



Service Manual

JBL FLIP 3 (S/N starting with TL) Bluetooth Portable Speaker



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Technical Specifications

1 Audio Section

1.1.1 Speaker Output

Description	Specification
Rated Output Power	2 x 8W +-10% (Measure before power limiter at 1% THD). Please refer to Acoustic Design Specification.
Input Sensitivity	Aux : 370mV +/- 10% Wireless input:-9dBfs +/-1dB
Input Overload	Aux : 1V rms BT: 0dBFS
Auto Turn On Input Sensitivity	@1KHz, Typical : 2mV Limit : 4mV @100Hz Typical : 10mV Limit :15mV
Frequency Response (Output Power)	Aux_in : 40Hz to 20KHz +/- 1dB (EQ setting is disable) BT: 20Hz to 19KHz +/- 1dB (EQ setting is disable)
Frequency Response (Output Power) with EQ setting	TBC
THD+N at 1W	<0.5%@100hz/7khz, else<0.3%
THD+N at Rated Output Power	<1%
Signal-to-Noise ratio at Rated Output Power	80dB (A-Weighted)
Channel Separation	45dB @100Hz 50dB @1KHz 45dB @10KHz
Channel Crosstalk	80dB @100Hz 75dB @1KHz 70dB @10KHz
Inter Channel Gain Difference	<0.5dB
Residual Noise	80nW

1.1.2 Microphone

Short Circuit Protection at Output Stage	The amplifier should be protected so that no functional failure occurs when it is operated with a short across its output stage for 2 minutes. The amplifier should recover after removing the short condition.
DC Offset Protection	The amplifier with output power of higher than 50W per channel must ensure that no DC is available at its output in normal mode as well as abnormal/faulty condition mode.
Thermal Protection	There should not be any breakdown or activation of any protection circuit during the entire thermal profile test. Refers to the Thermal Profile test stated in Reliability Test Plan for Multimedia Powered Speaker System.
Output Power Duration	<p>FTC requirement: Warm-up or preconditioning period at 1/8 power for 1 hour, followed by 5 minutes of continuous Rated Output Power (ROP). Channels in the same frequency range are tested at ROP. Subwoofer is tested separately.</p> <p>IEC requirement : Output power distortion limited of 60 sec Short-term maximum output power of 1 sec Long-term maximum output power of 1 minutes Temperature-limited output power infinitely</p>

1.2 USB Section

Reference : USB-IF USB 2.0 Electrical Test Specification Version 1.03 dated January, 2005

1.3 Bluetooth Section

1.3.1 General

Description	Specification
Bluetooth Standard	Version 4.1
Frequency Band	2.402 – 2.480 GHz
Host Interface	UART
Profile Supported	HFP (Audio Gateway and Handsfree) A2DP (Advanced Audio Distribution Profile) AVRCP (Audio/Video Remote Control Profile) Refer SRD
Audio Codec	SBC (Subband Codec)
Data Rate	2.1Mbps (over the air) 300Kbps (over UART)
Antenna	External
Certification	CE, FCC, BQE

1.3.2 Transmitter Performance @BDR Mode

Description	Specification
Maximum Transmit Power @ antenna connector	0 ~ 4dBm(class II)
Power Control	Maximum Power Step ≤ 8 dB Minimum Power Step ≥ 2 dB
Initial Carrier Frequency Shift	± 75 KHz
Carrier Drift <ul style="list-style-type: none"> - Drift Rate - Drift (Single Slot Packet) - Drift (Three Slot Packet) - Drift (Five Slot Packet) 	± 20 KHz/50us ± 25 KHz ± 40 KHz ± 40 KHz
Modulation Characteristic <ul style="list-style-type: none"> - F1avg - F2 Max Pass rate - F1/F2 Ratio 	140KHz – 175KHz ≥ 115 KHz ≥ 0.8

1.3.3 Receiver Performance

Description	Specification
Single Slot Sensitivity @ $\leq 0.1\%$ BER	≤ -85 dBm
Multiple Slot Sensitivity @ $\leq 0.1\%$ BER	≤ -85 dBm
Maximum Input Level @ $\leq 0.1\%$ BER	≥ -20 dBm

1.3.4 Transmitter Performance @EDR Mode

Description	Specification
Relative transmit power @ antenna connector	-2 to 1 dBm
EDR Carrier Frequency Stability and Modulation Accuracy	$ \omega_0 < 10\text{KHz}$ $ \omega_i < 75\text{KHz}$ $ \omega_0 + \omega_i < 75\text{KHz}$ RMS DEVM < 20% 99% DEVM < 30% Peak DEVM < 35%
EDR differential phase encoding	>= 99%

1.3.5 Antenna Performance

Description	Specification
Antenna VSWR	Typical : 1.5 Limit : 1.7
Antenna Return Loss	Typical: -14dB Limit :-12dB
Antenna Radiation Efficiency	>= 40%

1.4 Hands free section

1.4.1 Test equipment

1.4.2 Audio Performance

Description	Specification
Send Loudness Rating (SLR)	Typical : 13dB Limit : +/- 4dB
Receive Loudness Rating (RLR),Max	>-13dB
Receive Loudness Rating (RLR),Normal	Typical : 2dB Limit : +/- 4dB
Weighted Terminal Coupling Loss (TCLw), volume is set at Max	40dB
Weighted Terminal Coupling Loss (TCLw), volume is set at normal	47dB

1.5 Battery Section

1.5.1 General Specification

Description	Specification	Standard and Method of Measurement
Typical Capacity	3000mAh	
Charge Voltage	4.2V	
Output Voltage	Typical : 3.7V Limit : 4.2V	No Load Condition
Cut Off Voltage	Typical : 3.0V Limit : 2.8V	
Standard Charging Method	0.5C Constant current charge to 4.2V (+/- 0.05V), then constant voltage 4.2V charge till charge current decline to $\leq 0.05C$	
Charging Time	3 hour (Standard Charging)	
Maximum Charge Current	1.0C	
Standard Discharge Method	Discharge current of 0.5C with 3.0V cut-off after standard charging.	
Maximum Discharge Current	2.0C	
Overcharge Current Protection	12A	
Cycle Life	Typical : 80% of initial capacity Limit : 75% of initial capacity	Continuous standard charge and discharge for 500 cycles. The capacity is measured at the end of 500 cycles
Capacity Retention	Typical : 90% of initial capacity Limit : 85% of initial capacity	Fully charge the battery at 23 +/-5°C, then stored it at an ambient temperature for 60 days. Measured the capacity after 60 days storage with 0.5C discharge at 23 +/-5°C as retention capacity.
Continuous Charge Test	No leakage, no visible evidence of electrolyte loss, no explosion and no fire.	The battery discharged at 0.5C 23 +/-5°C, then fully charged and held at the specified end of charge voltage for total period of 30 days.
Over Charging Discharging	No leakage, no visible evidence of electrolyte loss, no explosion and no fire.	The battery fully charged at 0.5C 23 +/-5°C, discharge the battery at constant 0.5C, until battery circuit terminates discharge or at 0V, then charge the battery with 0.5C until battery circuitry terminates charge or at 4.2V. Repeat the cycle for 30 times.
Short Circuit	No explosion, no fire, maximum temperature of battery surface should not exceed 150°C	The battery to be fully charged with standard charging condition, and short the positive and negative terminal with wire resistance = 30 mOhm.

1.5.2 Battery Charging Time

System at Power off mode, charging time is less than 3. Hour using Harman 5V/2.3A adaptor.

1.5.3 Battery power off current

System at power off mode, battery current is less than 100uA

1.5.4 Battery Playtime

Test Audio Signals:

- 3 pre-selected MP3 tracks

Requirements:

Estimate Playtime > 8 hours for Music Playback

Test Condition (Ambient Temperature 23 +/-5 degree)

1. Insert fresh and fully charged Li-Poly cells into the DUT. Connected a multi-meter at the battery terminals to measure its voltage.
2. Set the DUT to **Bluetooth** Mode. Use iPhone as the music source.
3. Set the DUT to maximum volume and playback a 1 KHz 0dB music track through the iPhone. Record the Rated Output Power (ROP).
4. Adjust the volume step of the iPhone until the audio output of the DUT is ¼ of ROP. Record the volume step on the iPhone.
5. Set the iPhone's volume to the volume step as recorded in step 4. Playback 3 pre-selected MP3 track in repeat play mode. Record the start time.
6. Measure the battery voltage every 5 to 10 minutes interval. When audio is inaudible, record the end time. Compute the battery playtime for 3 pre-selected MP3 track.

Note, please don't adjust iPhone's volume during set up and testing since that will change the DUT's volume by AVRCP.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, or the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
15. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
16. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.
17. The mains plug of the power supply cord shall remain readily operable.
18. Do not expose batteries to excessive heat such as sunshine, fire or the like.



For Products That Transmit and Receive RF Energy:

FCC Regulations (USA Only)

FCC Information For Users

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference; and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radio and Television Interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and then on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Increase the separation between the equipment and receiver.
- Connect the equipment to a different outlet so that the equipment and receiver are on different branch circuits.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE: Changes or modifications not expressly approved by Harman could void the user's authority to operate the equipment.

IC Statement and Warning (Canada Only)

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

For Canadian Model

This Class B digital apparatus complies with Canadian ICES-003.

Modèle pour les Canadien

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

For Products with Radio Receivers That Can Use an External Antenna:

CATV or Antenna Grounding

If an outside antenna or cable system is connected to this product, be certain that it is grounded so as to provide some protection against voltage surges and static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements of the grounding electrode.

Note to CATV System Installer:

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

For CD/DVD/Blu-ray Disc™ Players:

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN.



THE LIGHTNING FLASH WITH AN ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE PRODUCT.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

Caution:

This product uses a laser system. To prevent direct exposure to the laser beam, do not open the cabinet enclosure or defeat any of the safety mechanisms provided for your protection. DO NOT STARE INTO THE LASER BEAM. To ensure proper use of this product, please read the owner's manual carefully and retain it for future use. Should the unit require maintenance or repair, please contact your local Harman Kardon service center. Refer servicing to qualified personnel only.

For Products That Include Batteries:



Instructions for Users on Removal and Disposal of Used Batteries.

CAUTION

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

Alkaline batteries are considered nonhazardous. Rechargeable batteries (i.e., nickel cadmium, nickel metal-hydride, lithium and lithium-ion) are considered hazardous household materials and may pose an unnecessary health and safety risk.

In the European Union and other locations, it is illegal to dispose of any battery with household trash. All batteries must be disposed of in an environmentally sound manner. Contact your local waste management officials for information regarding the environmentally sound collection, recycling and disposal of used batteries.

To remove the batteries from your equipment or remote control, reverse the procedure described for inserting batteries in the owner's manual.

For products with a built-in battery that lasts for the lifetime of the product, removal may not be possible for the user. In this case, recycling or recovery centers handle the dismantling of the product and the removal of the battery. If, for any reason, it becomes necessary to replace such a battery, this procedure must be performed by authorized service centers.

ELECTROSTATICALLY SENSITIVE (ES) DEVICES



Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor "chip" components.

The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
 2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge build-up or exposure of the assembly.
 3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
 4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
 5. Do not use freon-propelled chemicals. These can generate electrical change sufficient to damage ES devices.
 6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material.)
 7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
- CAUTION :** Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES devices.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing.

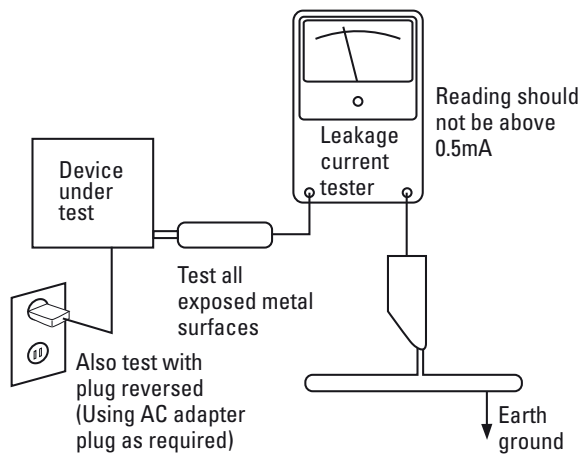
Components identified with the IEC symbol  in the parts list are of special significance to safety. When replacing a component identified with , use only the replacement parts designated, or parts with the same ratings or resistance, wattage, or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

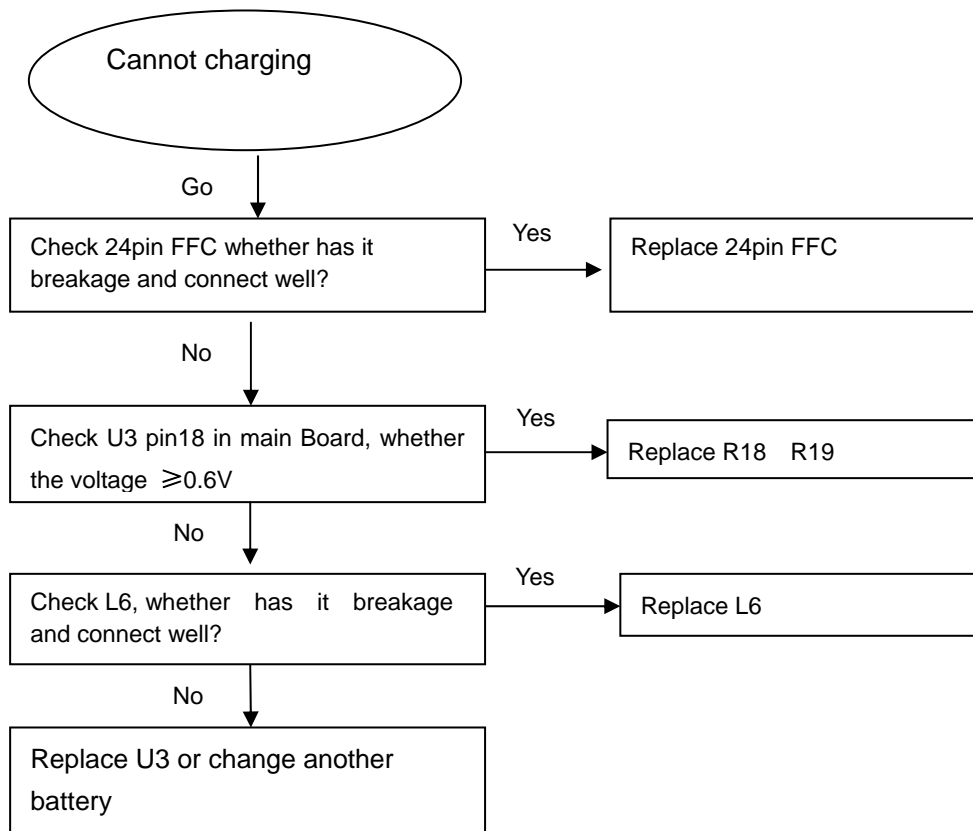
LEAKAGE CURRENT CHECK

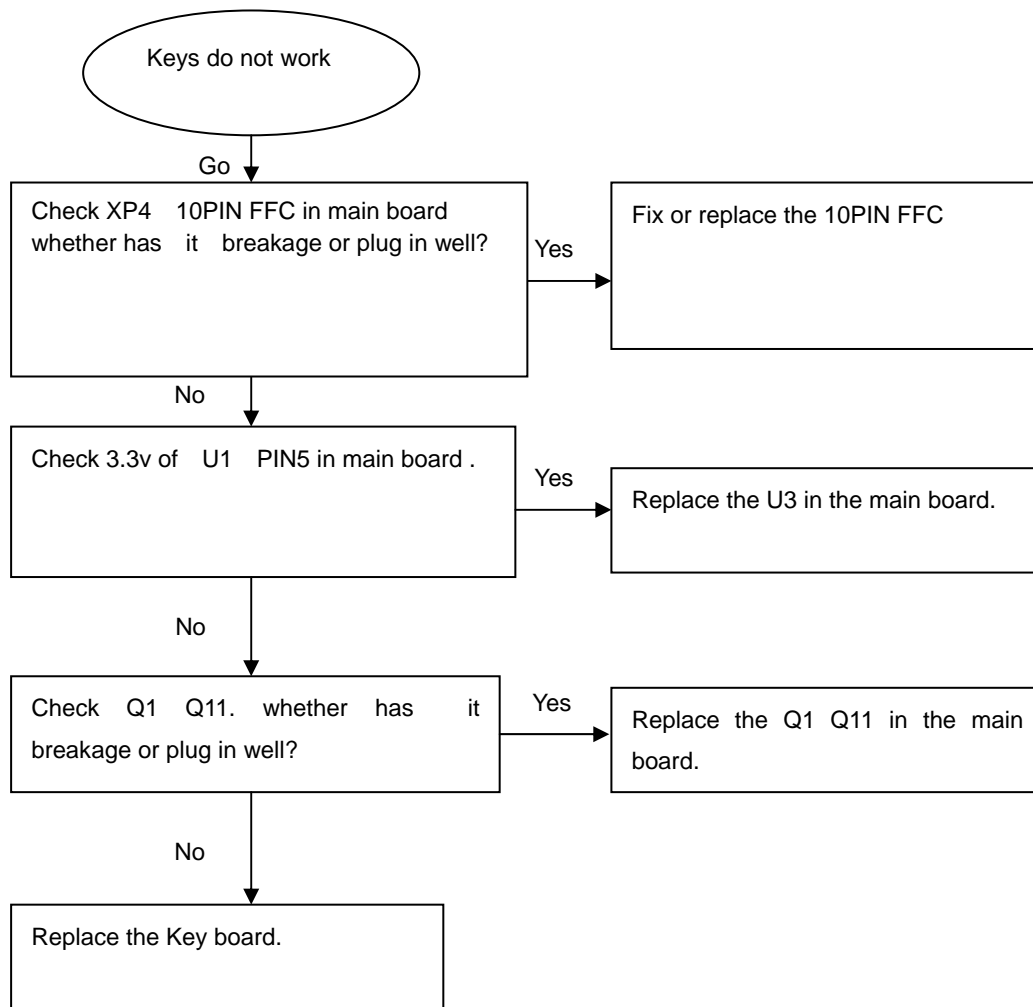
Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.

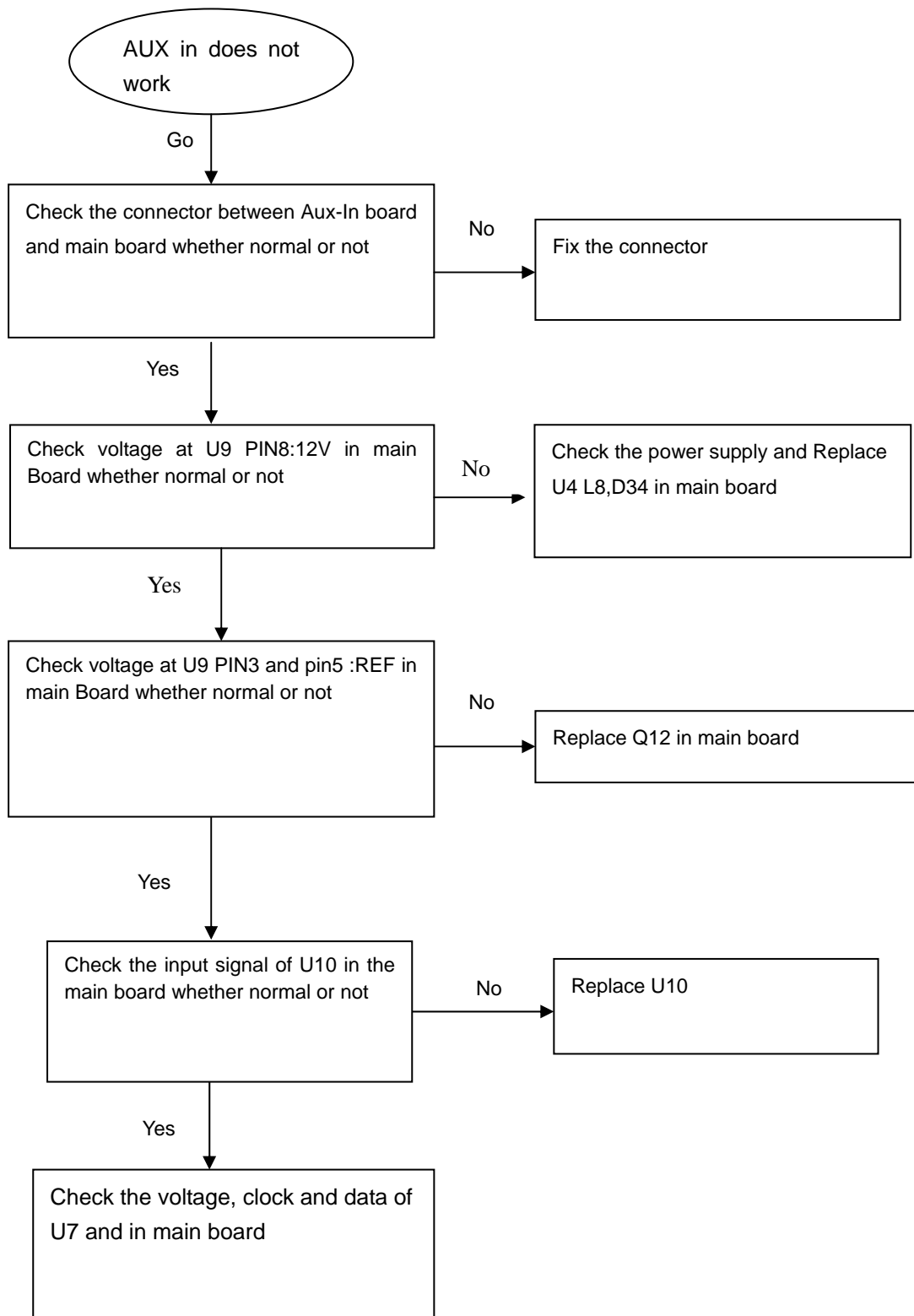


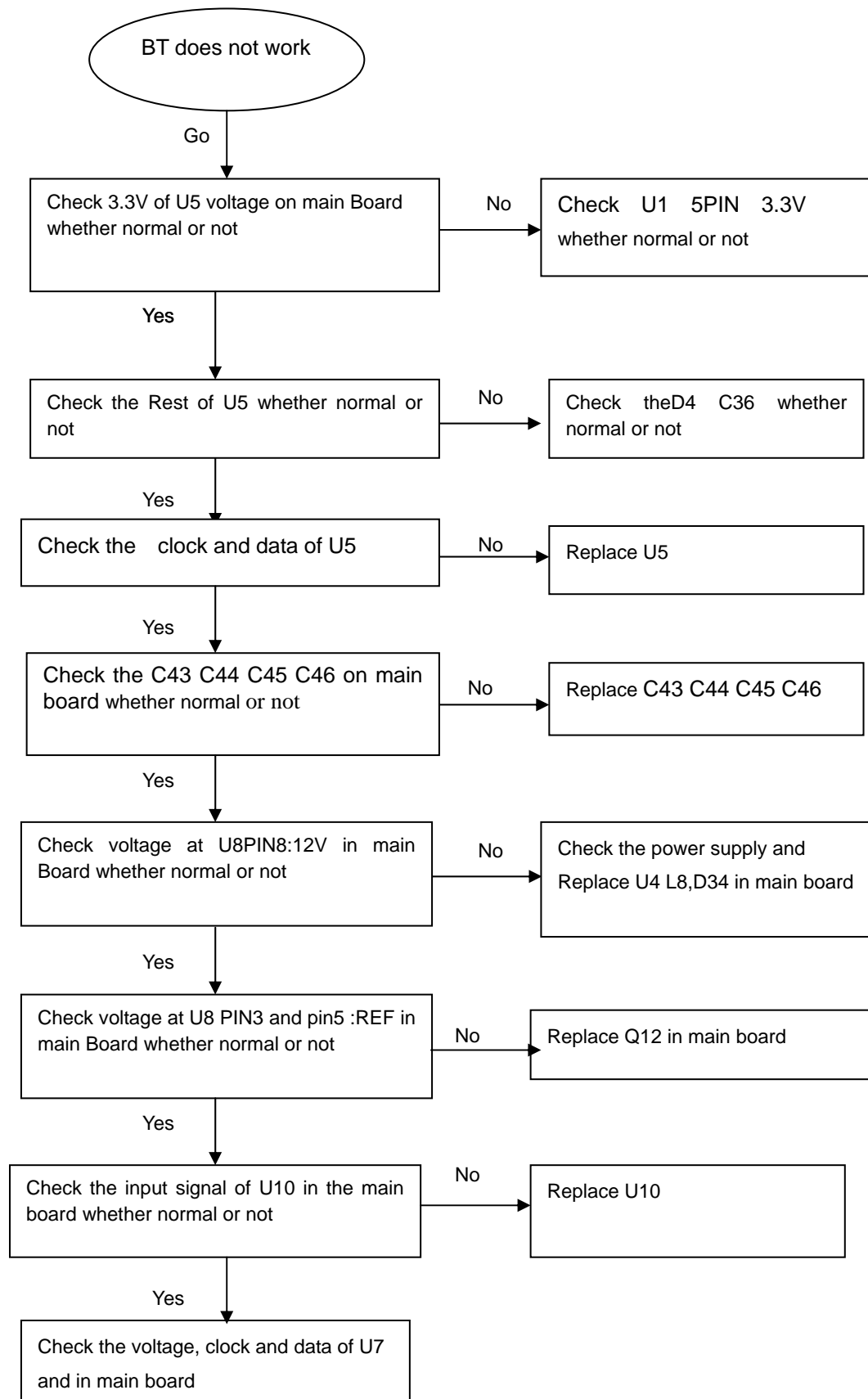
AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

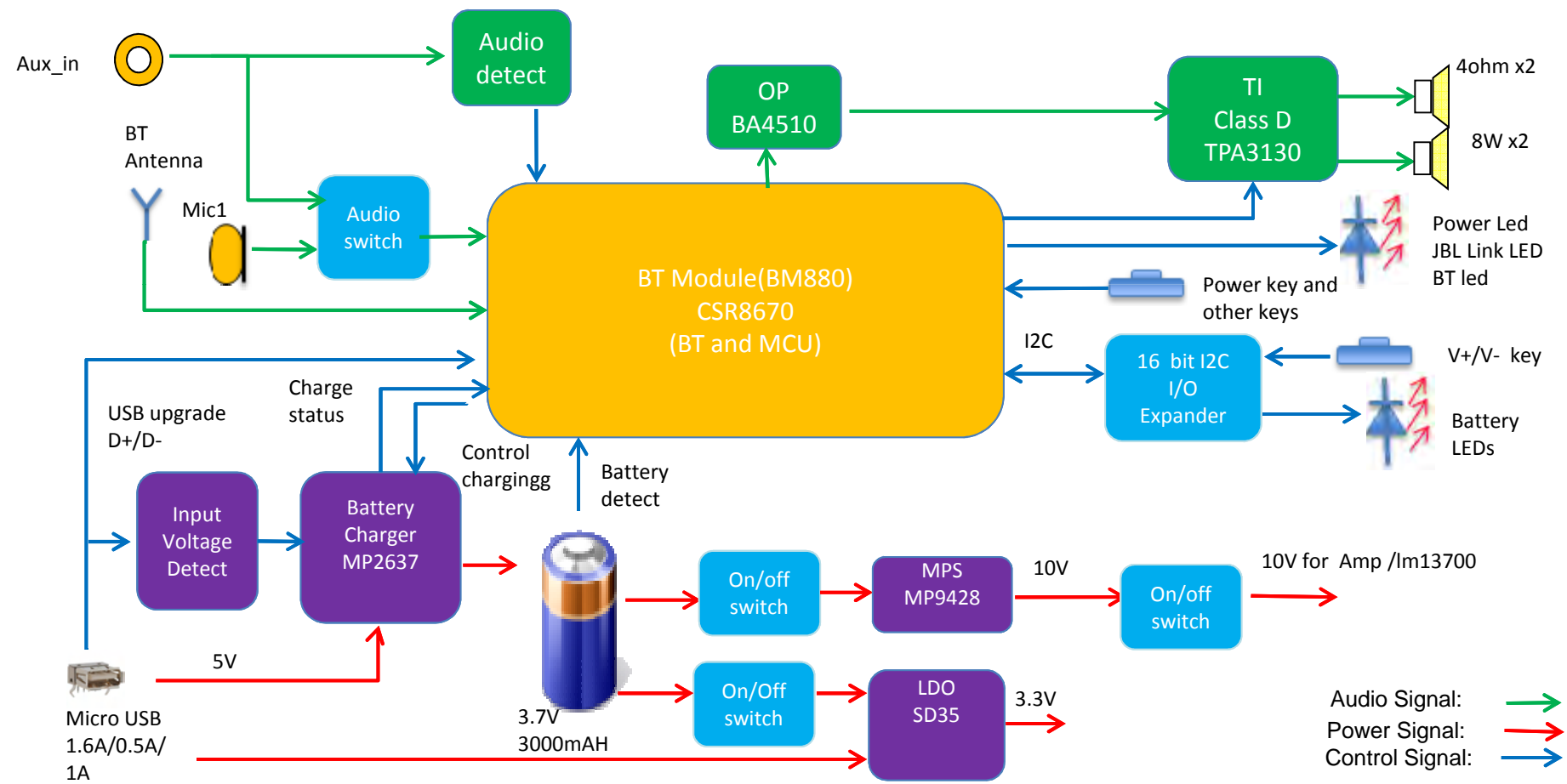
Cannot charging

keys do not work

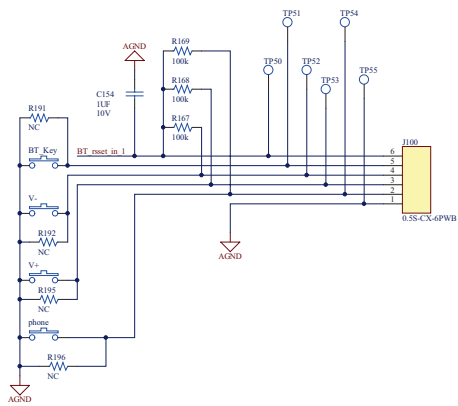
AUX in does not work

BT does not work

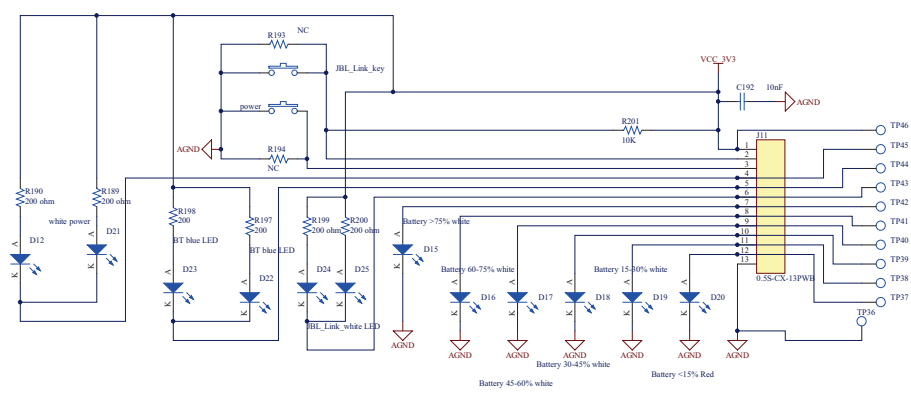
Set Block Diagram



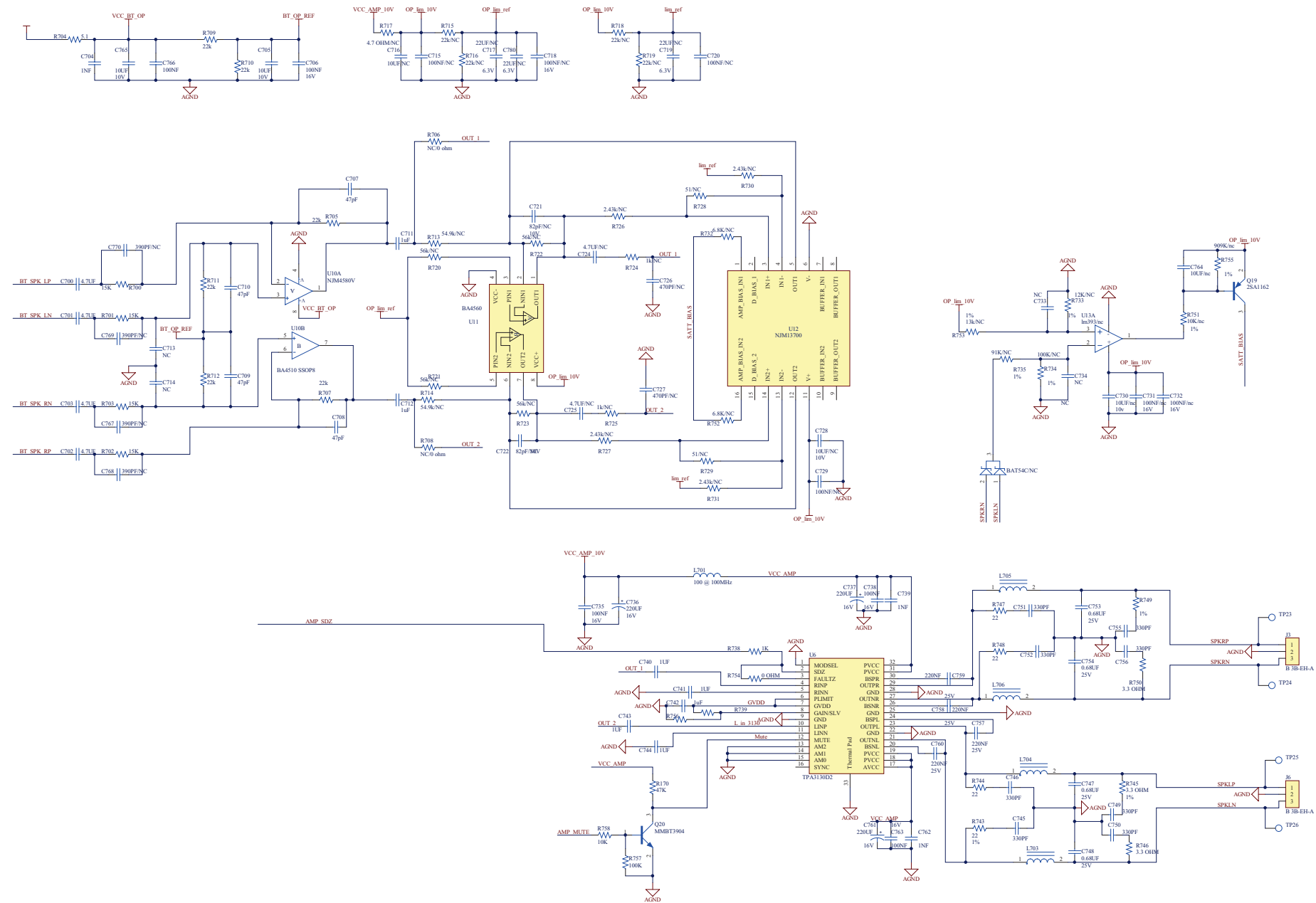
Key Board Circuit Diagram:



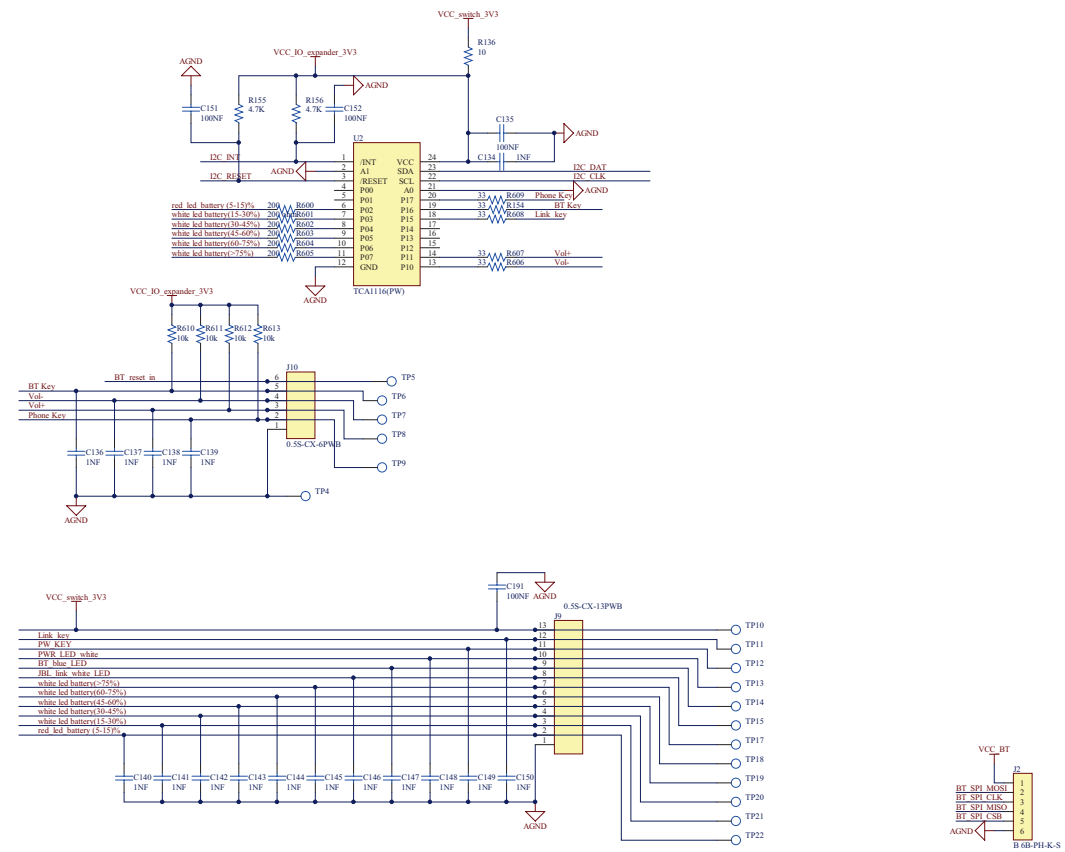
LED Circuit Diagram:



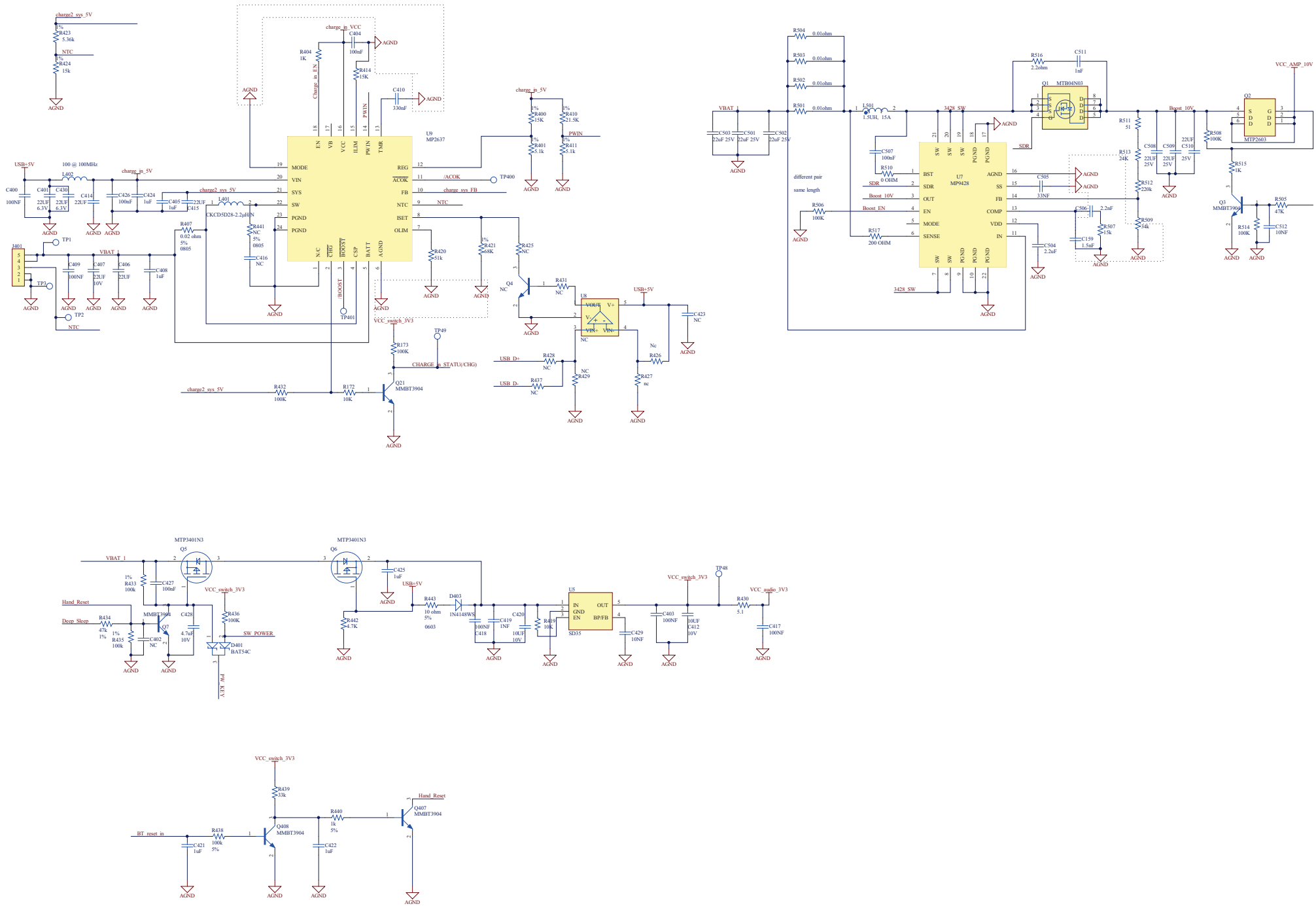
Main Board Circuit Diagram:



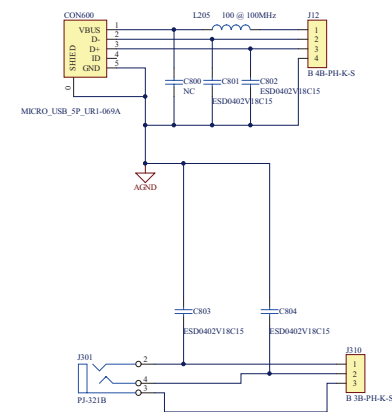
Main Board Circuit Diagram:



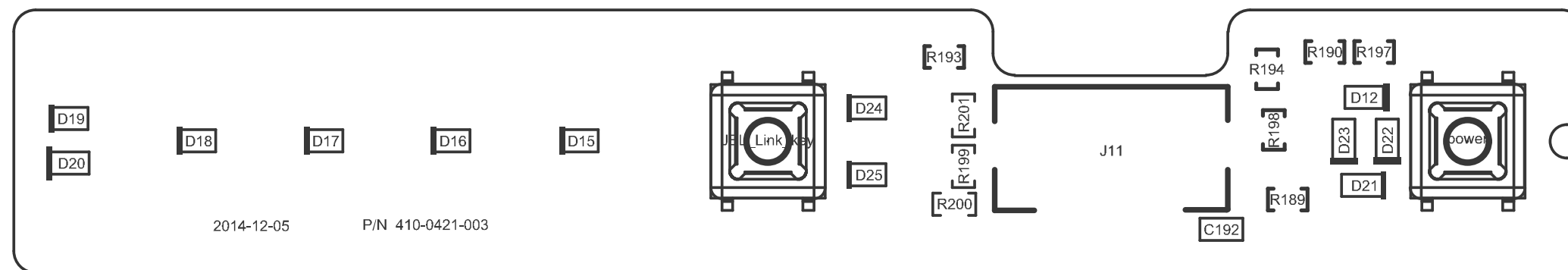
Main Board Circuit Diagram:



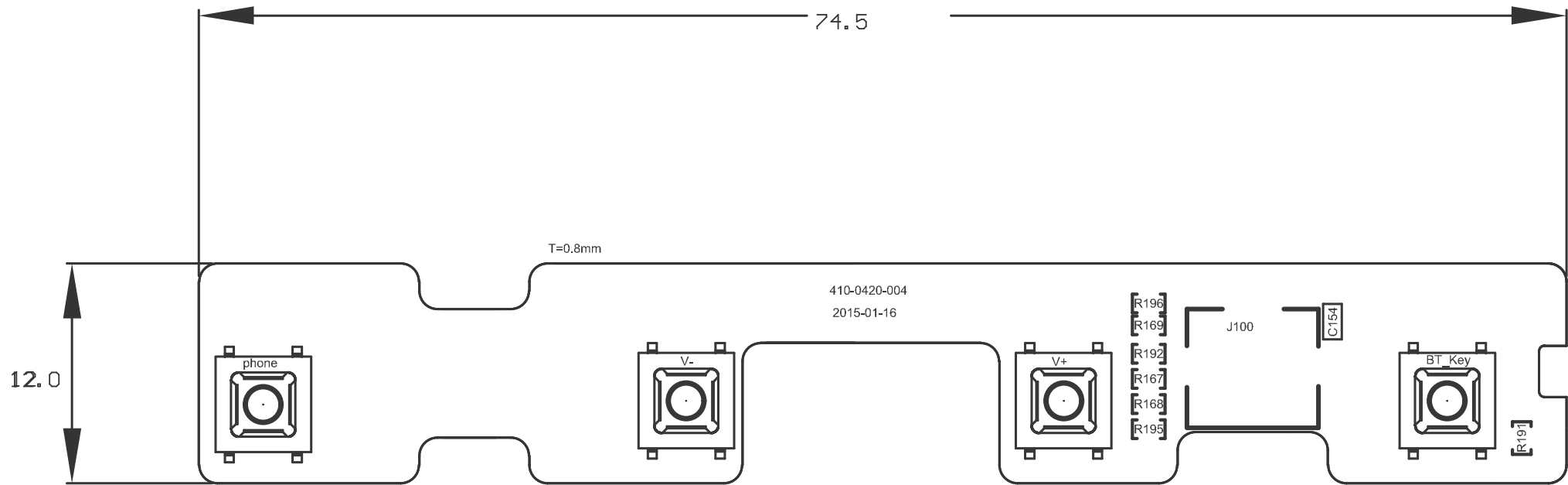
USB Board Print-layout:



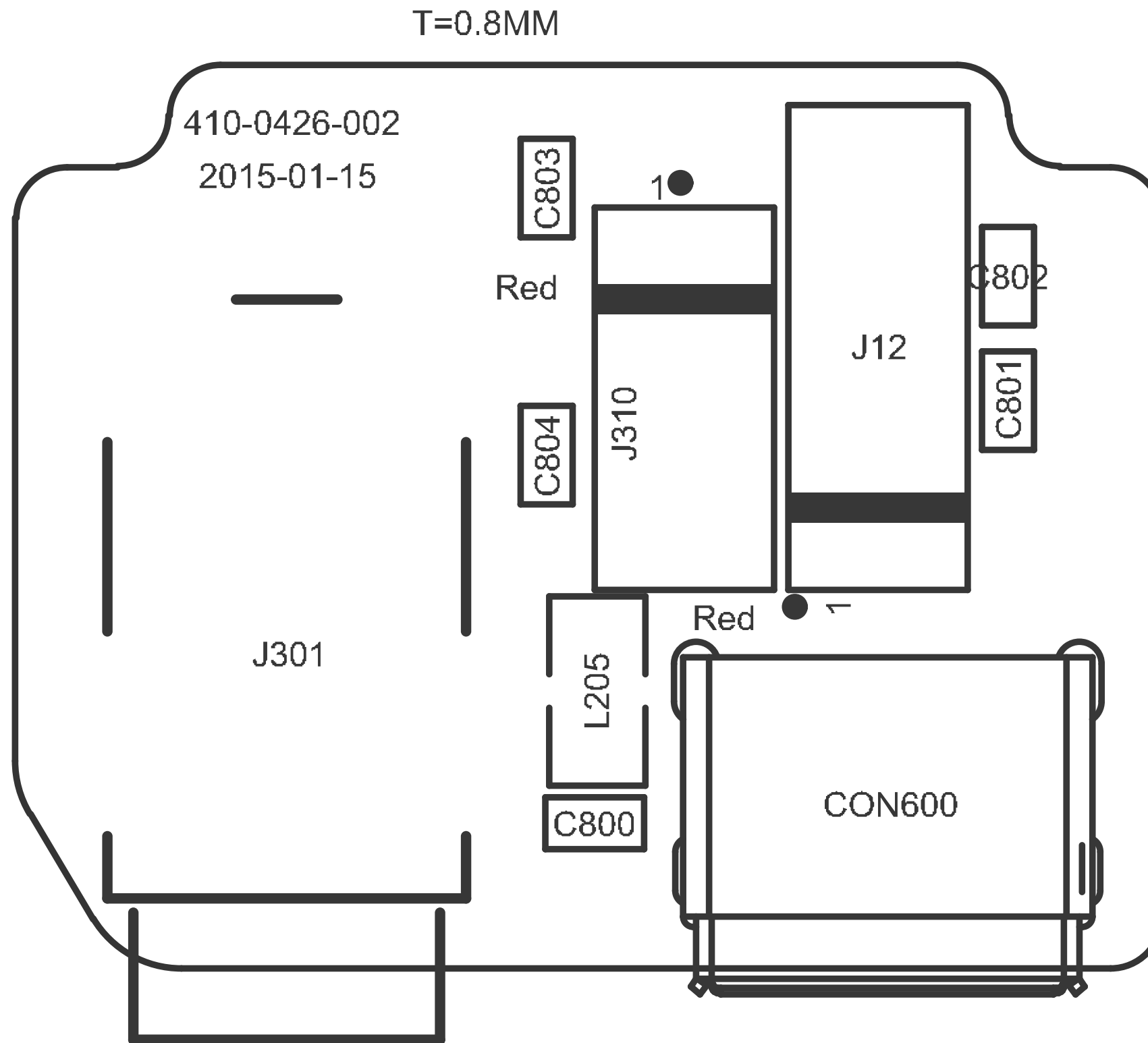
LED Board Print-layout:



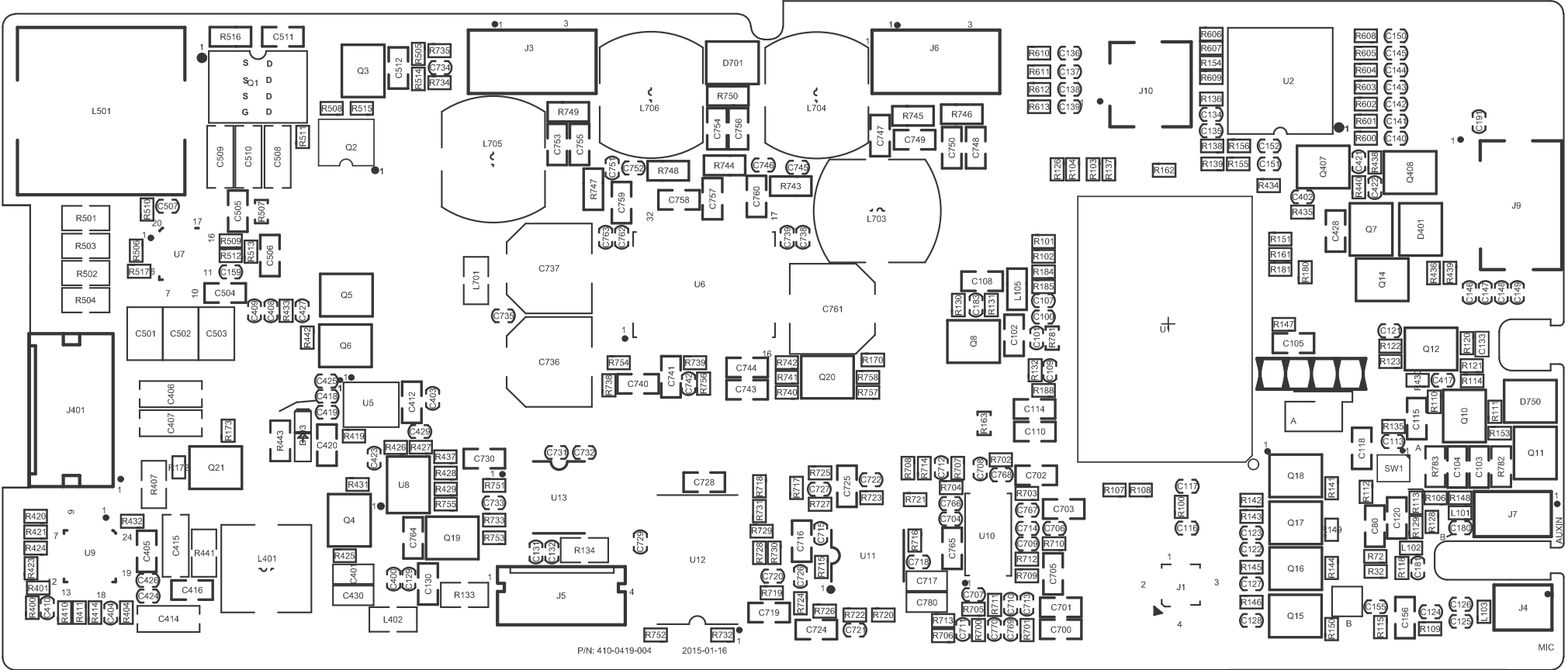
KEY Board Print-layout:



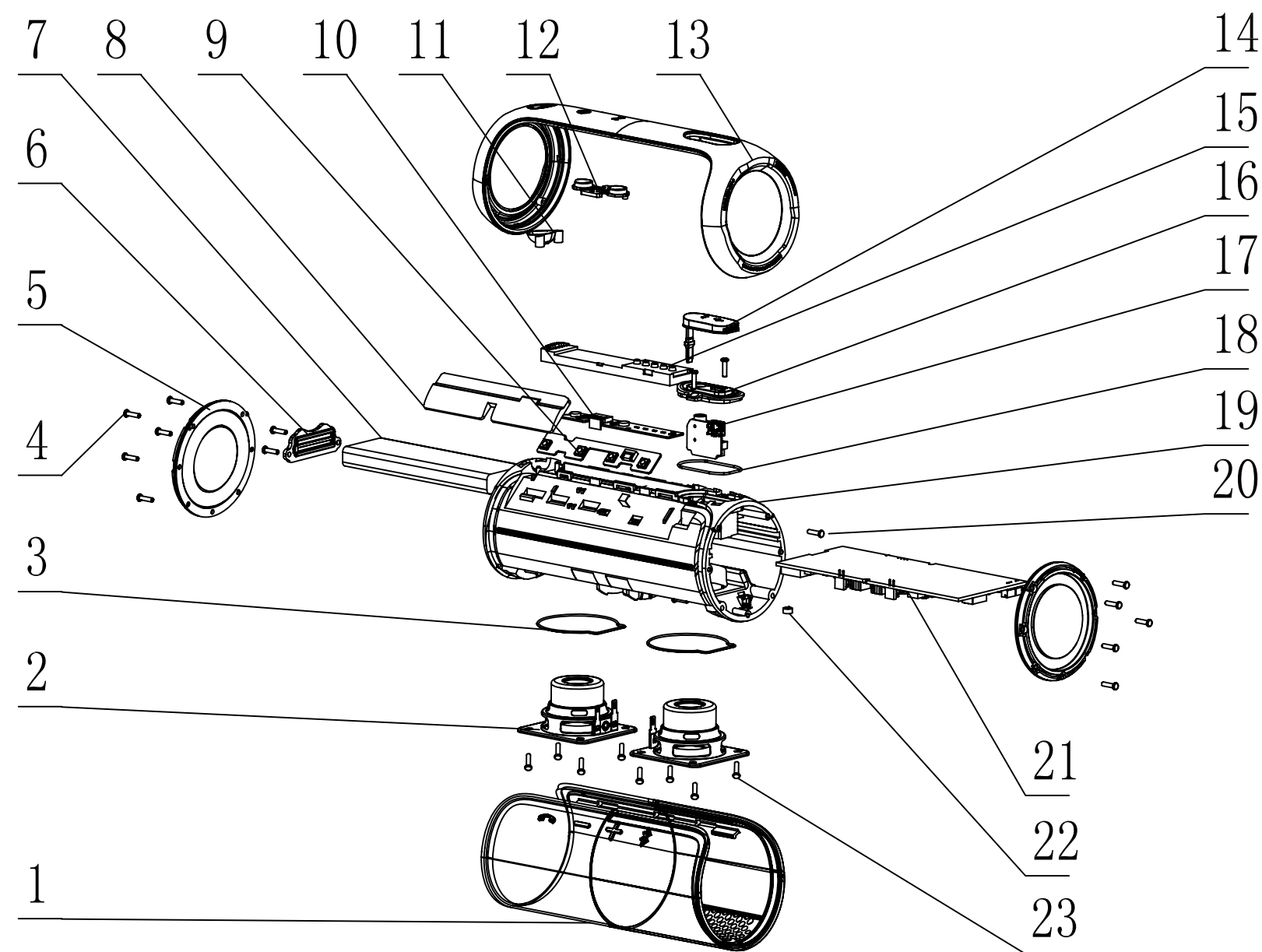
USB Board Print-layout:



Main Board Print-layout:



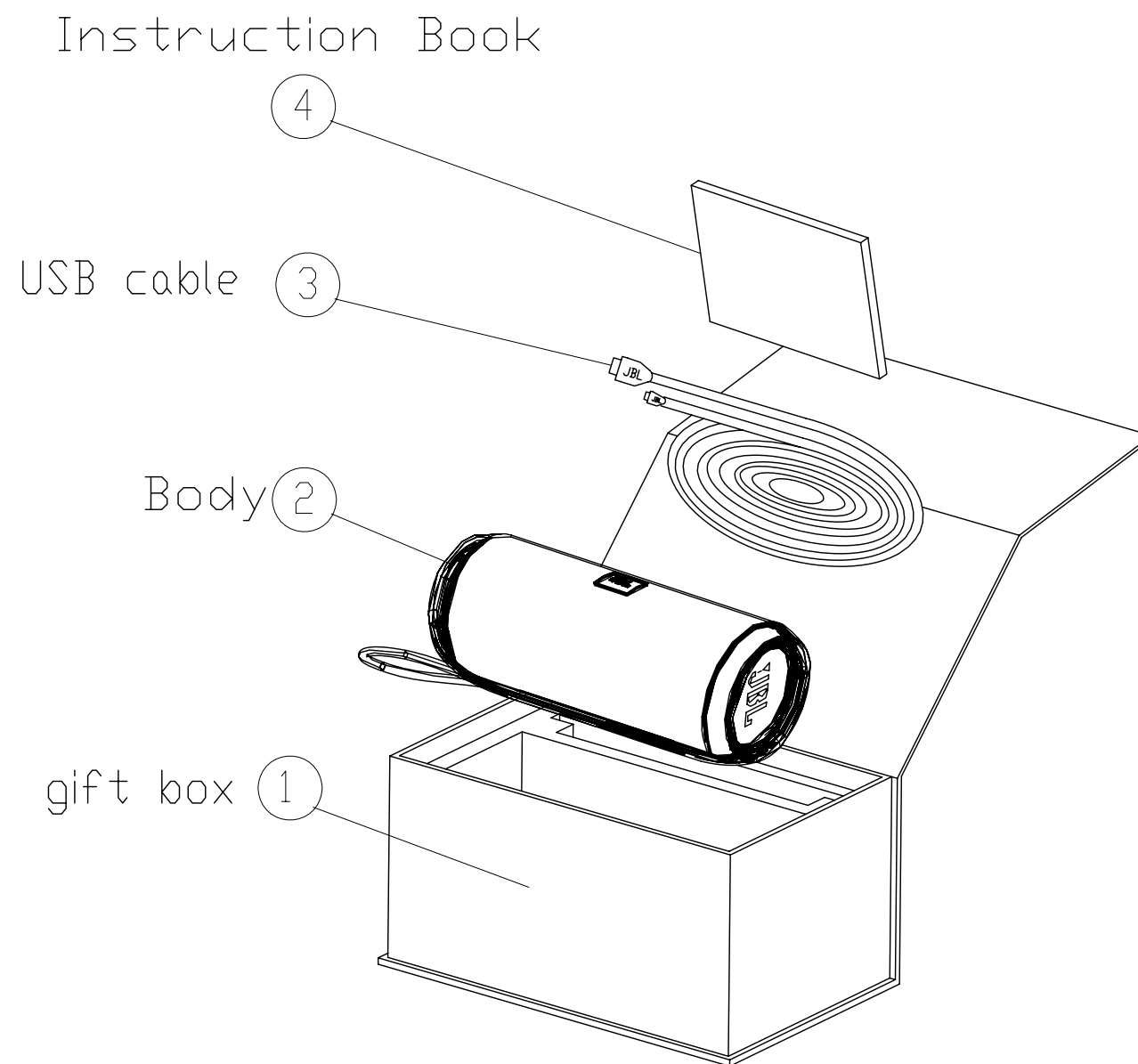
Mechanical Exploded View:



For spare parts numbers for outer grille #1, please refer to Spare Parts List below, page 29.

Part Number List for the Exploded View

No.	Description	Part Number	Remarks
2	1.5" full range Speaker	42-015008-04001	
5	Passive Radiator	54-NE0590-00001	
6	battery cover assy	02-FLP3D1-0HA	
7	Li-ion polymer Battery 3.7V 3000mAh	49-373000-BAT5-M	
9	KEY Board	08-WB702U-KY0	
10	LED Board	08-WB702U-FE0	
13	Main Stand	55-FLP3H1-0UHB2	
14	USB Cover	55-FLP3C1-0UHB2	
16	USB Bracket	56-FLP3H4-0HAB2	
17	USB Board	08-WB702U-IN0	
19	Main Body	55-FLP3I1-0UH	
21	Main Board	08-WB702U-MA0	
22	MIC Φ 4.0/2pin JST 1.5mm IP5X water resistant	02-MIC025-XX0	



Spare Parts List

11

Level	Pos. No.	Part Number	Description	QTY
01	5	54-NE0590-00001	Passive Radiator (Left) Flip3 TL	1
01	5	54-NE0590-00002	Passive Radiator (Right) Flip3 TL	1
01	6	02-FLP3D1-0HA	Battery cover ass'y FLIP3 TL	1
01	22	02-MIC025-XX0	MIC D4.0/2pin JST 1.5mm FLIP3 TL	1
002	U1	07-BTM880-00A	Bluetooth Module BM880F3 FLIP3 TL	1
01	10	08-WB702U-FE0	LED Board FLIP3 TL	1
01	17	08-WB702U-IN0	USB Board FLIP3 TL	1
01	9	08-WB702U-KY0	KEY Board FLIP3 TL	1
01	21	08-WB702U-MA0	Main Board FLIP3 TL	1
002	U10	13-BA4510-FVS2	IC BA4510FV SSOP-B8 operational amplifier FLIP3 TL	1
002	R782,R783	13-ESDV12-C033	ESD Suppressor ESD0603V12C03 FLIP3 TL	2
002	U9	13-MP2637-QFN3	IC MP2637 QFN-24 BATTERY CHARGER FLIP3 TL	1
002	U7	13-MP9428-QFN3	IC MP9428 QFN-22 BOOST FLIP3 TL	1
002	SW1	13-SD20TR-UTQ3	IC SD20/TR UTQFN-1.8x1.4-10L SWITCH FLIP3 TL	1
002	U5	13-SD35TR-0003	IC SD35/TR 3.3V SOT23-5 LDO FLIP3 TL	1
002	U2	13-TCA1111-6TS3	TCA1116 TSSOP24 16-BIT I2C I/O EXPANDER FLIP3 TL	1
002	U6	13-TPA313-0D22	IC TPA3130D2(DAP) SOP32 AMP FLIP3 TL	1
01	cable	41-USB1000-UMC	Cable 1M USB to Micro orange Type-C FLIP3 TL	1
01	2	42-015008-04001	Speaker Unit 1.5" full range FLIP3 TL	2
01	BT Antenna	47-ANT136-XX0	BT Antenna WA-F-LA-03-113 FLIP3 TL	1
01	7	49-373000-BAT5-M	Li-ion polymer battery 3.7V 3000mAh FLIP3 TL	1
01	14	55-FLP3C1-0UHB1	USB cover Flip3 TL BLK	1
01	14	55-FLP3C1-0UHB2	USB cover Flip3 TL Gry	1
01	14	55-FLP3C1-0UHB3	USB cover Flip3 TL ORG	1
01	14	55-FLP3C1-0UHB4	USB cover Flip3 TL Red	1
01	14	55-FLP3C1-0UHB5	USB cover Flip3 TL Pink	1
01	14	55-FLP3C1-0UHB6	USB cover Flip3 TL BLU	1
01	14	55-FLP3C1-0UHB7	USB cover Flip3 TL Yel	1
01	14	55-FLP3C1-0UHB8	USB cover Flip3 TL Tea	1
01	13	55-FLP3H1-0UHB1	Main Stand Flip3 TL BLK	1
01	13	55-FLP3H1-0UHB2	Main Stand Flip3 TL Gry	1
01	13	55-FLP3H1-0UHB3	Main Stand Flip3 TL ORG	1
01	13	55-FLP3H1-0UHB4	Main Stand Flip3 TL Red	1
01	13	55-FLP3H1-0UHB5	Main Stand Flip3 TL Pink	1
01	13	55-FLP3H1-0UHB6	Main Stand Flip3 TL BLU	1
01	13	55-FLP3H1-0UHB7	Main Stand Flip3 TL Yel	1
01	13	55-FLP3H1-0UHB8	Main Stand Flip3 TL Tea	1
01	19	55-FLP3I1-0UH	Main Body Flip3 TL	1
01	16	56-FLP3H4-0HAB1	USB Bracket Flip3 TL BLK	1
01	16	56-FLP3H4-0HAB2	USB Bracket Flip3 TL Gry	1
01	16	56-FLP3H4-0HAB3	USB Bracket Flip3 TL ORG	1
01	16	56-FLP3H4-0HAB4	USB Bracket Flip3 TL Red	1
01	16	56-FLP3H4-0HAB5	USB Bracket Flip3 TL Pink	1
01	16	56-FLP3H4-0HAB6	USB Bracket Flip3 TL BLU	1
01	16	56-FLP3H4-0HAB7	USB Bracket Flip3 TL Yel	1
01	16	56-FLP3H4-0HAB8	USB Bracket Flip3 TL Tea	1
01	gift box	76-195240-0ATC1	Gift Box Flip3 TL BLK	1
01	gift box	76-195240-0ATC2	Gift Box Flip3 TL Gry	1
01	gift box	76-195240-0ATC3	Gift Box Flip3 TL ORG	1
01	gift box	76-195240-0ATC4	Gift Box Flip3 TL Red	1
01	gift box	76-195240-0ATC5	Gift Box Flip3 TL Pink	1
01	gift box	76-195240-0ATC6	Gift Box Flip3 TL BLU	1
01	gift box	76-195240-0ATC7	Gift Box Flip3 TL Yel	1
01	gift box	76-195240-0ATC8	Gift Box Flip3 TL Tea	1
01	carton box	76-195250-0ATB1	Carton Box Flip3 TL	1
01	1	02-FLP3H2-XX2B1	Grille assy Flip3 TL BLK	1
01	1	02-FLP3H2-XX0B2	Grille assy Flip3 TL Gry	1
01	1	02-FLP3H2-XX0B3	Grille assy Flip3 TL ORG	1
01	1	02-FLP3H2-XX0B4	Grille assy Flip3 TL Red	1
01	1	02-FLP3H2-XX0B5	Grille assy Flip3 TL Pink	1
01	1	02-FLP3H2-XX0B6	Grille assy Flip3 TL BLU	1
01	1	02-FLP3H2-XX0B7	Grille assy Flip3 TL Yel	1
01	1	02-FLP3H2-XX0B8	Grille assy Flip3 TL Tea	1

Revision List

Version 1.0

- * Initial Release for JBL FLIP3.

Version 1.1

- * Add Grille Ass'y in Spare Part List.