

## Go+Play Mini

Bluetooth Speaker System with echo and noise cancellation technology and USB Charge-out.




### CONTENTS

	Page
Technical Specifications.....	2
Safety Instruction, Warning & Notes.....	3
Set Block Diagram .....	4
Set Wiring Diagram .....	5
Circuit Diagrams .....	6
Layout Diagrams .....	7
Set Mechanical Exploded view .....	8
Packaging Exploded view .....	9
Spare Part list.....	10
Revision List.....	11

## TECHNICAL SPECIFICATIONS

- Bluetooth version: 4.2
- Support: A2DP 1.3, AVRCP 1.6, HFP 1.6
- Transducers: 2x woofers (90mm), 2x tweeters (20mm)
- Rated power: 4x25W (AC mode)
- Frequency response: 50Hz-20kHz (-6dB)
- Signal-to-noise ratio: 80dB A-weighted
- Battery type: 22.2Wh rechargeable battery
- Power Supply: 19V 3A
- USB charge out: 5V/2.1A ( 5V/0.5A when playing music)
- Music playtime: up to 5 hours (varies by volume level and audio content)
- Battery charge time: 3 hours
- Dimensions (W x D x H): 417.50mm x 181.50mm x 211.50mm
- Weight: 3433g
- Bluetooth transmitter frequency range: 2402MHz to 2480MHz
- Bluetooth transmitter power: 0 to 9dBm
- Bluetooth transmitter modulation: GFSK,  $\pi/4$  DQPSK, 8DPSK

## 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 Canadiens

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 charge 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.

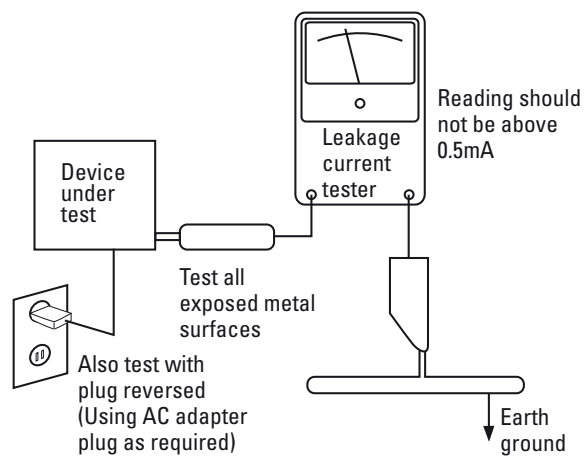
Components identified with the IEC symbol  in the parts list are of special significance to safety. When replacing a component identified with , use only the replacement parts designated, or parts with the same ratings or resistance, wattage, or voltage that are designated in the parts list in this manual. 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.

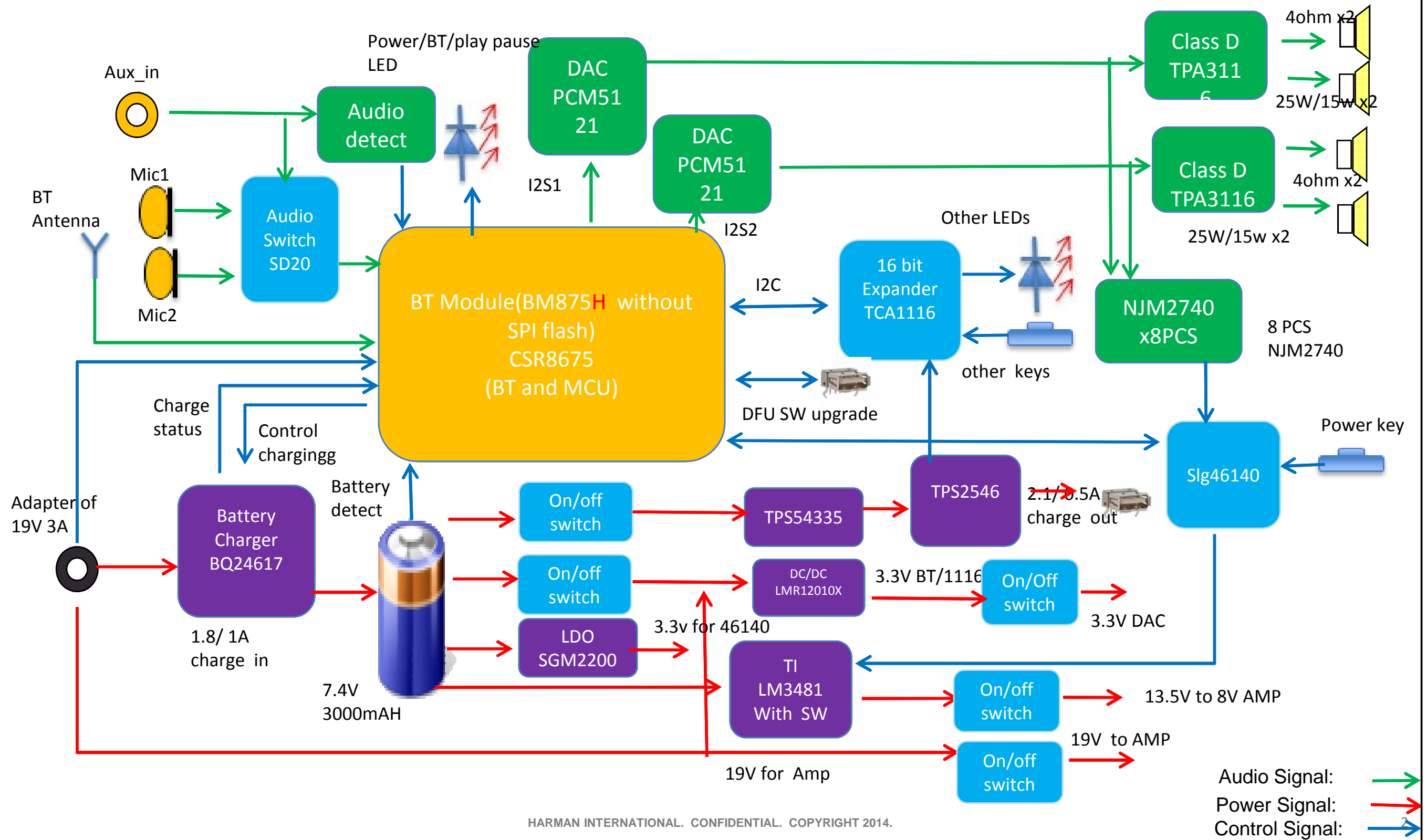


### AC Leakage Test

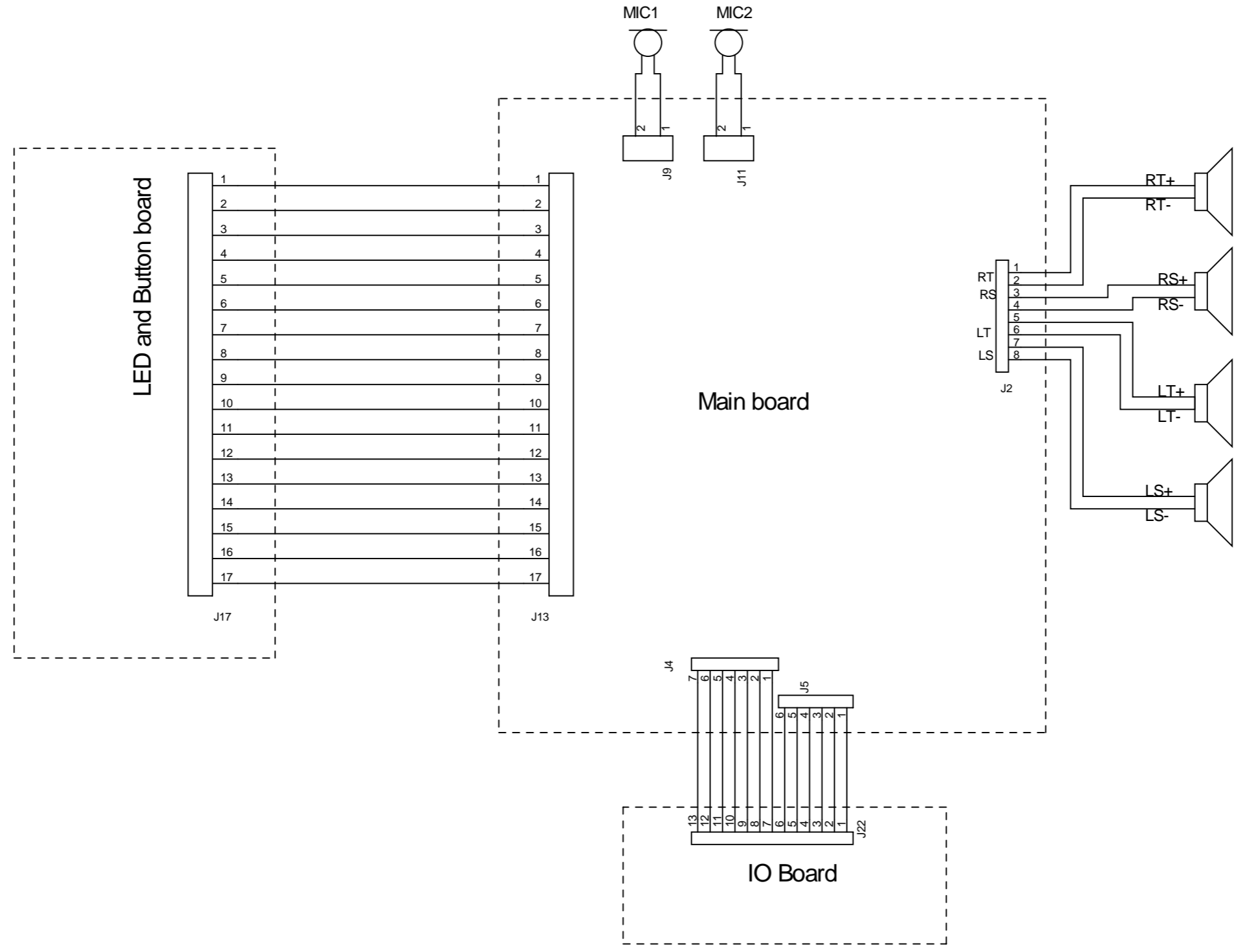
**ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

# Block Diagram

• CSR8675



# SET WIRING DIAGRAM



6

5

4

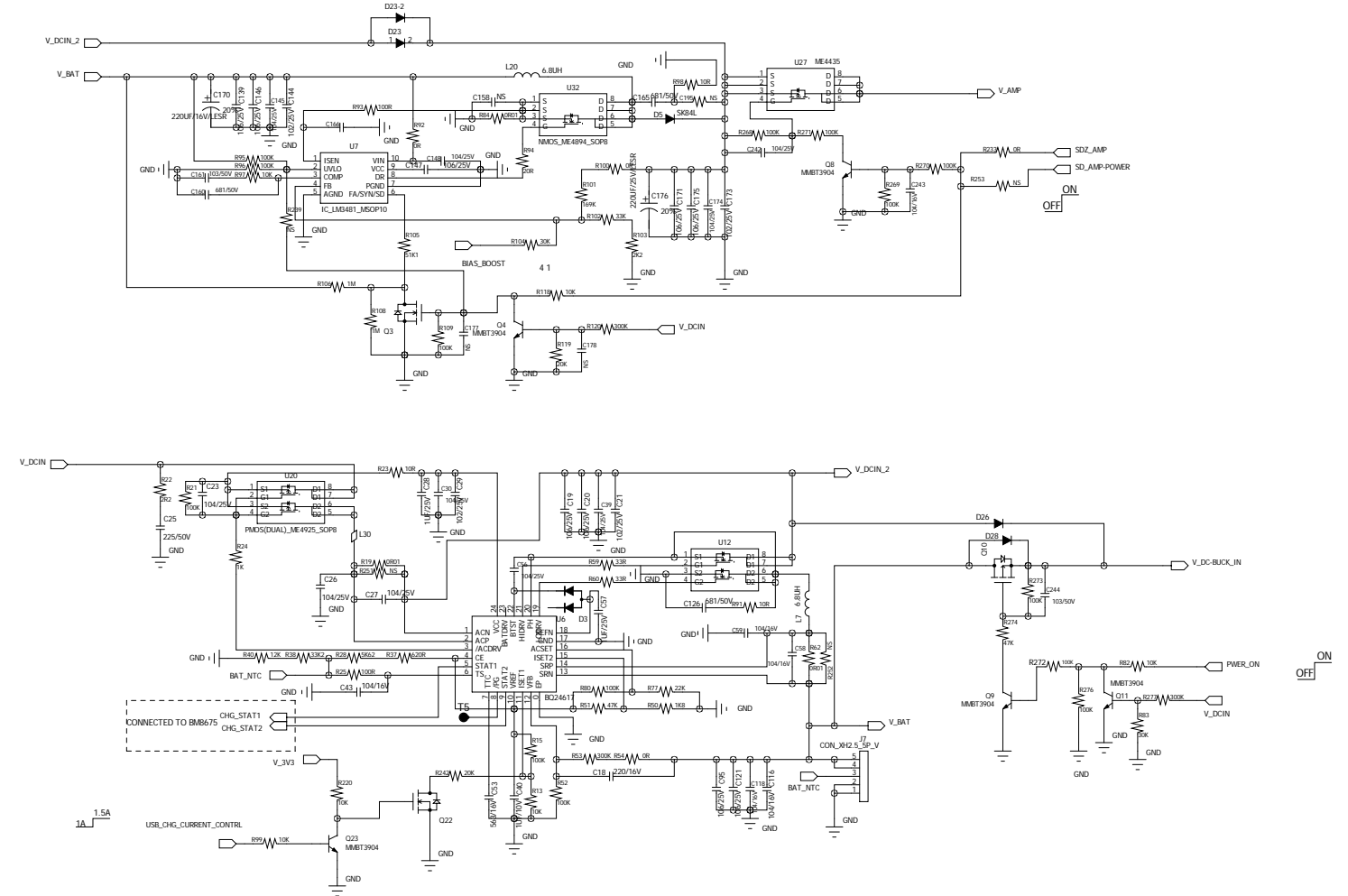
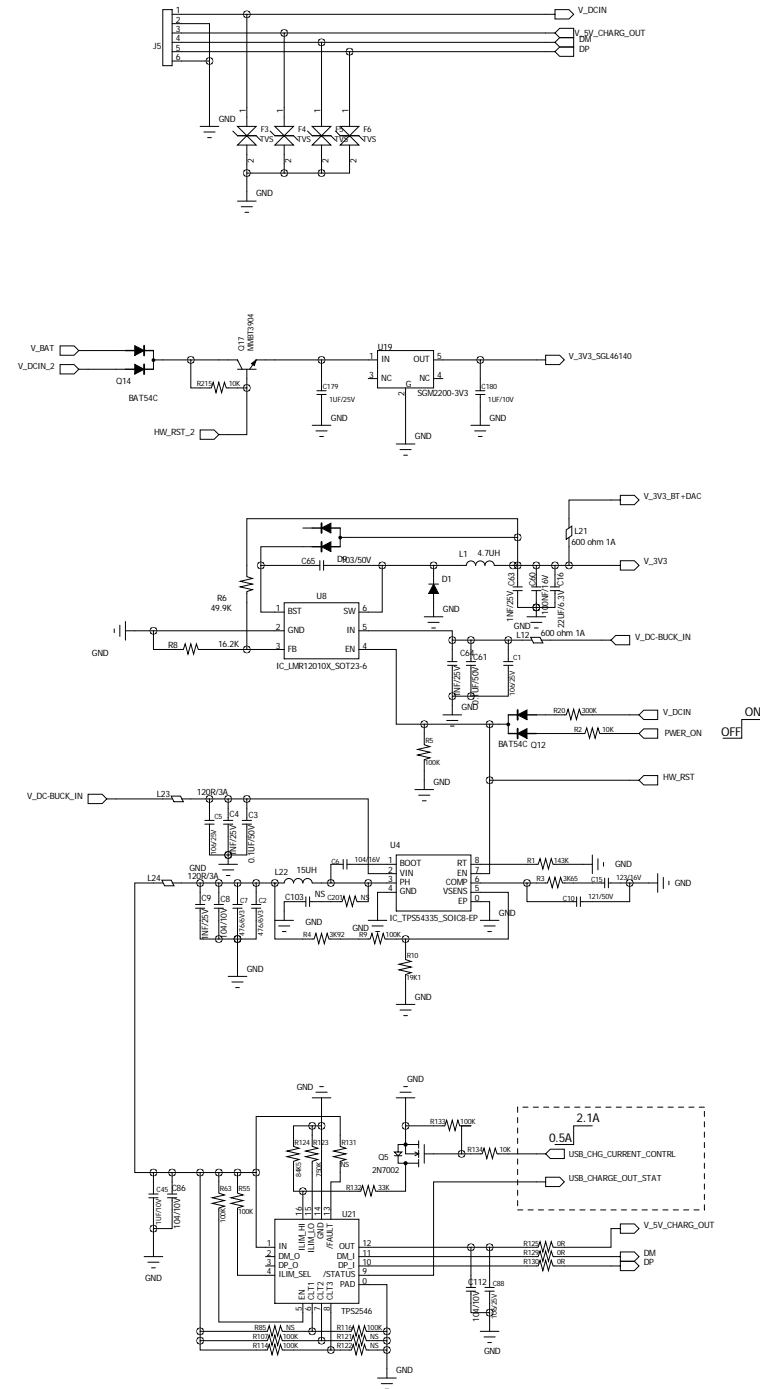
3

2

1

# CIRCUIT DIAGRAM - MAIN BOARD

REVISION RECORD			
LTR	ECO NO.	APPROVED	DATE



FAST CHARGE: 1.5A  
PRECHARGE: 60mA  
IDPM=3A

COMPANY:			
TITLE: GO+PLAY MINI			
DRAWN: SM	DATED: 160302	CODE:	SIZE:
CHECKED: <Checked By>	DATED: <Checked Date>	DRAWING NO.:	REV:
QUALITY CONTROL: <QC By>	DATED: <QC Date>	<Code> D	<Drawing Number> 05
RELEASED: <Released By>	DATED: <Release Date>	SCALE: <Scale>	SHEET: 2/ 5





# CIRCUIT DIAGRAM - MAIN BOARD

6

5

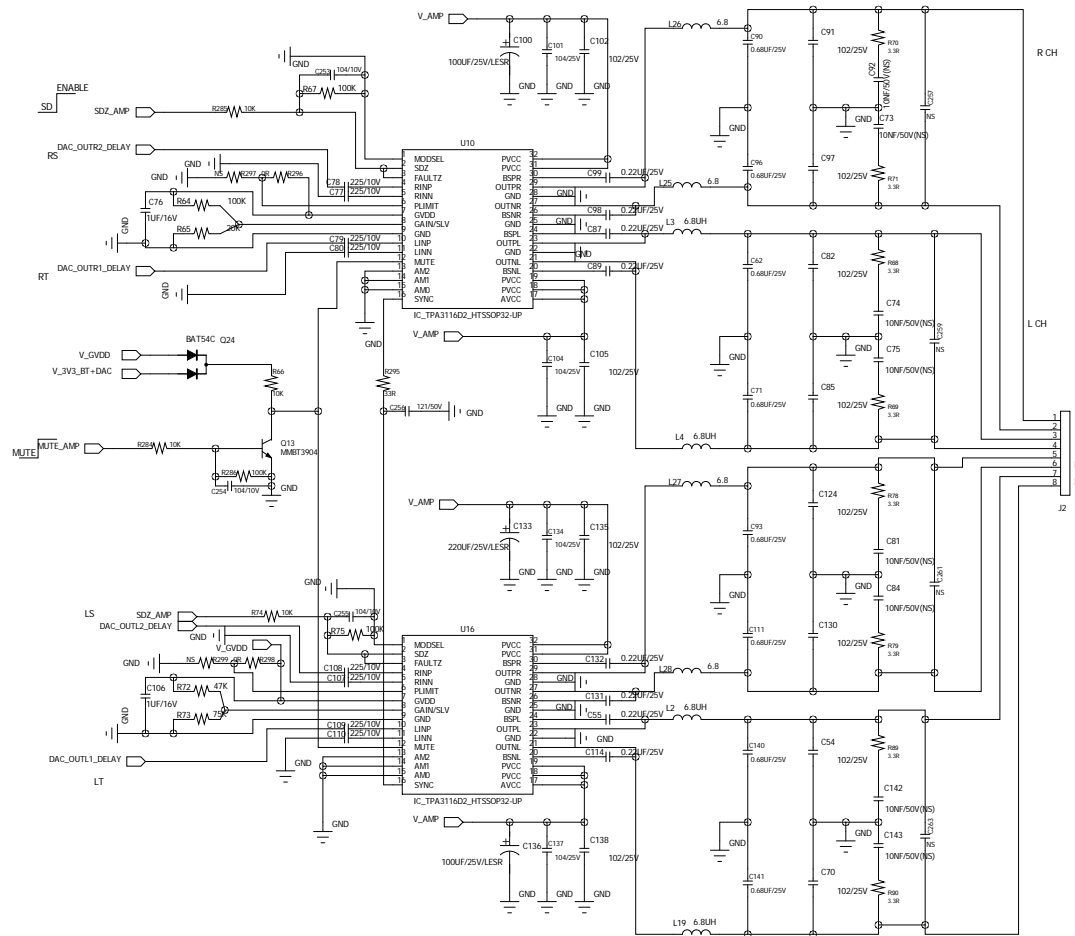
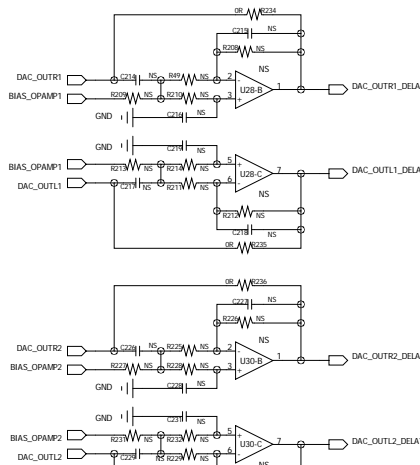
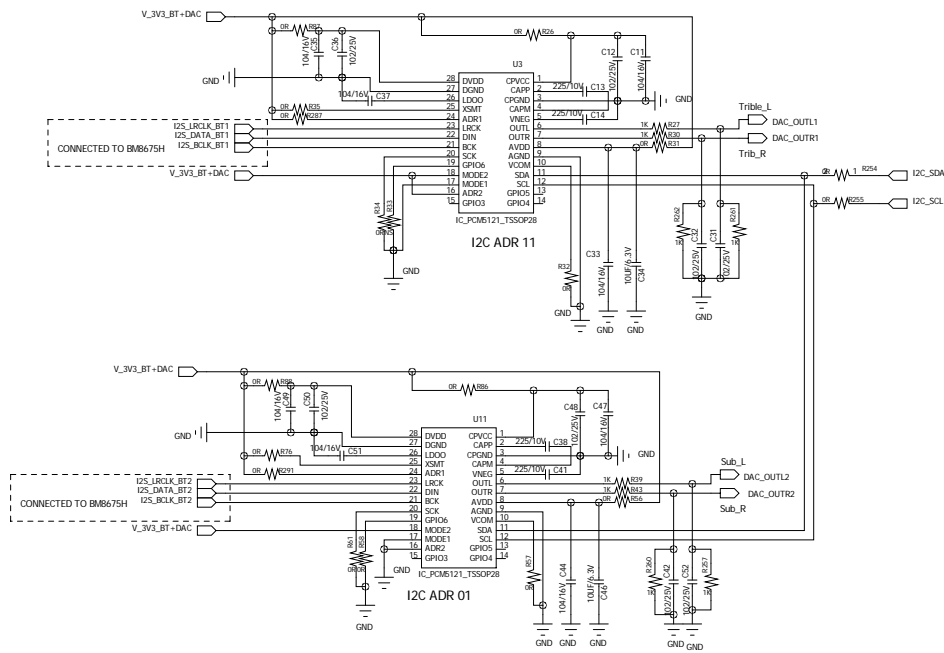
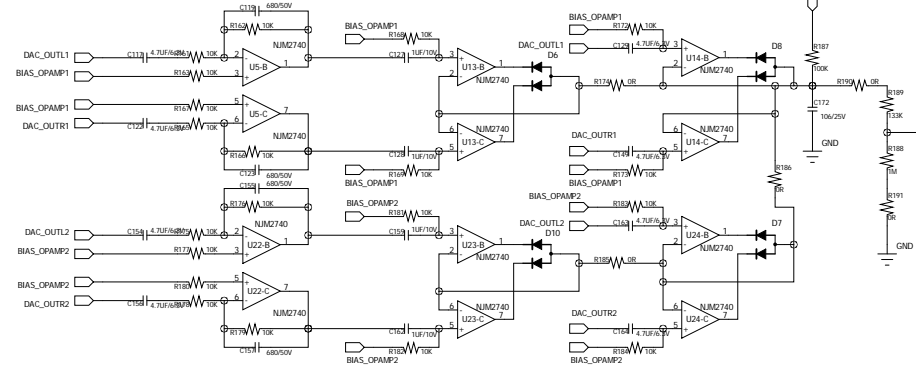
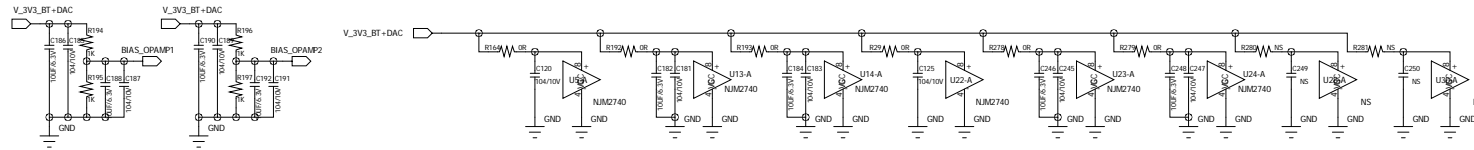
4

3

2

1

REVISION RECORD			
LTR	ECO NO.	APPROVED	DATE



COMPANY:			
TITLE:			
<b>GO+PLAY MINI</b>			
DRAWN: SM	DATED: 160302	CODE:	SIZE:
CHECKED: <Checked By>	DATED: <Checked Date>	DRAWING NO.:	REV.:
QUALITY CONTROL: <QC By>	DATED: <QC Date>	<b>D &lt;Drawing Number&gt; 05</b>	
RELEASED: <Released By>	DATED: <Release Date>	SCALE: <Scale>	SHEET: 4/ 5

6

5

4

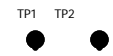
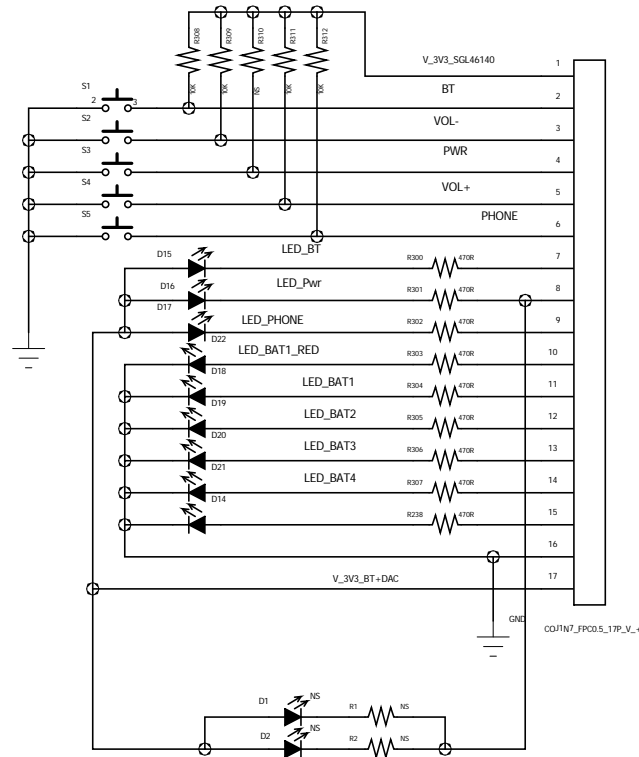
3

2

1

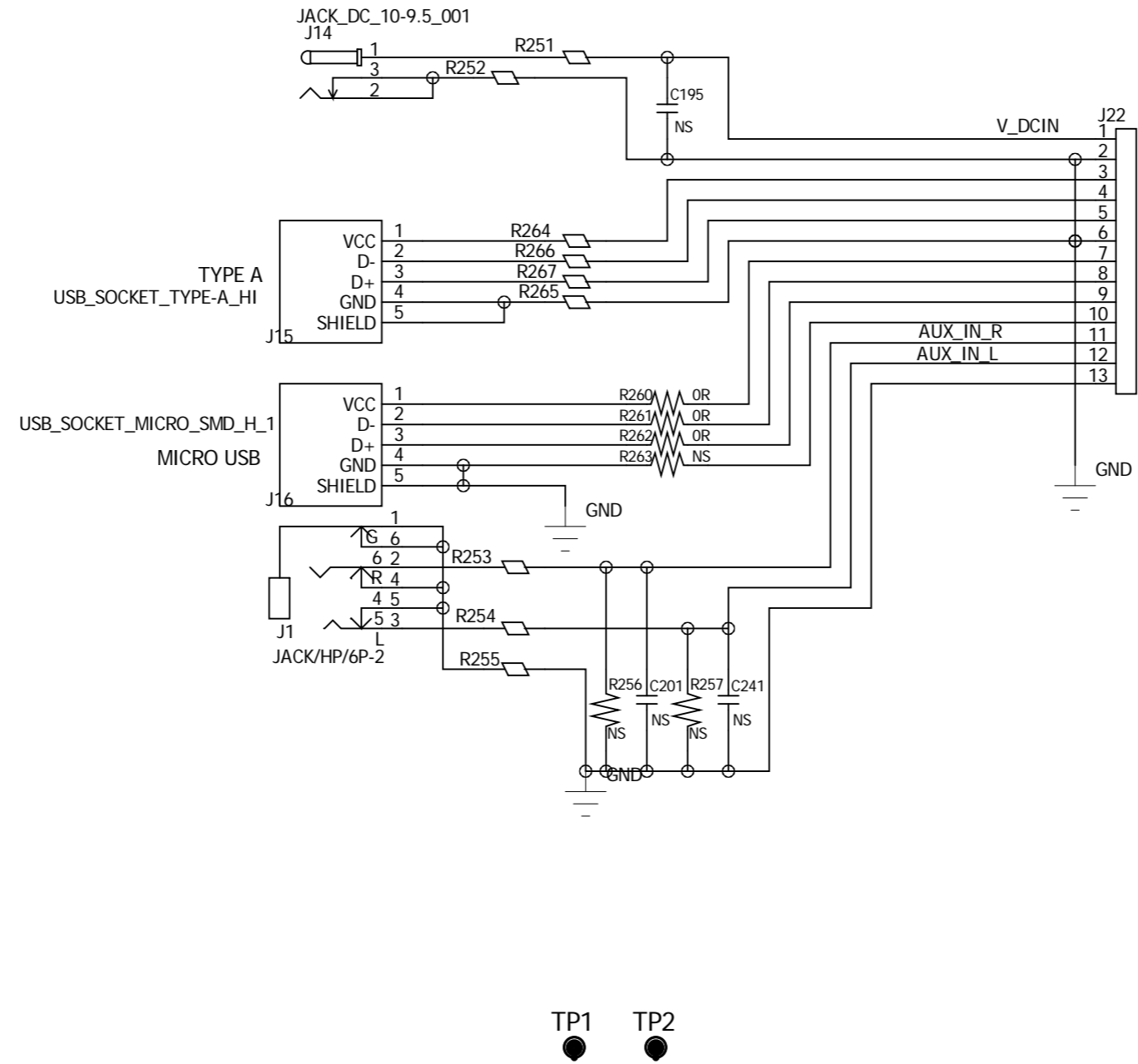
# CIRCUIT DIAGRAM - LED BOARD

REVISION RECORD			
LTR	ECO NO.	APPROVED	DATE

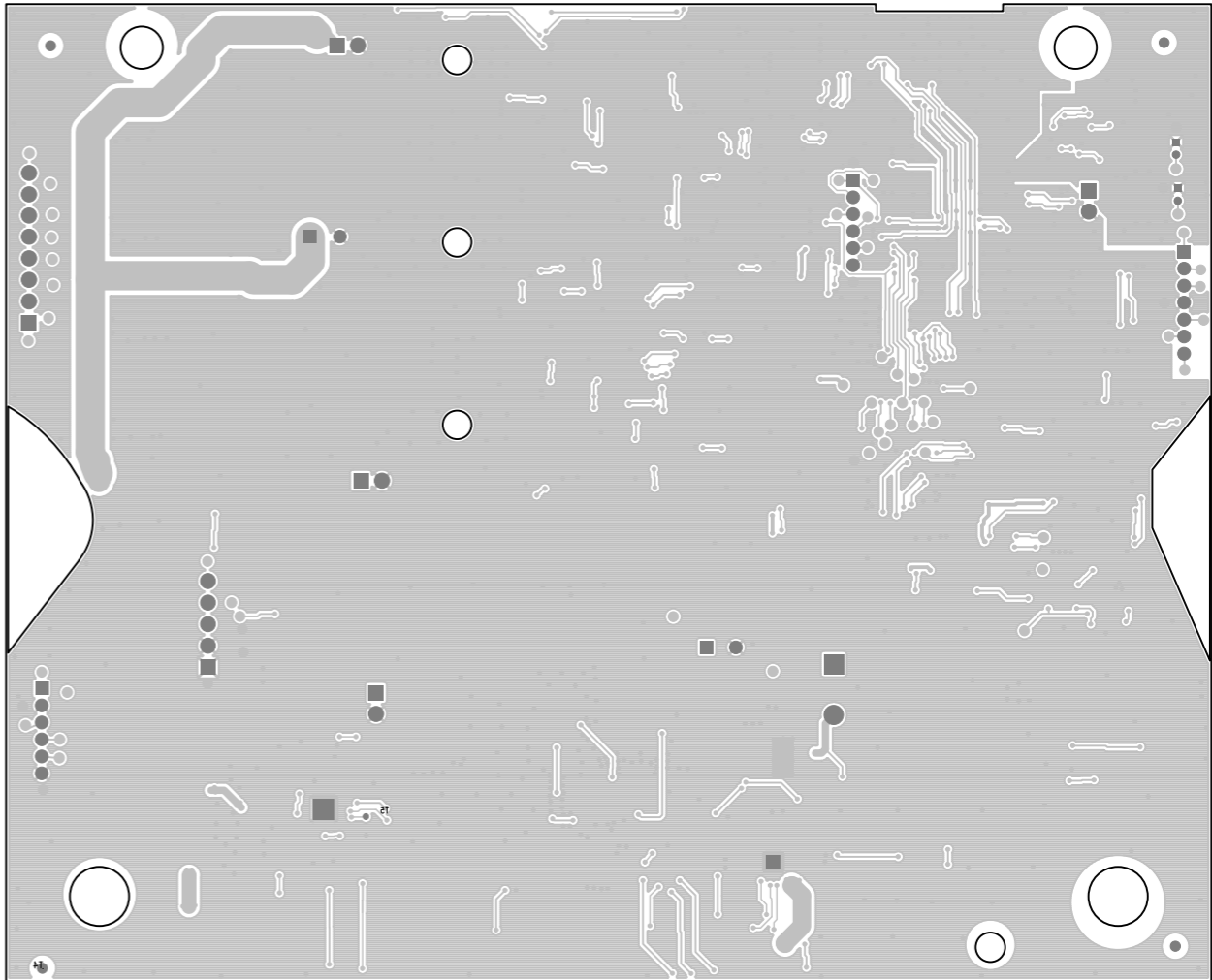
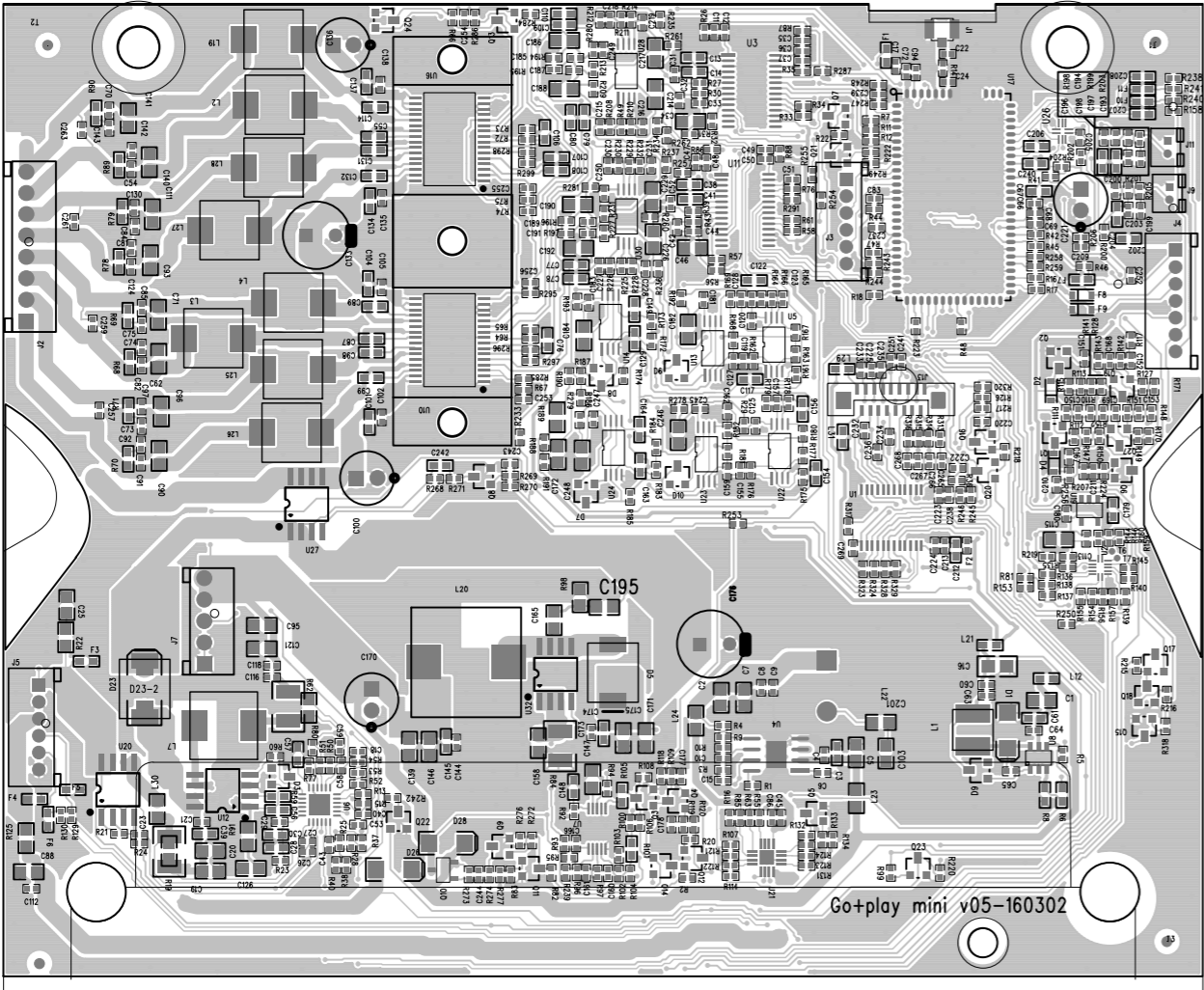


COMPANY:			
TITLE: <b>GO+PLAY MINI</b>			
DRAWN: SM	DATED: <Drawn Date>	CODE	REV:
CHECKED: <Checked By>	DATED: <Checked Date>	SIZE: <b>D</b>	DRAWING NO. <b>&lt;Drawing Number&gt;</b>
QUALITY CONTROL: <QC By>	DATED: <QC Date>	01	
RELEASED: <Released By>	DATED: <Release Date>	SCALE: <Scale>	SHEET: 1 of 1

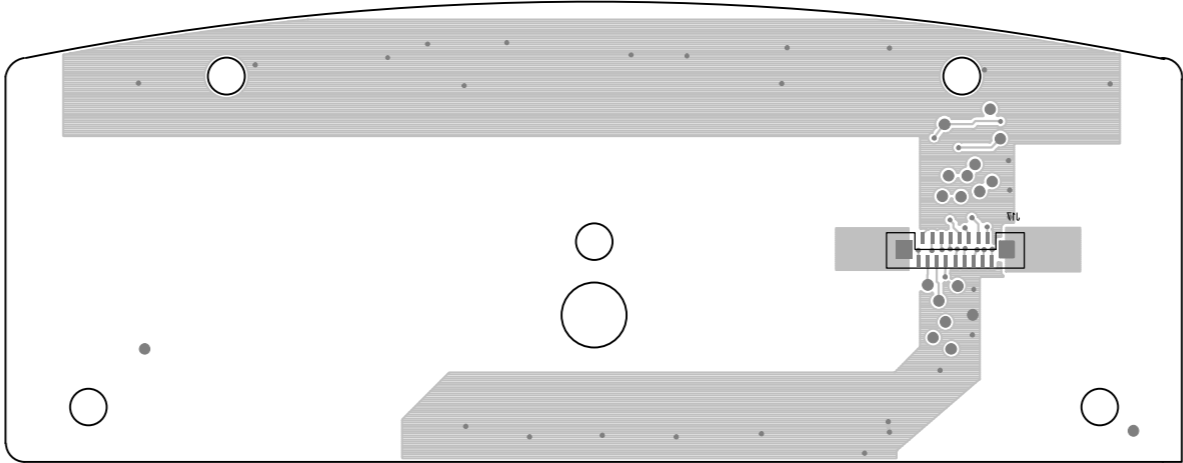
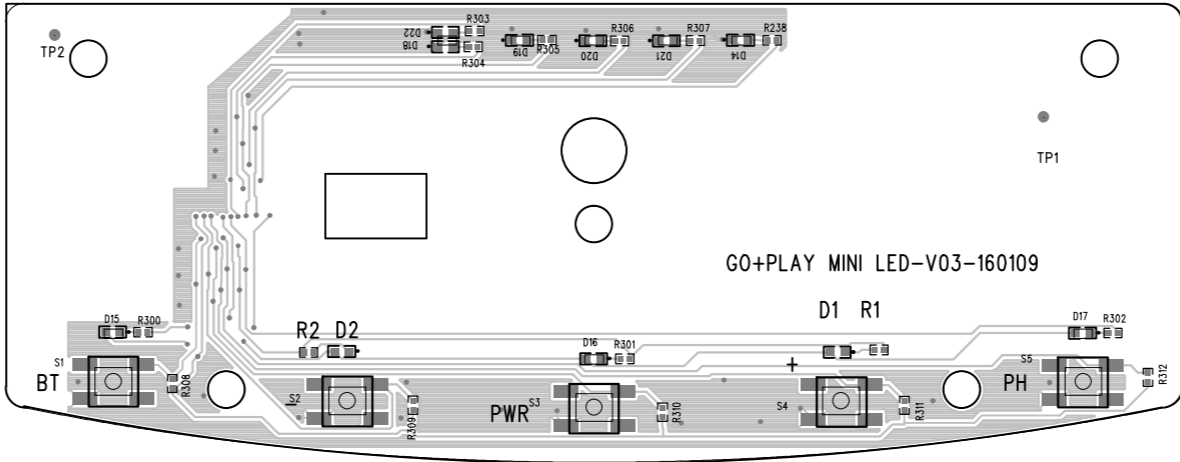
# CIRCUIT DIAGRAM - IO BOARD



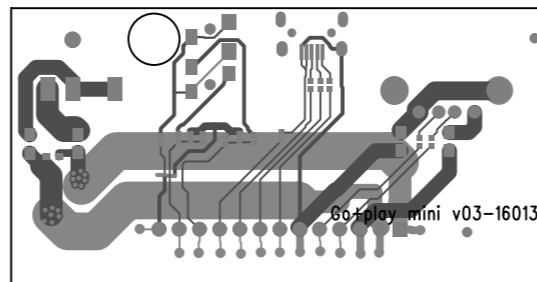
# LAYOUT DIAGRAM - MAIN BOARD



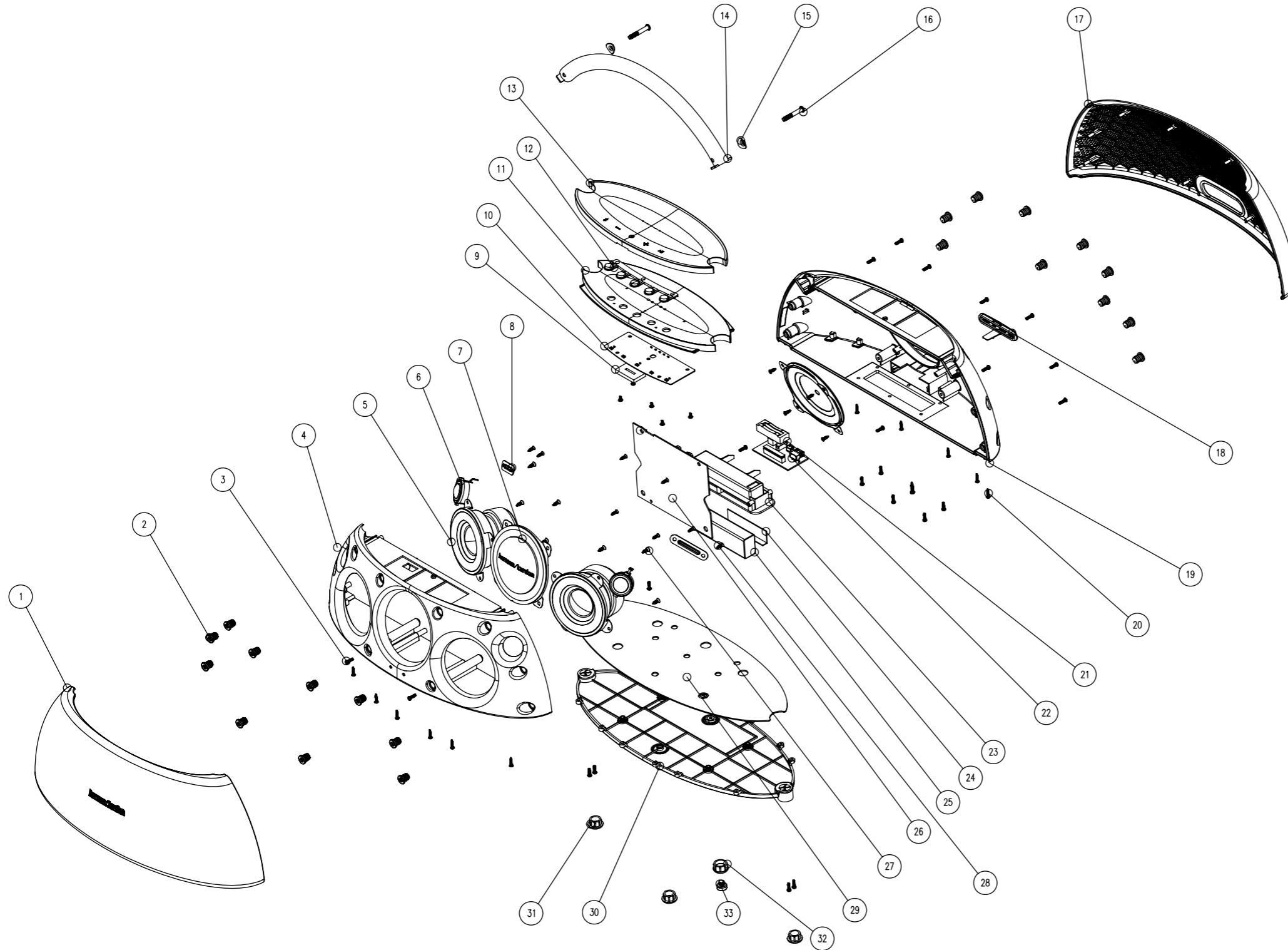
LAYOUT DIAGRAM - LED BOARD



# LAYOUT DIAGRAM - IO BOARD



**MECHANICAL EXPLODED VIEW**



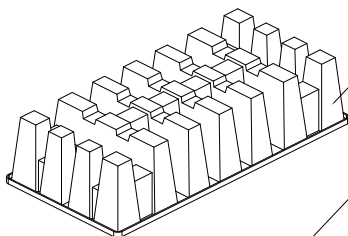
32	TT0020033010	FOOT PAD RING BLK GO+PLAY MINI
32	TT0020033020	FOOT PAD RING WHT GO+PLAY MINI
31	TT0020032010	FOOT PAD BLK GO+PLAY MINI
31	TT0020032020	FOOT PAD WHT GO+PLAY MINI
30	MM0402001010	BOTTOM CASE BLK GO+PLAY MINI
30	MM0402001020	BOTTOM CASE WHT GO+PLAY MINI
26	APA2PLAYM0101	MAIN BOARD GO+PLAY MINI
25	EXA3030007410	Li-ion BATTERY GO+PLAY MINI
23	GL0144001010	BATTERY CASE GO+PLAY MINI
22	APA2PLAYM0201	IO BOARD GO+PLAY MINI
21	ZS0045002010	SEALING STRIP GO+PLAY MINI
19	HZ0407001010	REAR COVER BLK GO+PLAY MINI
19	HZ0407001020	REAR COVER WHT GO+PLAY MINI
18	GL0071001010	I/O CASE BLK GO+PLAY MINI
18	GL0071001020	I/O CASE WHT GO+PLAY MINI
17	WT0417001010	REAR FABRIC GRILL BLK GO+PLAY MINI
17	WT0417001020	REAR FABRIC GRILL WHT GO+PLAY MINI
15	DQ0015007010	GASKET GO+PLAY MINI
14	BS1312001010	HANDLE GO+PLAY MINI
13	MZ0262003010	RUBBER BUTTON BLK GO+PLAY MINI
13	MZ0262003020	RUBBER BUTTON WHT GO+PLAY MINI
12	JL0105001010	BUTTON GO+PLAY MINI
11	ZJ0253001010	BUTTON CASE BLK GO+PLAY MINI
10	APA2PLAYM0301	KEY BOARD GO+PLAY MINI
7	000100 14201 1	PASSIVE RADIATOR WHT GO+PLAY MINI
7	000100 20001 1	PASSIVE RADIATOR BLK GO+PLAY MINI
6	320019 01504	TWEETER GO+PLAY MINI
5	110092 02301	WOOFER GO+PLAY MINI
4	MZ0407001010	FRONT COVER BLK GO+PLAY MINI
4	MZ0407001020	FRONT COVER WHT GO+PLAY MINI
1	WT0417002010	FRONT FABRIC GRILL ASSY BLK GO+PLAY MINI
1	WT0417002020	FRONT FABRIC GRILL ASSY WHT GO+PLAY MINI
Pos. No.	P/N	Description



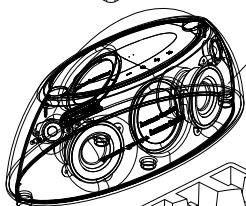
# PACKAGING VIEW

9

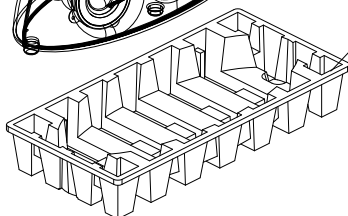
Top Paper Pulp



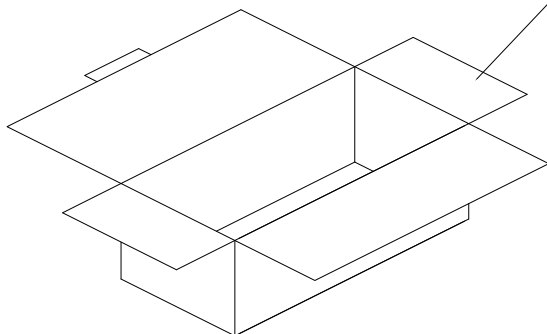
Product



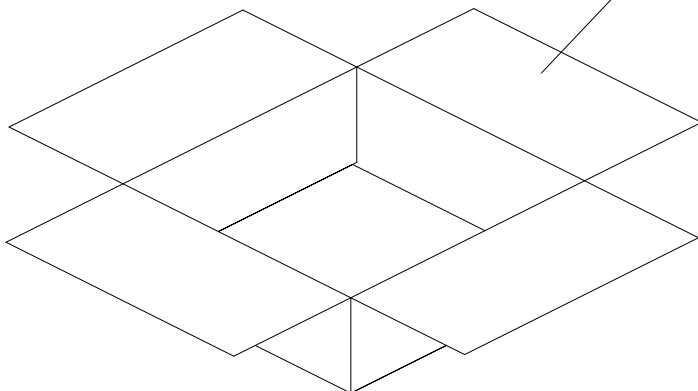
Bottom Paper Pulp



Beauty Box



Carton Box



## HK GO+PLAY MINI SPARE PARTS LIST

Pos. No.	P/N	Description
1	WT0417002010	FRONT FABRIC GRILL ASSY BLK GO+PLAY MINI
1	WT0417002020	FRONT FABRIC GRILL ASSY WHT GO+PLAY MINI
4	MZ0407001010	FRONT COVER BLK GO+PLAY MINI
4	MZ0407001020	FRONT COVER WHT GO+PLAY MINI
5	110092 02301	WOOFER GO+PLAY MINI
6	320019 01504	TWEETER GO+PLAY MINI
7	000100 14201 1	PASSIVE RADIATOR WHT GO+PLAY MINI
7	000100 20001 1	PASSIVE RADIATOR BLK GO+PLAY MINI
10	APA2PLAYM0301	KEY BOARD GO+PLAY MINI
11	ZJ0253001010	BUTTON CASE BLK GO+PLAY MINI
12	JL0105001010	BUTTON GO+PLAY MINI
13	MZ0262003010	RUBBER BUTTON BLK GO+PLAY MINI
13	MZ0262003020	RUBBER BUTTON WHT GO+PLAY MINI
14	BS1312001010	HANDLE GO+PLAY MINI
15	DQ0015007010	GASKET GO+PLAY MINI
17	WT0417001010	REAR FABRIC GRILL BLK GO+PLAY MINI
17	WT0417001020	REAR FABRIC GRILL WHT GO+PLAY MINI
18	GL0071001010	I/O CASE BLK GO+PLAY MINI
18	GL0071001020	I/O CASE WHT GO+PLAY MINI
19	HZ0407001010	REAR COVER BLK GO+PLAY MINI
19	HZ0407001020	REAR COVER WHT GO+PLAY MINI
21	ZS0045002010	SEALING STRIP GO+PLAY MINI
22	APA2PLAYM0201	IO BOARD GO+PLAY MINI
23	GL0144001010	BATTERY CASE GO+PLAY MINI
25	EXA3030007410	Li-ion BATTERY GO+PLAY MINI
26	APA2PLAYM0101	MAIN BOARD GO+PLAY MINI
30	MM0402001010	BOTTOM CASE BLK GO+PLAY MINI
30	MM0402001020	BOTTOM CASE WHT GO+PLAY MINI
31	TT0020032010	FOOT PAD BLK GO+PLAY MINI
31	TT0020032020	FOOT PAD WHT GO+PLAY MINI
32	TT0020033010	FOOT PAD RING BLK GO+PLAY MINI
32	TT0020033020	FOOT PAD RING WHT GO+PLAY MINI
	ETSN1024A5W0N	AC ADAPTER 19V 3A WHT GO+PLAY MINI
	ETSN1024B2B0NS	AC ADAPTER 19V 3A BLK GO+PLAY MINI
	EWA6HMMGP0010	RF ANTENNA GO+PLAY MINI
	EWB5017001000	13P CABLE GO+PLAY MINI
	EWF2013090170	17P FFC CABLE GO+PLAY MINI
	EWP0120007020	EU POWER CORD BLK GO+PLAY MINI
	EWP0120097030	EU POWER CORD WHT GO+PLAY MINI
	EWP1120007121	US POWER CORD BLK GO+PLAY MINI
	EWP1120097130	US POWER CORD WHT GO+PLAY MINI
	EWP2120007221	UK POWER CORD BLK GO+PLAY MINI
	EWP2120097230	UK POWER CORD WHT GO+PLAY MINI
	EWP4120007B21	KOR POWER CORD BLK GO+PLAY MINI
	EWP4120097B30	KOR POWER CORD WHT GO+PLAY MINI
	EWP5120007421	CHN POWER CORD BLK GO+PLAY MINI
	EWP5120097K30	CHN POWER CORD WHT GO+PLAY MINI

	EWP8120097D30	THAILAND POWER CORD BLK GO+PLAY MINI
	EWPF120007L21	THAILAND POWER CORD WHT GO+PLAY MINI
	EWPE120007521	AUS POWER CORD BLK GO+PLAY MINI
	EWPE120097530	AUS POWER CORD WHT GO+PLAY MINI
	EXM0304150010	MIC GO+PLAY MINI

## **REVISION LIST**

Version 1.0  
Initial release for HK GO+PLAY MINI May 2016