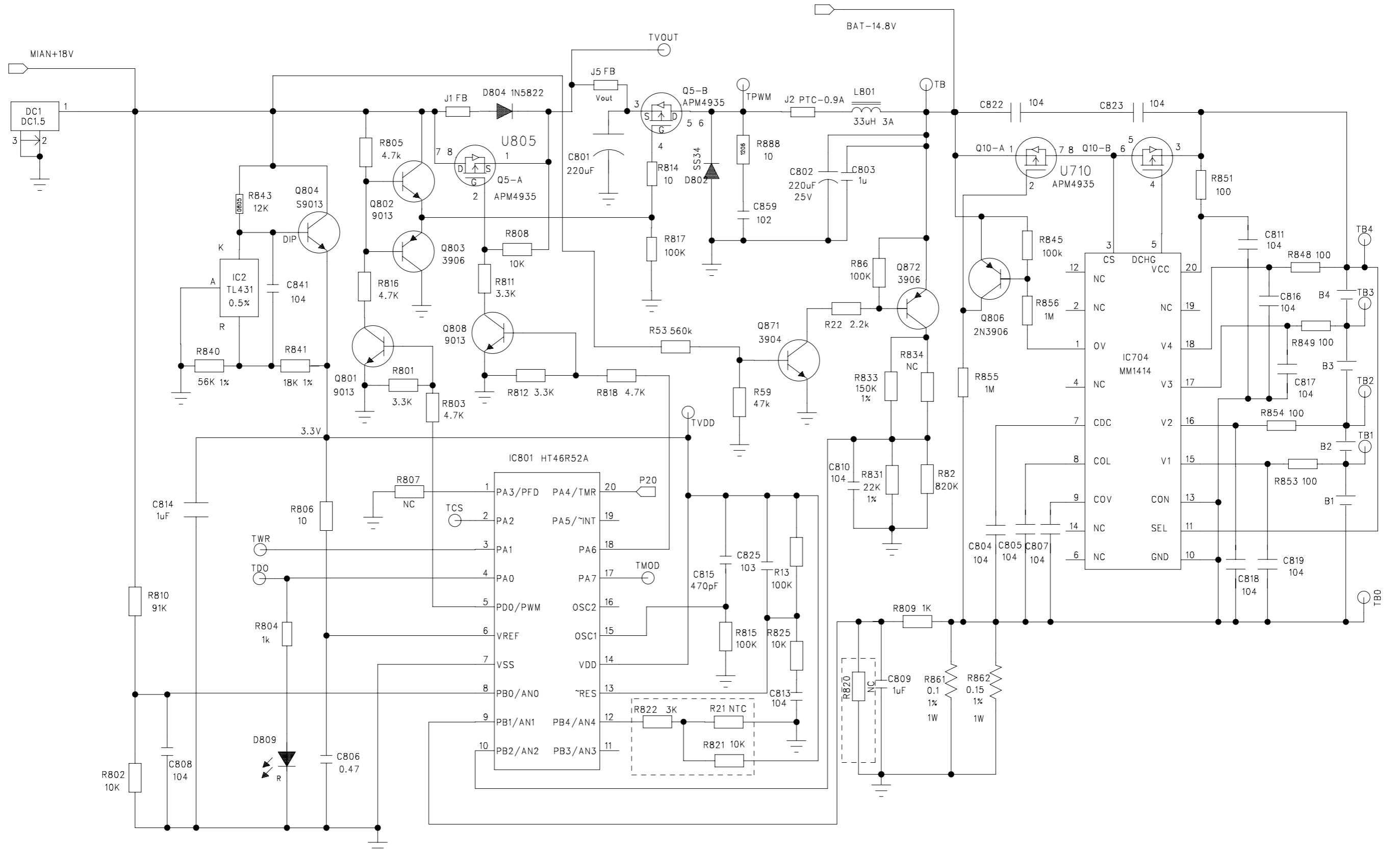
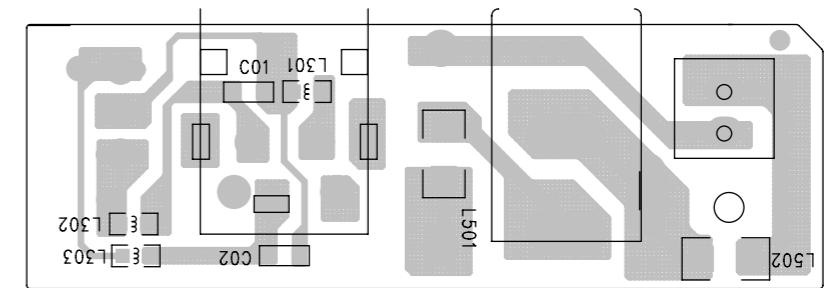# PCB LAYOUT - MAIN BOARD
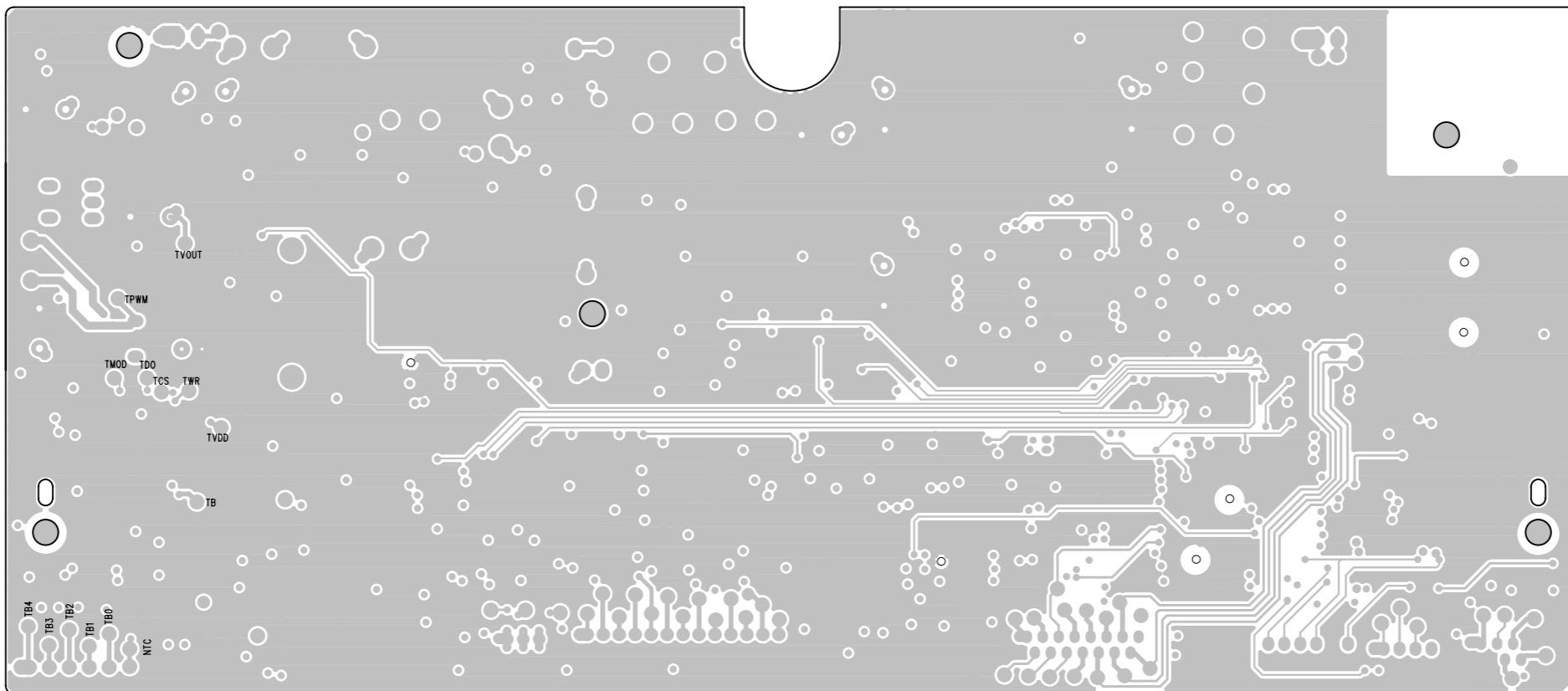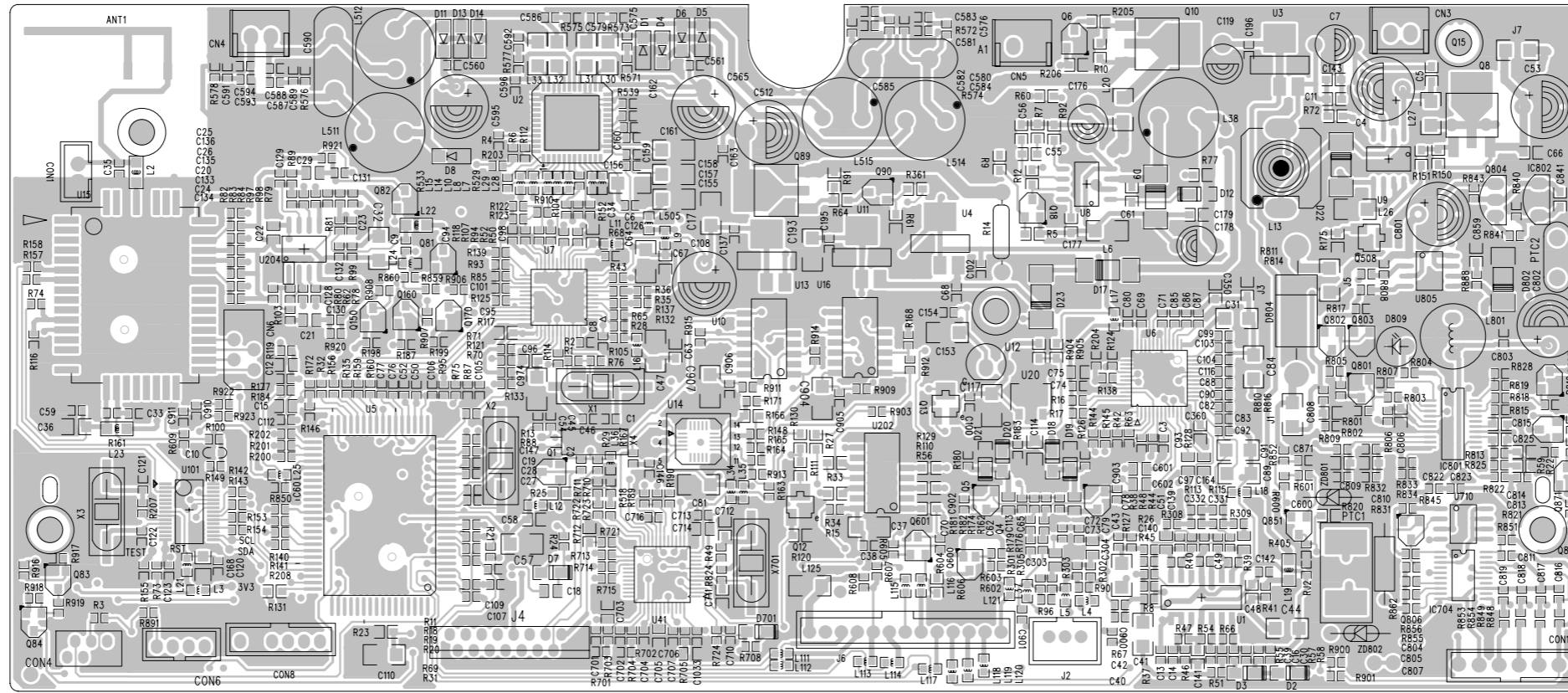
PCB LAYOUT - KEY BOARD
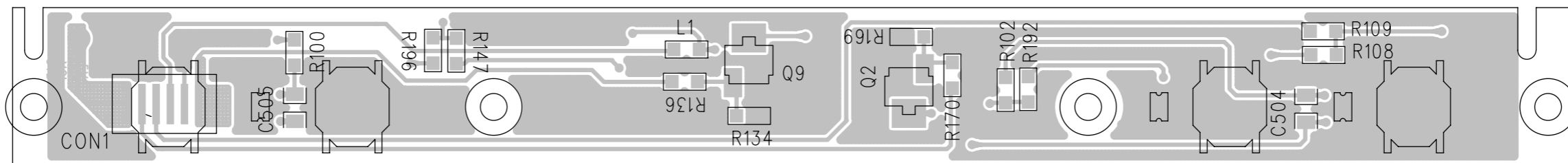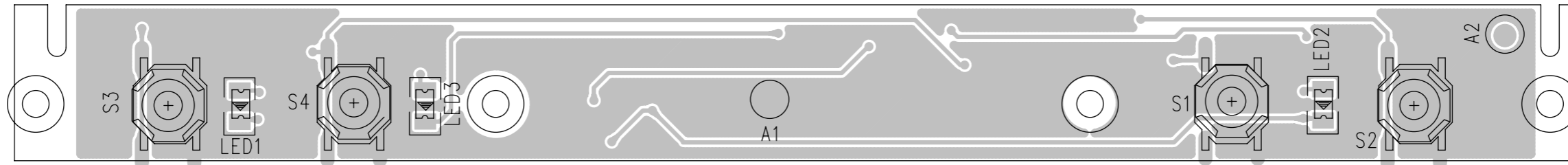
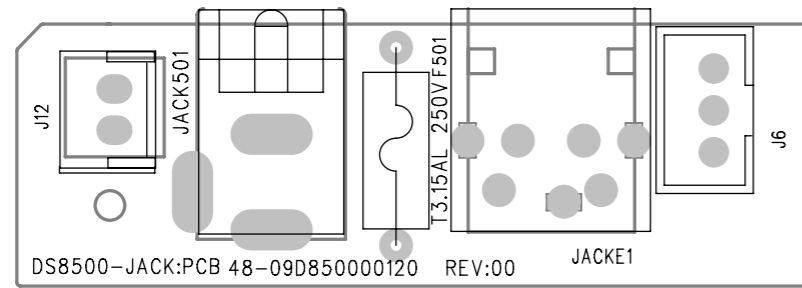# PCB LAYOUT - IR BOARD/iPod DOCKING BOARD/JACK BOARD

IR BOARD
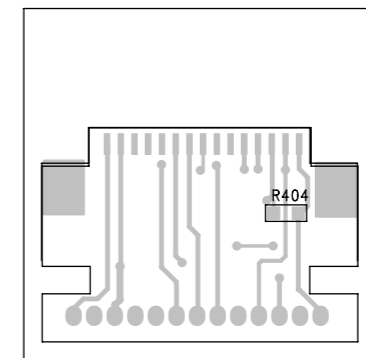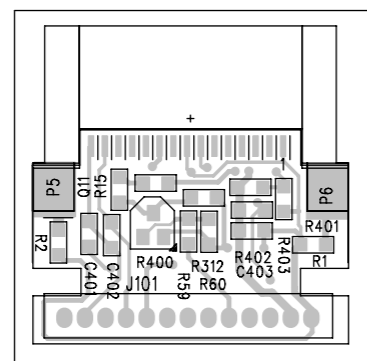

JACK BOARD

iPod DOCKING BOARD

EXPLODED VIEW