



Service Manual

BOOMBOX 3

The JBL Boombox 3 is a big and powerful portable Bluetooth speakers. The IP67 rating will not only be water-proof but also dust-proof. 24 hours of playtime can meet a long time of outdoor use, it will bring significant sound improvement, powerful, rugged and fashionable.

SKU:

JBLBOOMBOX3BLKAM, JBLBOOMBOX3SQUADAM, JBLBOOMBOX3BLKEP, JBLBOOMBOX3SQUADEP, JBLBOOMBOX3BLKUK, JBLBOOMBOX3SQUADUK, JBLBOOMBOX3BLKCN, JBLBOOMBOX3SQUADCN, JBLBOOMBOX3BLKAS, JBLBOOMBOX3SQUADAS, JBLBOOMBOX3BLKBR, JBLBOOMBOX3SQUADBR, JBLBOOMBOX3BLKRU, JBLBOOMBOX3SQUADRU, JBLBOOMBOX3BLKIN, JBLBOOMBOX3SQUADIN, JBLBOOMBOX3BLKJN, JBLBOOMBOX3SQUADJN.



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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:



Pb

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.

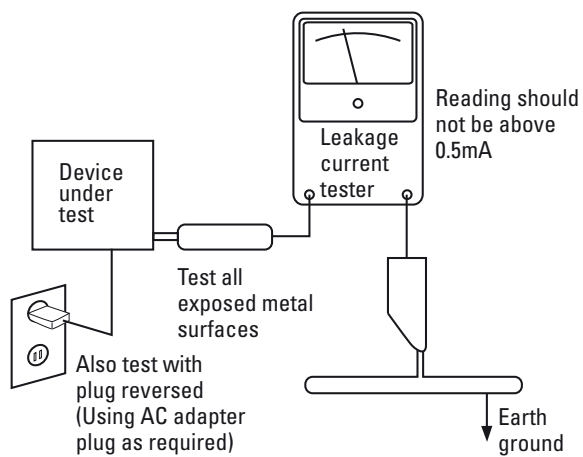
Components identified with the IEC symbol  in the parts list are of special significance to safety. When replacing a component identified with , use only the replacement parts designated, or parts with the same ratings or resistance, wattage, or voltage that are designated in the parts list in this manual.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

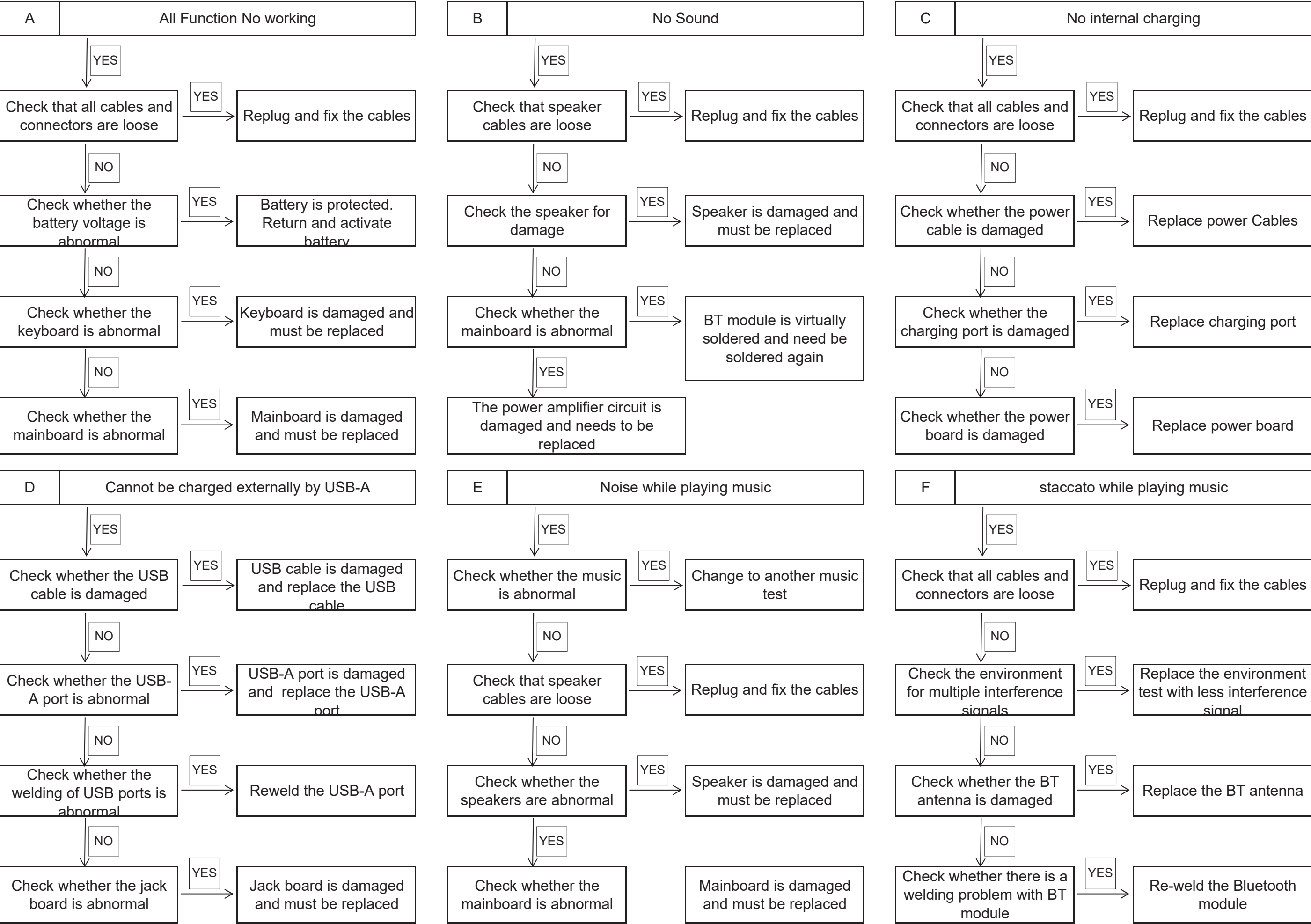


AC Leakage Test

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.

Technical Specifications

Model Name	JBL Boombox 3
Bluetooth version:	5.3
Support:	A2DP V1.3, AVRCP V1.6
Transducer:	189x114mm Subwoofer, 2x80.9x80.9mm Midrange / 2 x 2.75 inch, 2xΦ20mm Tweeter / 2x0.75 inch
Output power:	1x80W RMS-subwoofer + 2 x 40 W RMS-midrange + 2x10W RMS-tweeter (AC mode) 1x60W RMS-subwoofer + 2x30W RMS-midrange+ 2x8W RMS-tweeter (Battery mode)
Frequency response:	40 Hz - 20 kHz
Signal-to-noise ratio:	>80 dB
Power Supply:	100 - 240 Vac ; 50/60 Hz
Battery type:	Li-ion polymer 72.6 Wh (equivalent to 7.26 V / 10,000 mAh)
Battery charge time:	< 6.5H
Music playing time:	Up to 24 hours
Bluetooth transmitter power:	≤ 9 dBm (EIRP)
Bluetooth transmitter frequency range:	2.402 GHz - 2.480 GHz
Bluetooth transmitter modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Dimension (W x D x H):	482.4 x 256.9 x 199.7 mm / 19.0 x 10.1 x 7.9
Weight:	6.7 kg / 14.7 lbs

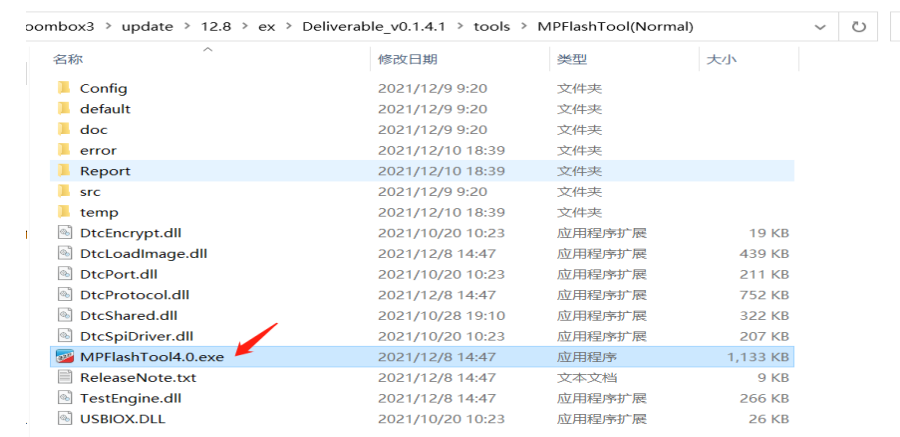


Software upgrade Instruction

1. Preparation tools:
Windows operating system computer;
Prepare the USB data cable according to the interface of the speaker.



2. Unzip the firmware package (Take Deliverable_v0.1.8.1 firmware as an example)
Double click to run MPFlashTool4.0.exe, The file path is as follows:
Deliverable_v0.1.8.1\tools\MPFlashTool((Normal))\MPFlashTool4.0.exe



3. Press and hold the volume + button, the Bluetooth button and then press the POWER button for about 3 seconds, the Power light flashes to indicate that it has entered the burning mode.



4. Connect the computer to the speaker via a USB cable. At this point, the MPFlashTool interface will display that the serial port is recognized, select the corresponding serial port, and click RUN to program.

5. After clicking RUN, Wait for the progress bar to advance, and display PASSED, which means that the programming has been successful.

Button combination function

1. How to Reset?

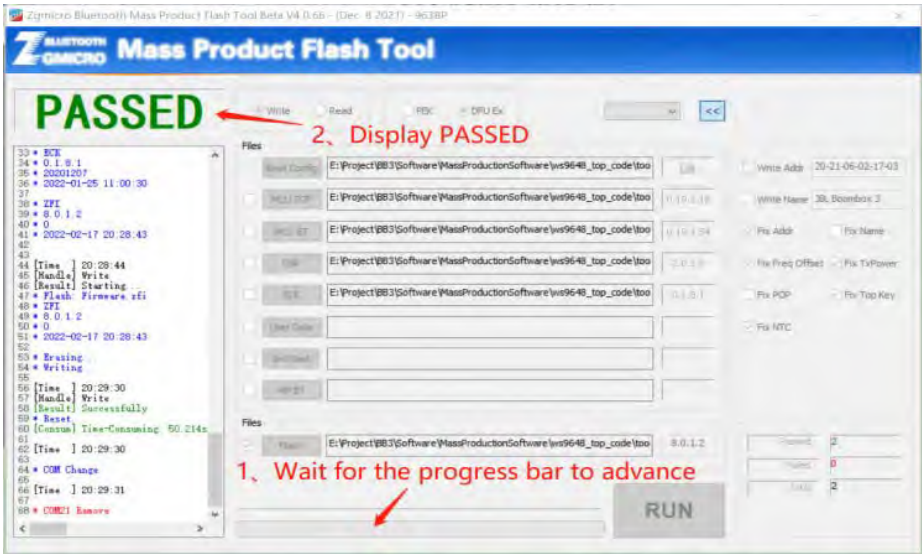
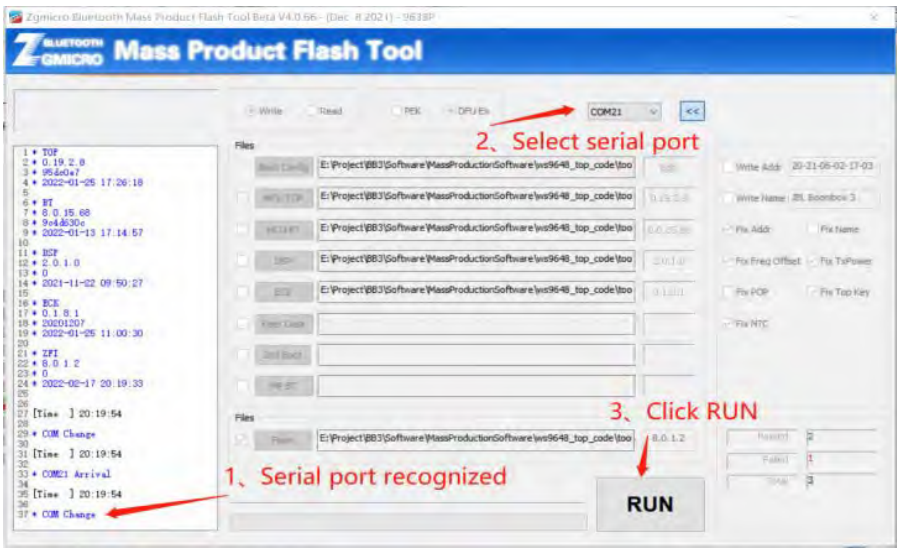
Press the '+' button and the 'Play' button simultaneously for 2 seconds.

2. How to check/read firmware version?

Press the '-' button and the 'Link' button simultaneously for 2 seconds.

3. Activate/de-activate Demo-mode.

Activate Demo-mode, power on and connect the power cord, hold down the 'Play' button and 'Bluetooth' button simultaneously for 10 seconds; De-activate Demo-mode, connect the power cord, also need to hold down 'Play' button and 'Bluetooth' button simultaneously for 10 seconds.



Tool list and pictures reference pictures

number	name	remark
1	Small Screwdrivers Blades	2
2	Middle Screwdrivers Blades	3
3	Large Screwdrivers Blades	4
4	Become Warped Blade	Flat Tip Screwdrivers
5	Right Anger Electric Screwdriver	KILEWS
6	Bend Electric Screwdriver	



Disassembly instruction (main unit)

1. Counterclockwise and remove the side bumpers at both ends.



2. Unscrew the 2pcs screws at each end of handle and remove the handle.



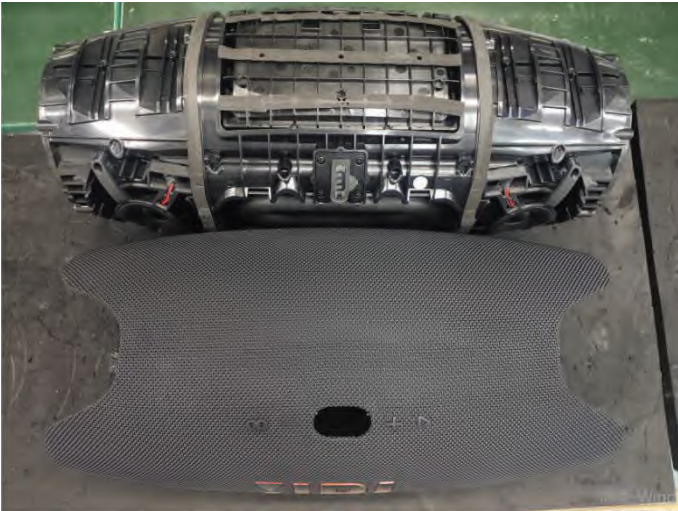
3. Unscrew the 6pcs screws on left and right side caps and remove the side caps.



4. Open the back fabric grille along the combination line.



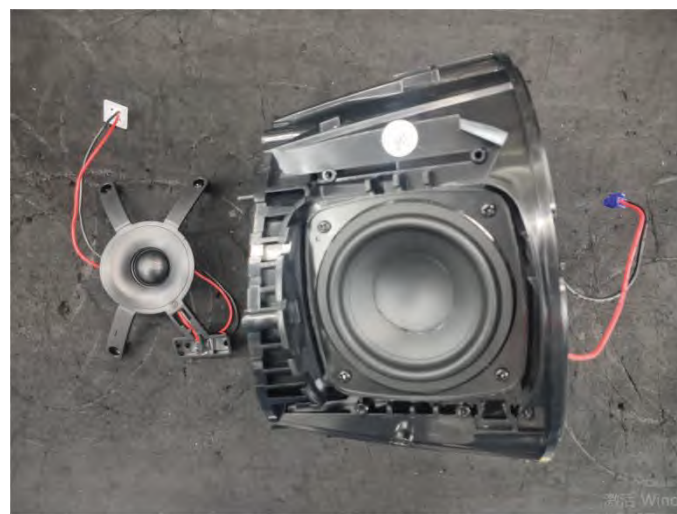
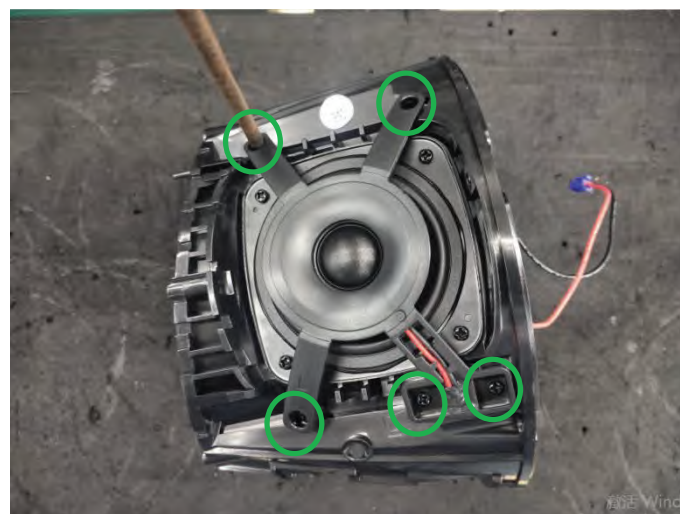
5. Unscrew the 4pcs screws and remove the whole fabric grille.



6. Unscrew the 6pcs screws each on the left and right cavities and remove the cavities .



7. Unscrew the 5pcs screws and remove the left tweeter.



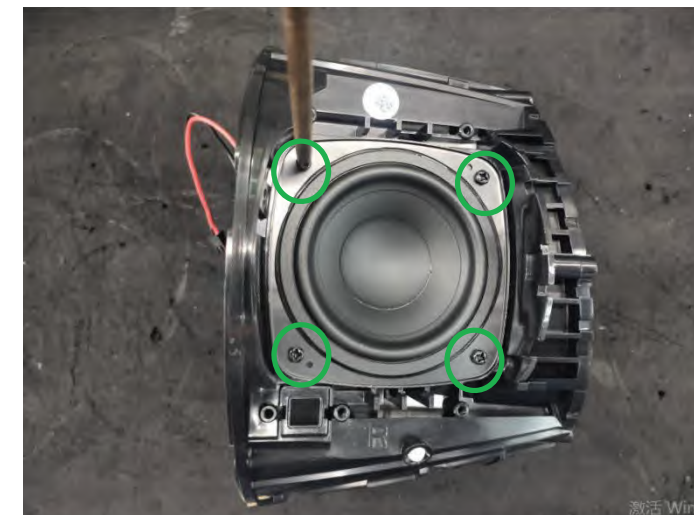
8. Unscrew the 4pcs screws and remove the left mid-range.



9. Unscrew the 5pcs screws and remove the right tweeter.



10. Unscrew the 4pcs screws and remove the right mid-range.



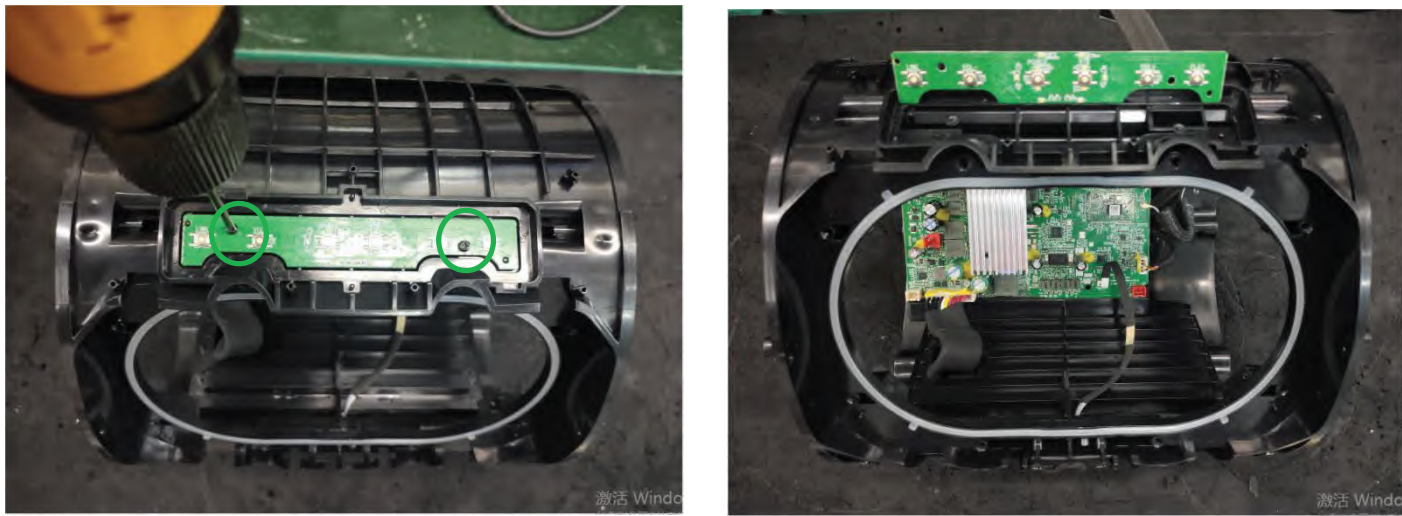
11. Unscrew the 8pcs screws and remove the subwoofer.



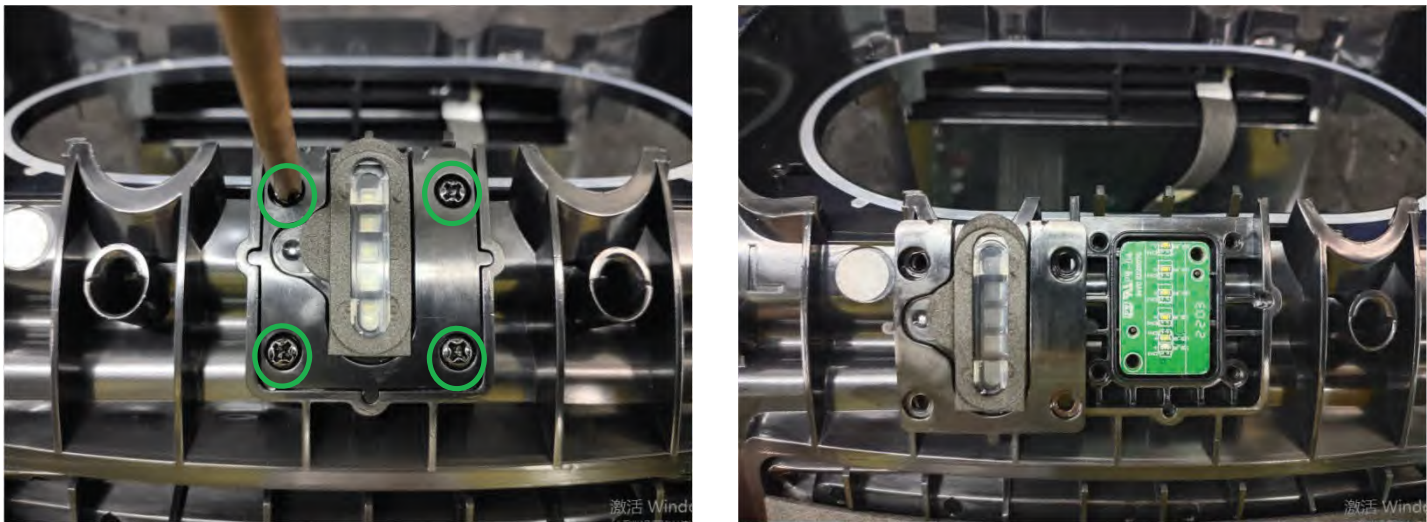
12. Pry the rubber buttons and remove the rubber buttons.



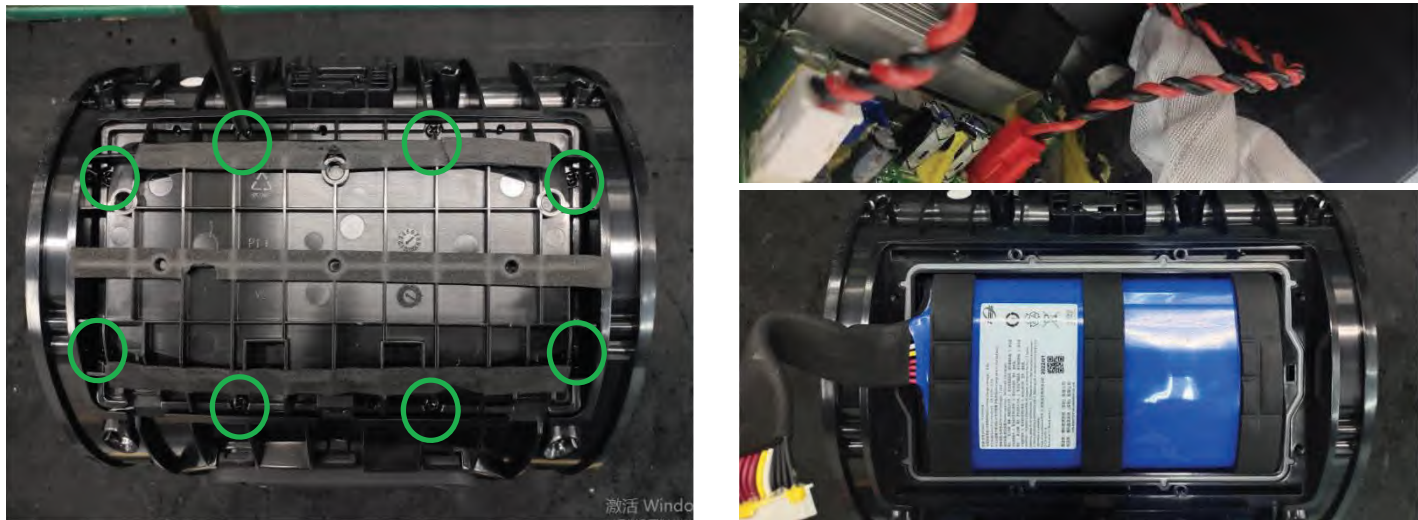
13. Unscrew the 2pcs screws and remove the button board.



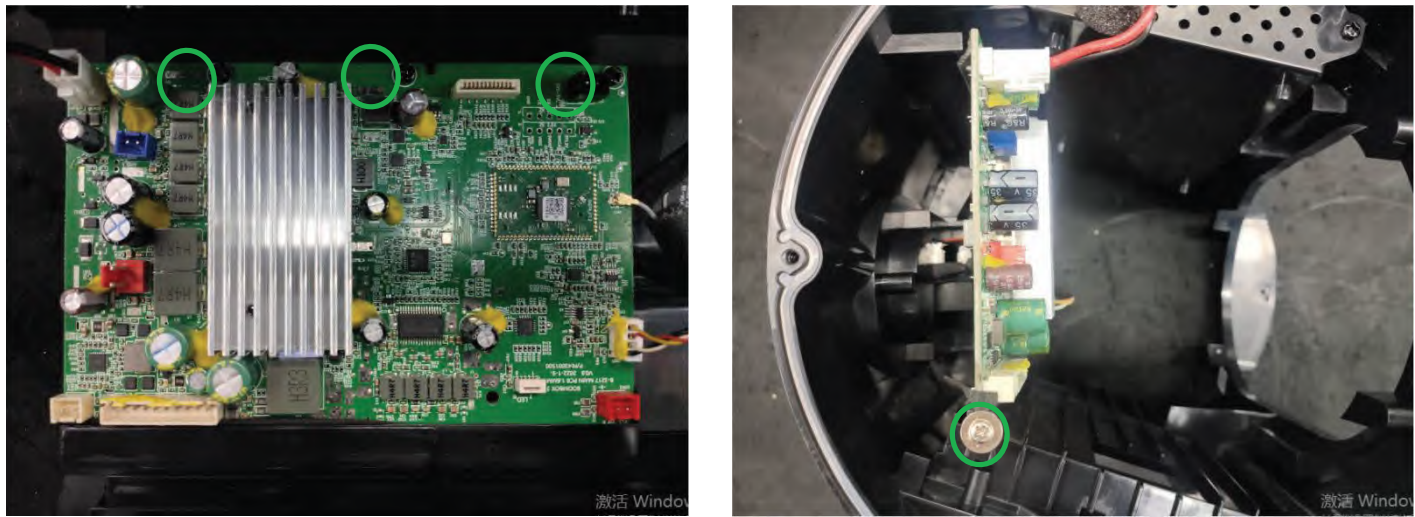
14. Unscrew the 4pcs screws and remove the LED light cover and PCBA board.



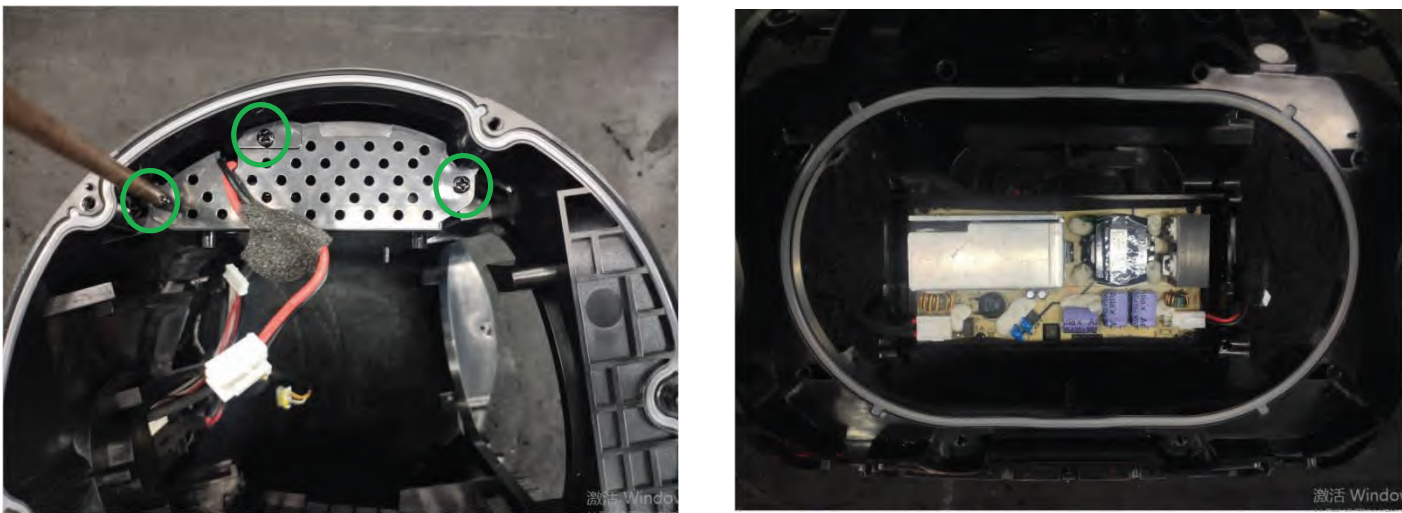
15. Unscrew the 8pcs screws, pull one end of the cable and remove the battery.



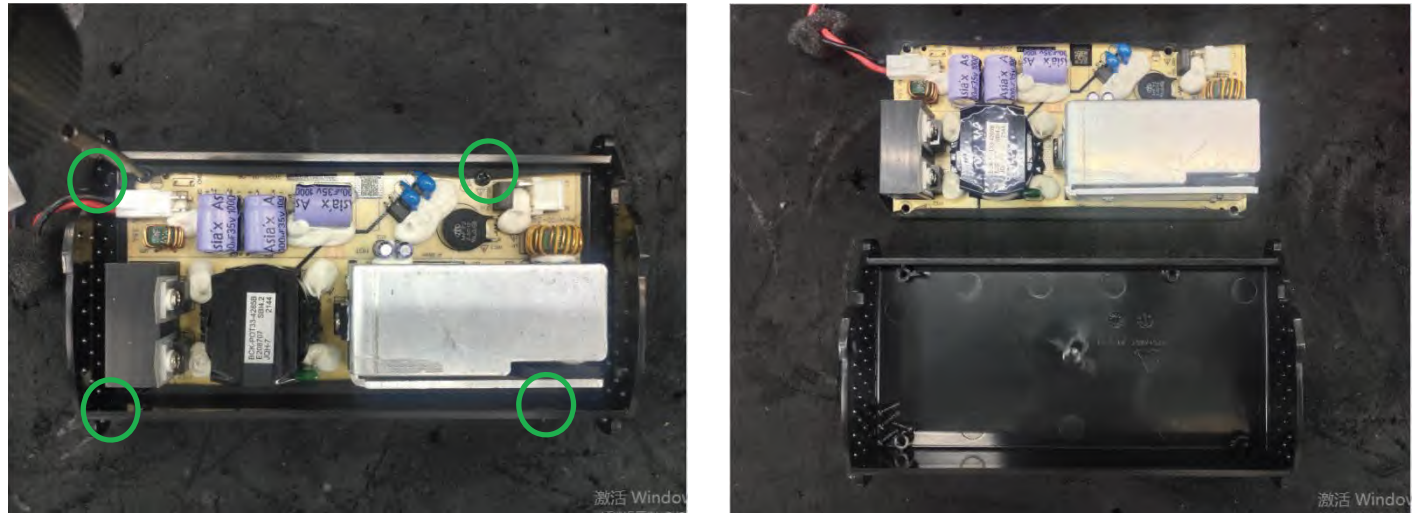
16. Unscrew the 3pcs screws and 2pcs screws both sides of the the main board.



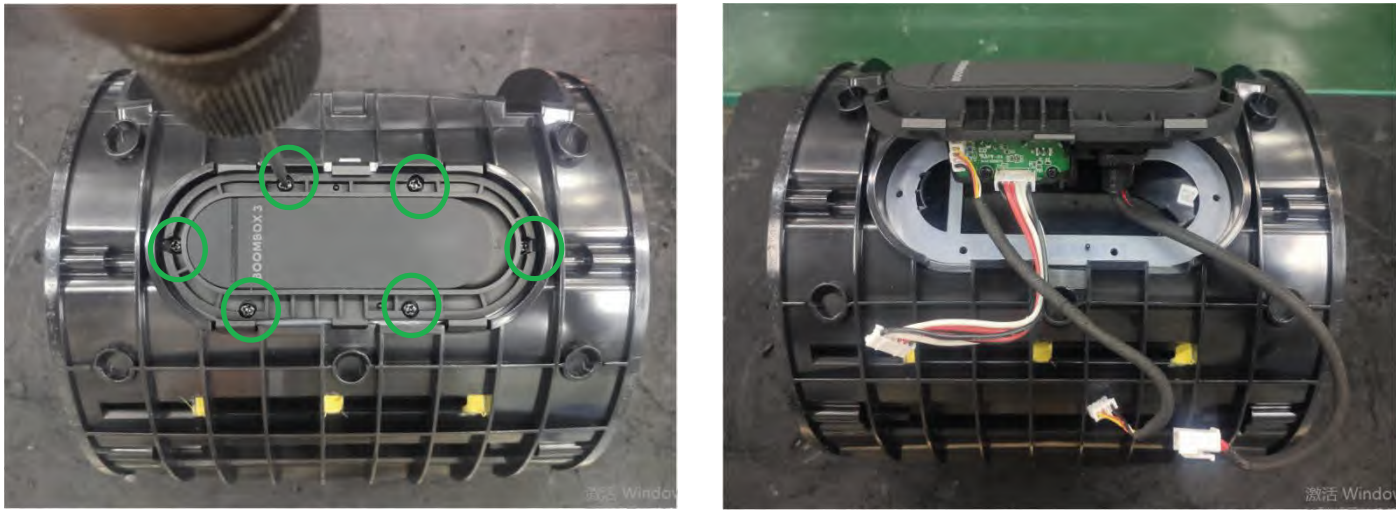
17. Unscrew the 3pcs screws screws on each side of the the power board cover.



18. Unscrew the 4 screws, remove the power board.



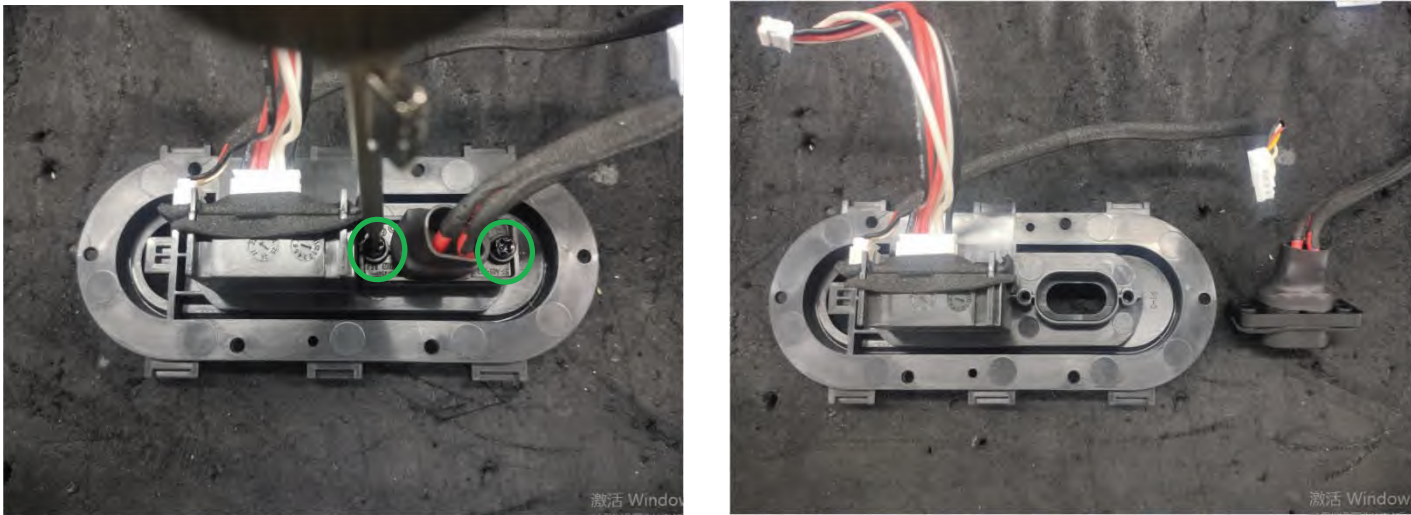
19. Unscrew the 6pcs screws and remove the I/O connector bracket.



20. Pull the screens and remove the I/O connector door.



21. Unscrew the 2pcs screws and remove the power cable port.



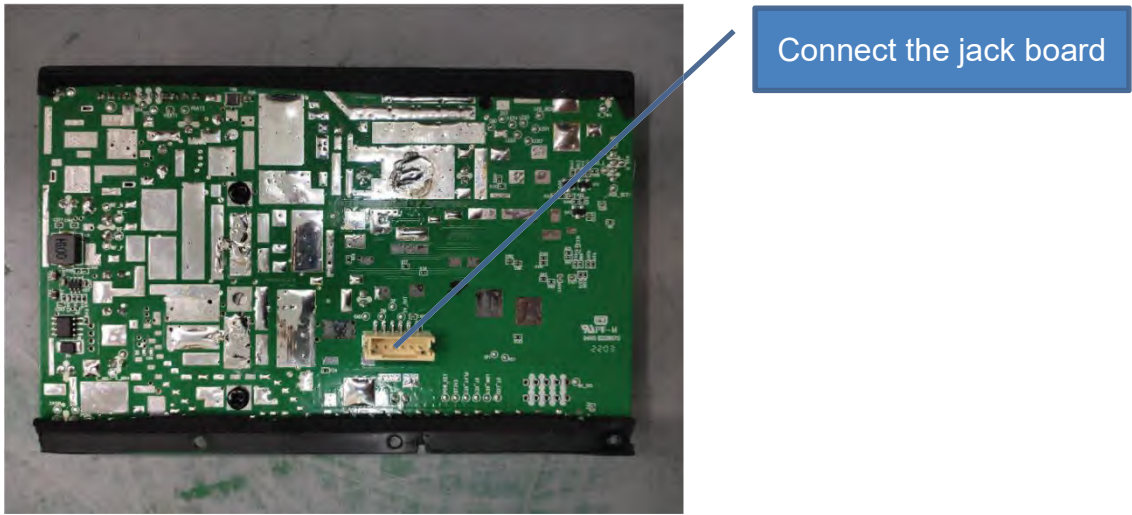
22. Unscrew the 2pcs screws and remove the power cable port.



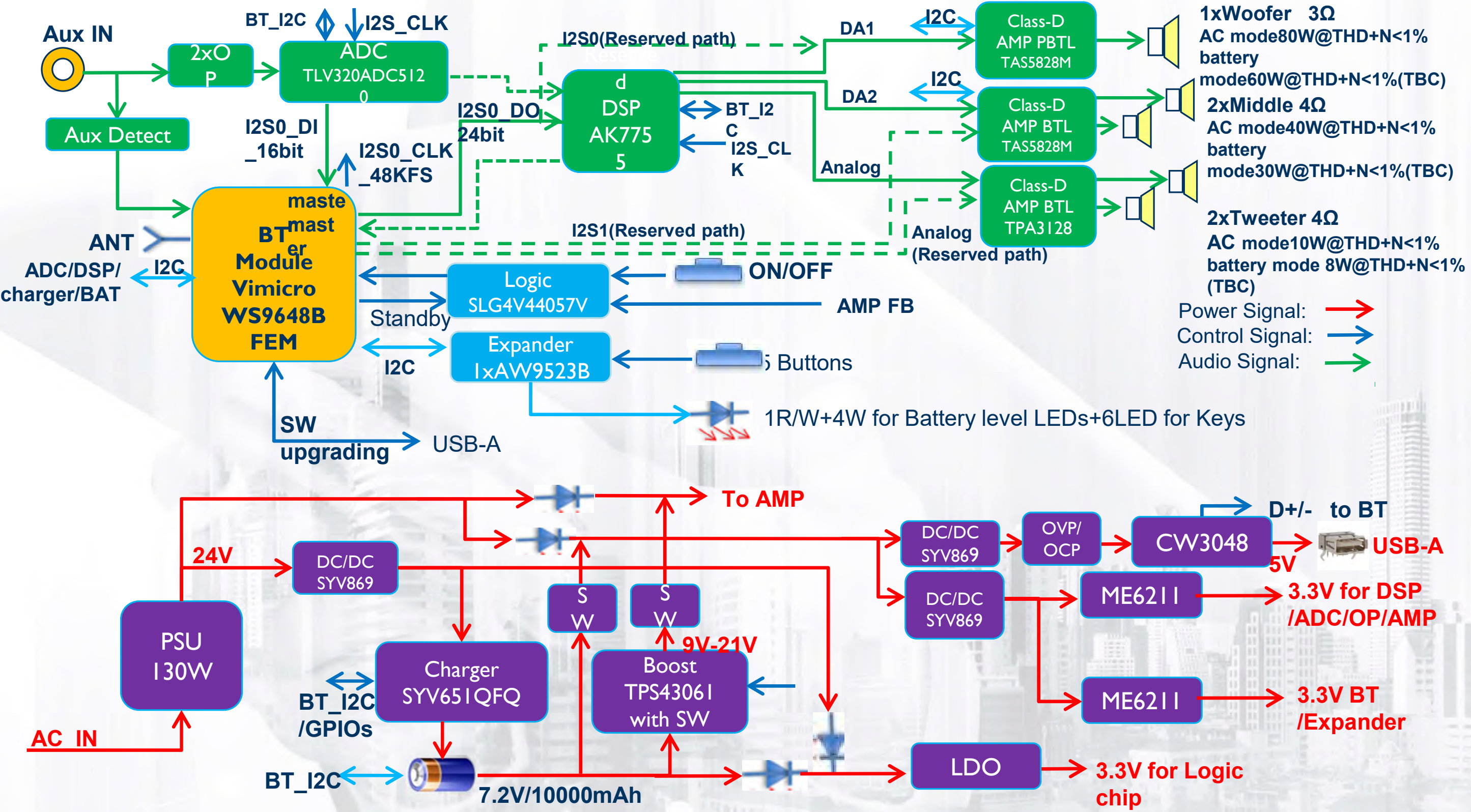
The front connection diagram for main board.



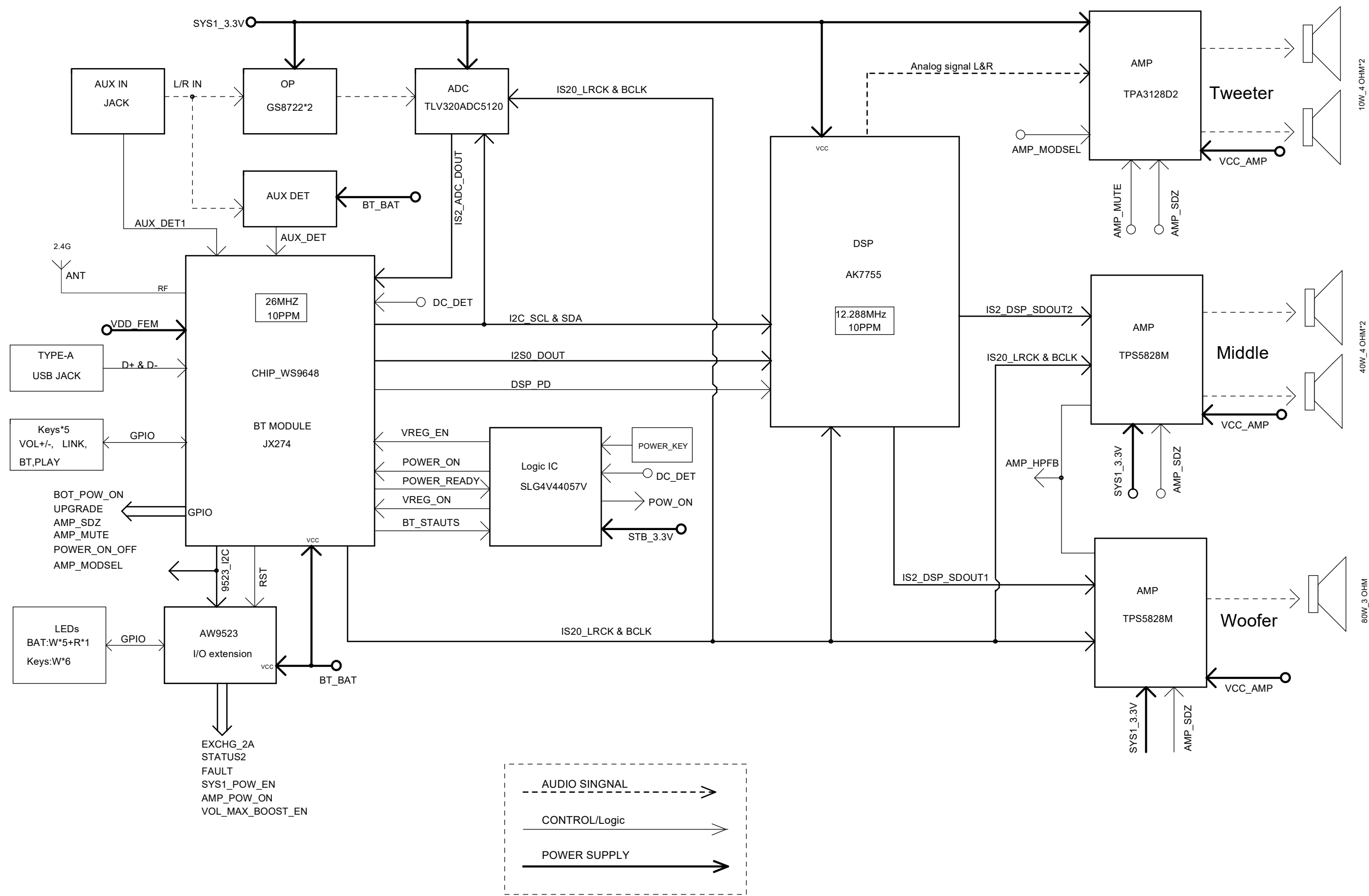
The back connection diagram for main board.



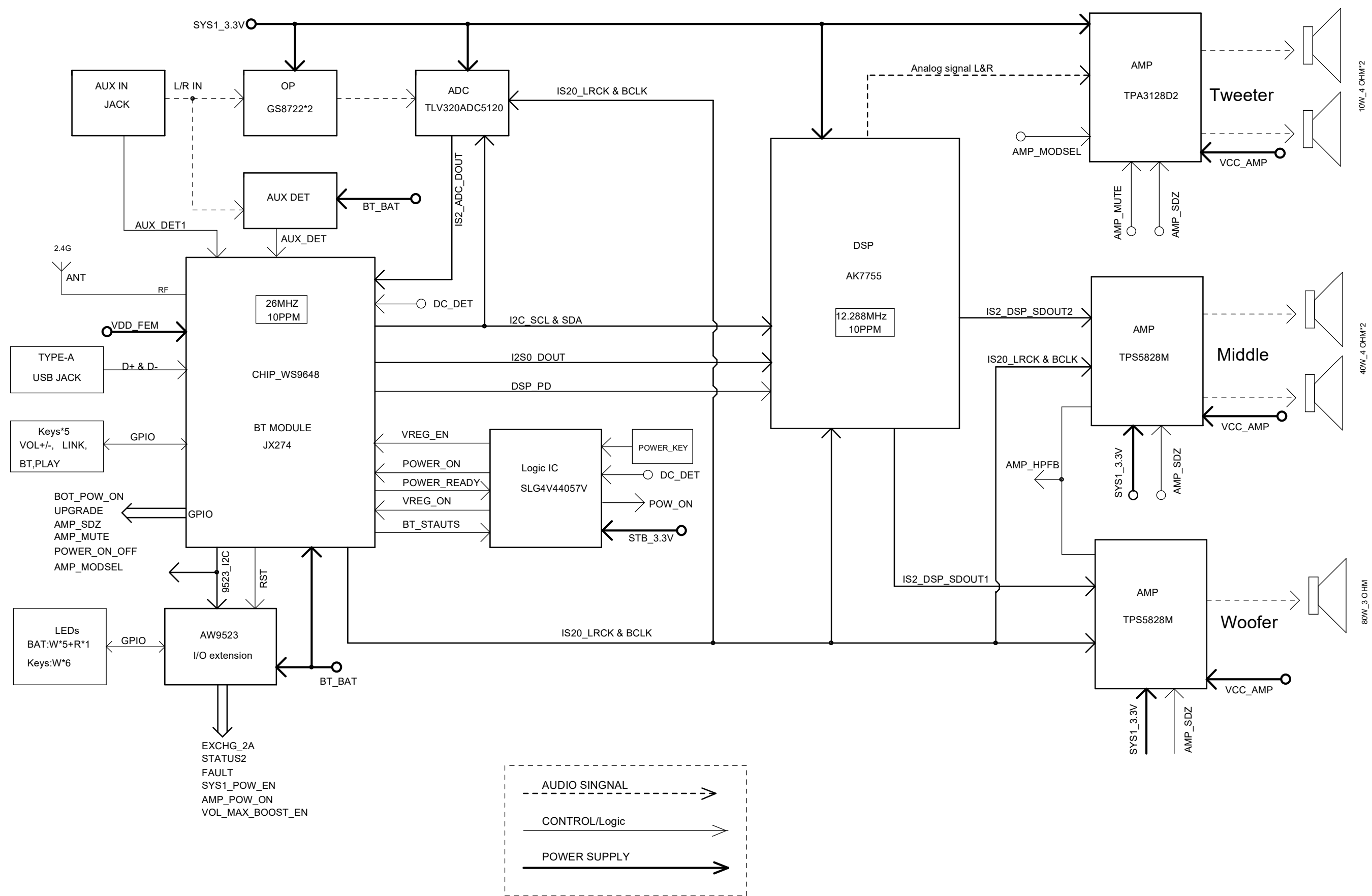
BLOCK DIAGRAM - SOLUTION A



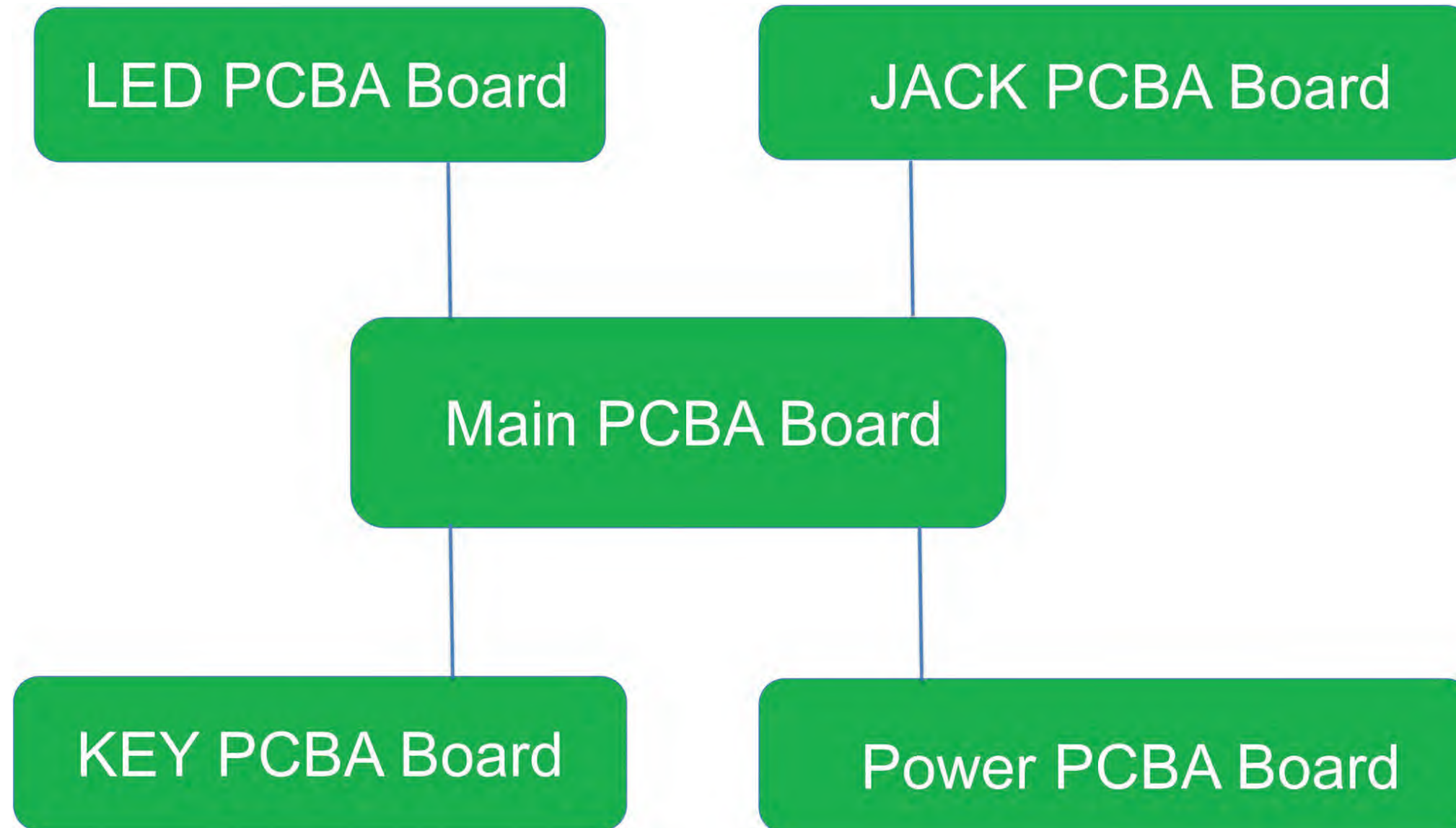
BLOCK DIAGRAM - SOLUTION B



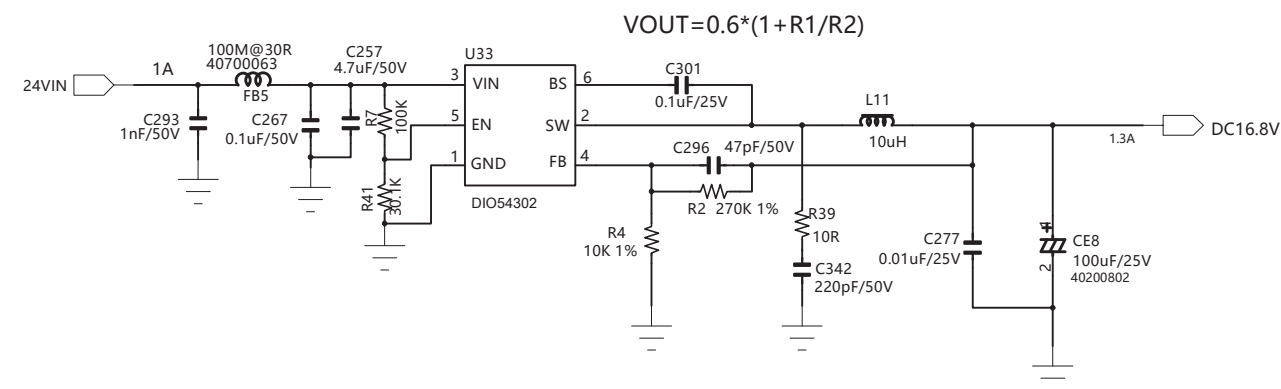
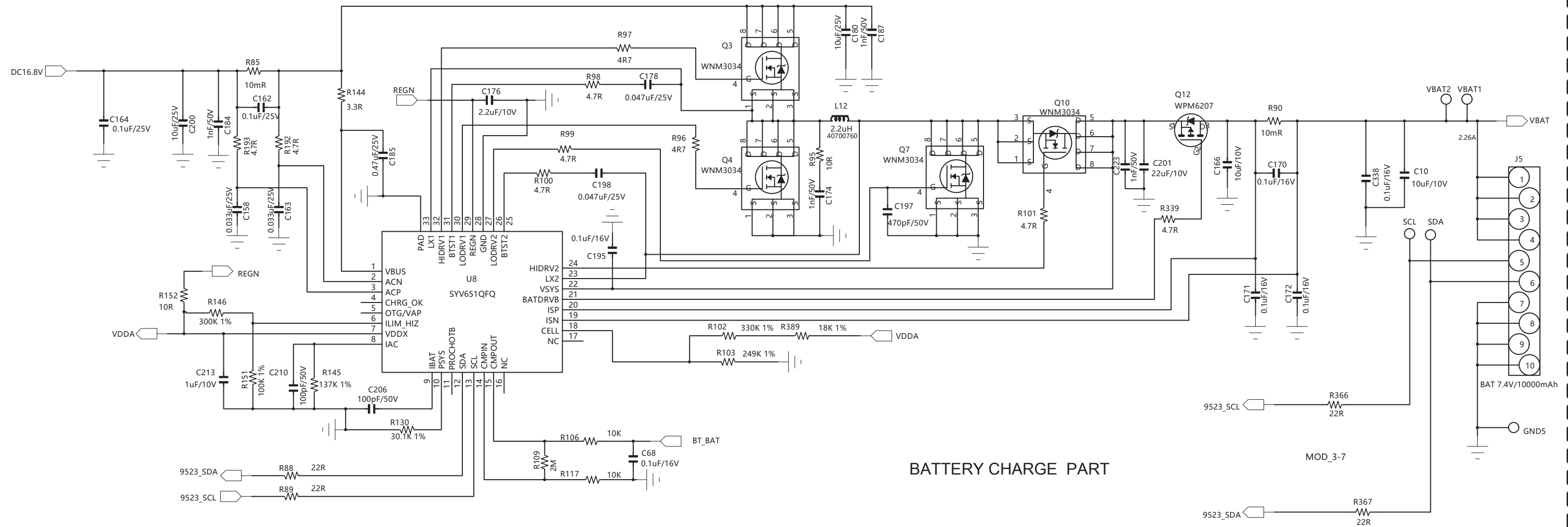
BLOCK DIAGRAM - SOLUTION C



WIRING DIAGRAM

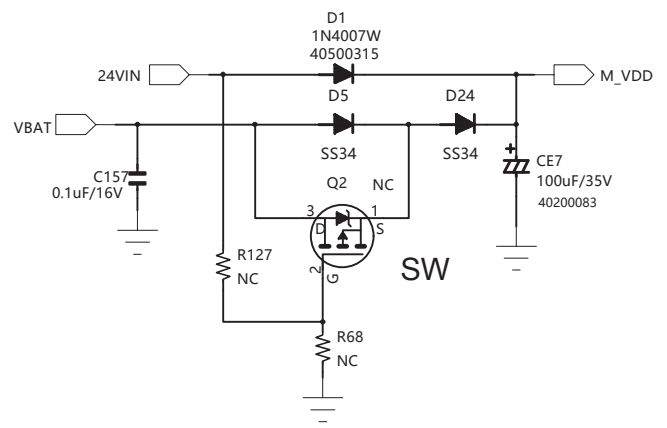
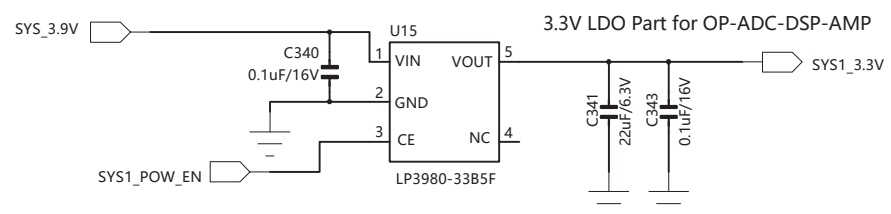
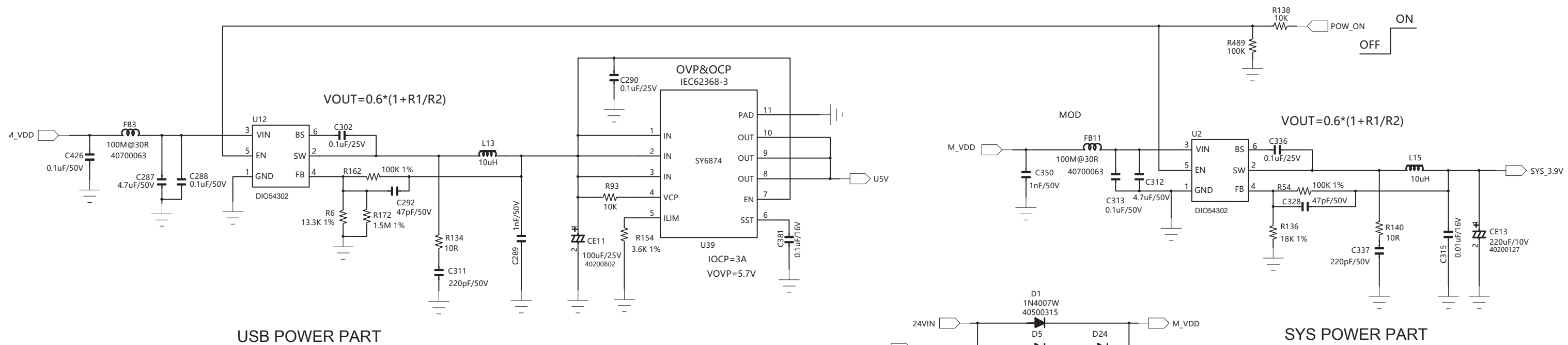
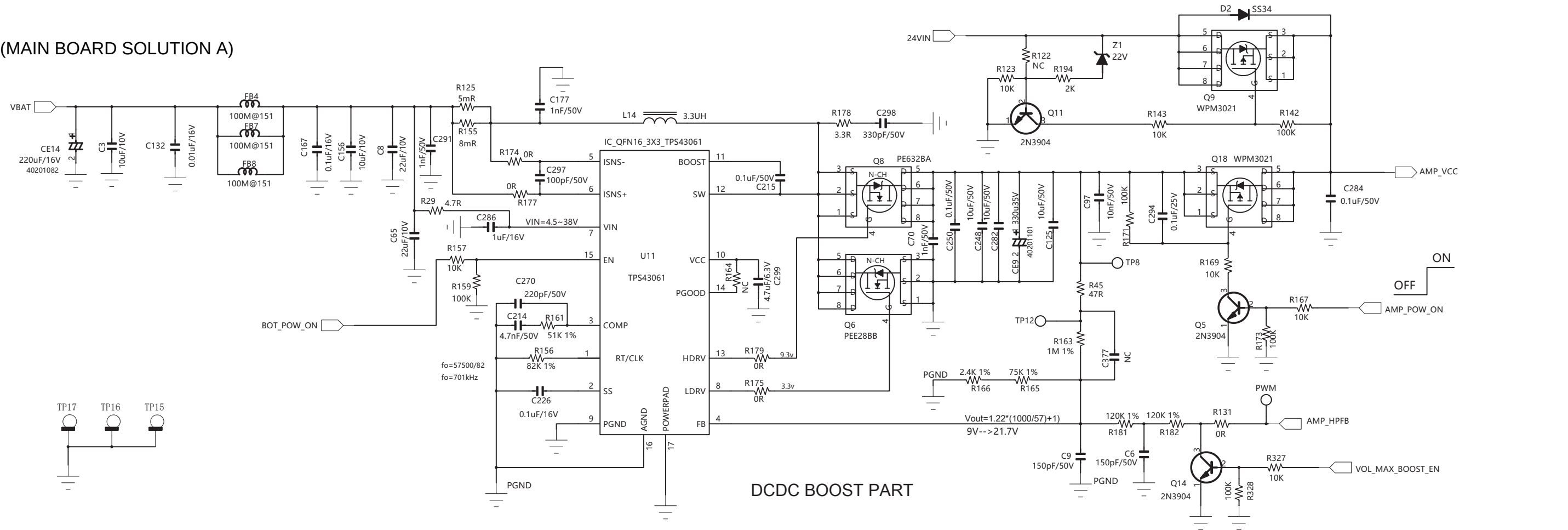


(MAIN BOARD SOLUTION A)

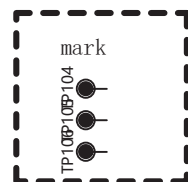
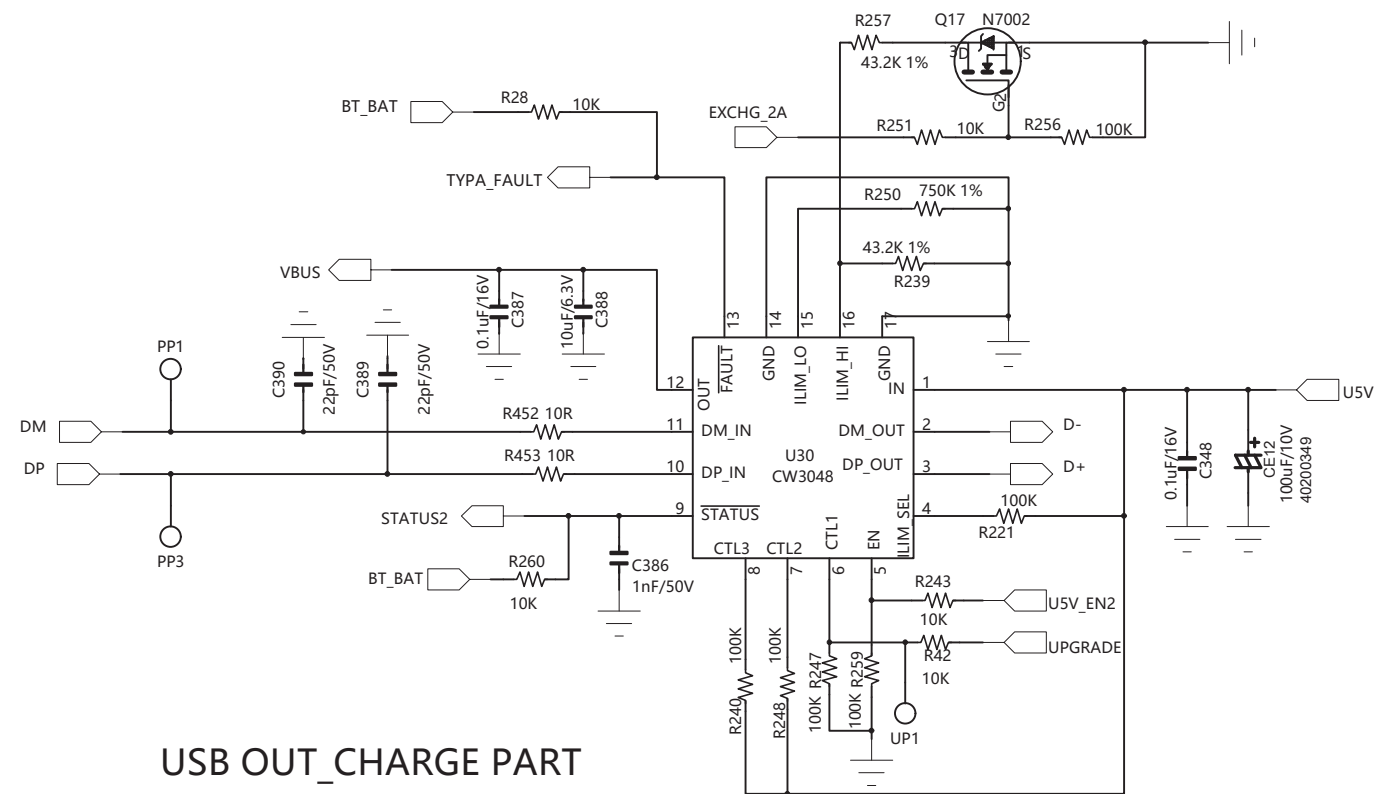
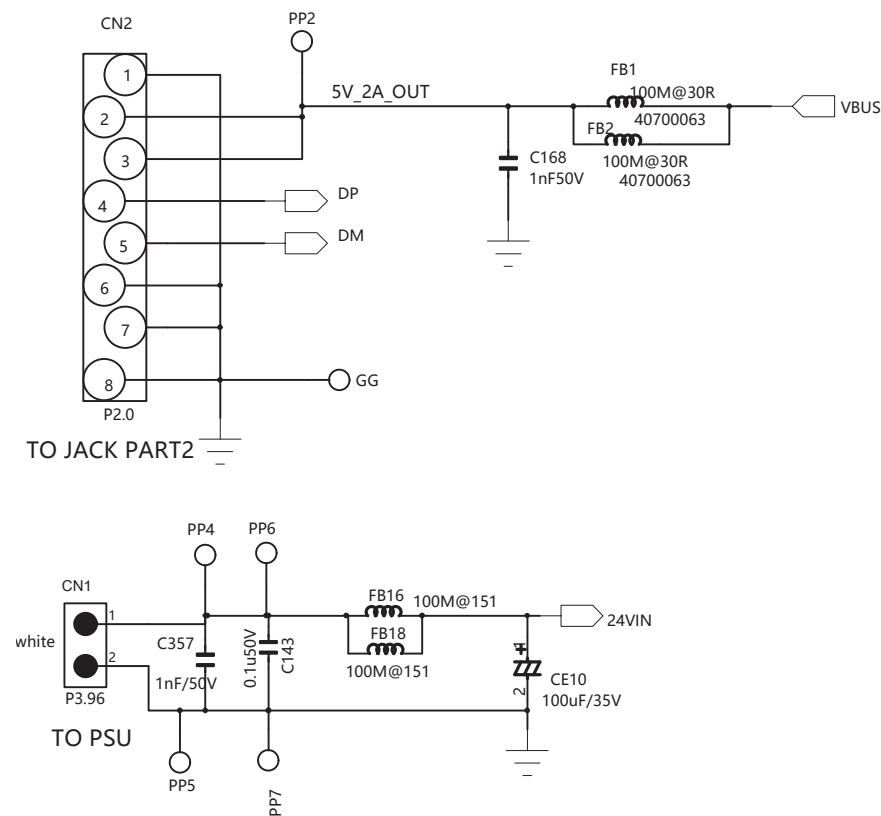


CHARGE POWER PART

(MAIN BOARD SOLUTION A)



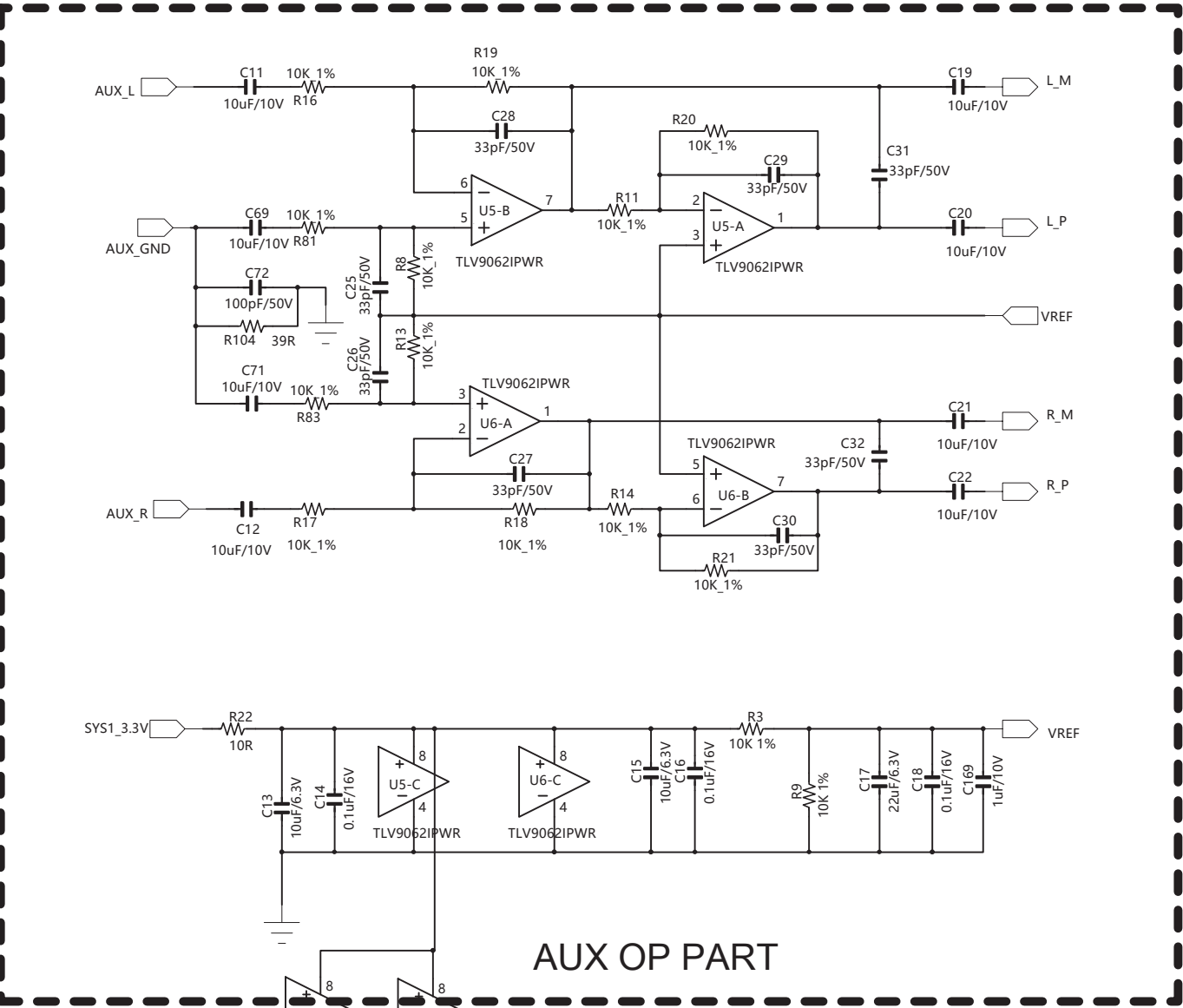
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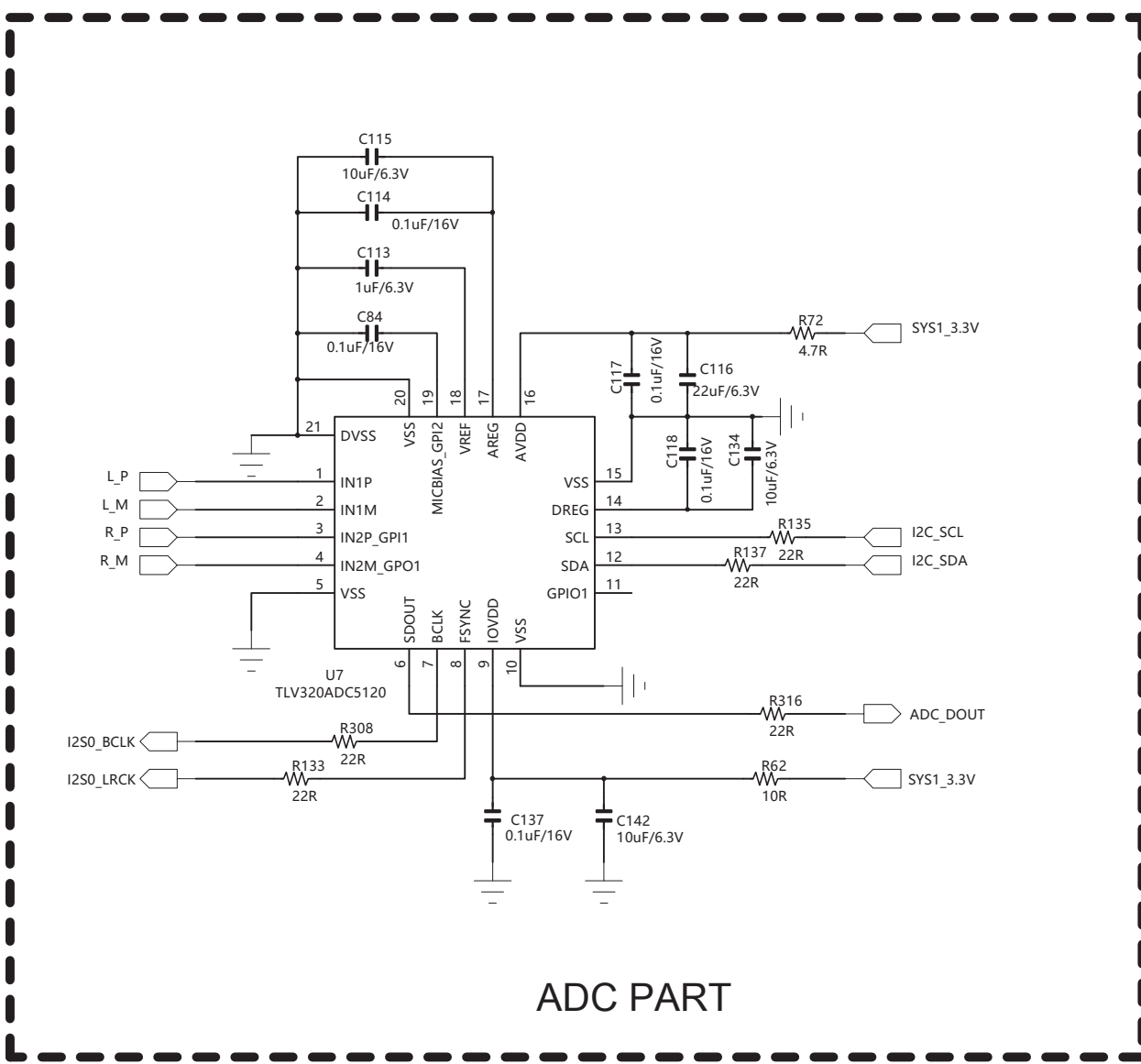
I/O extension



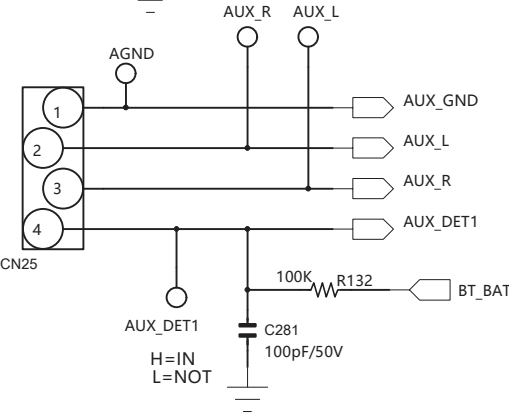
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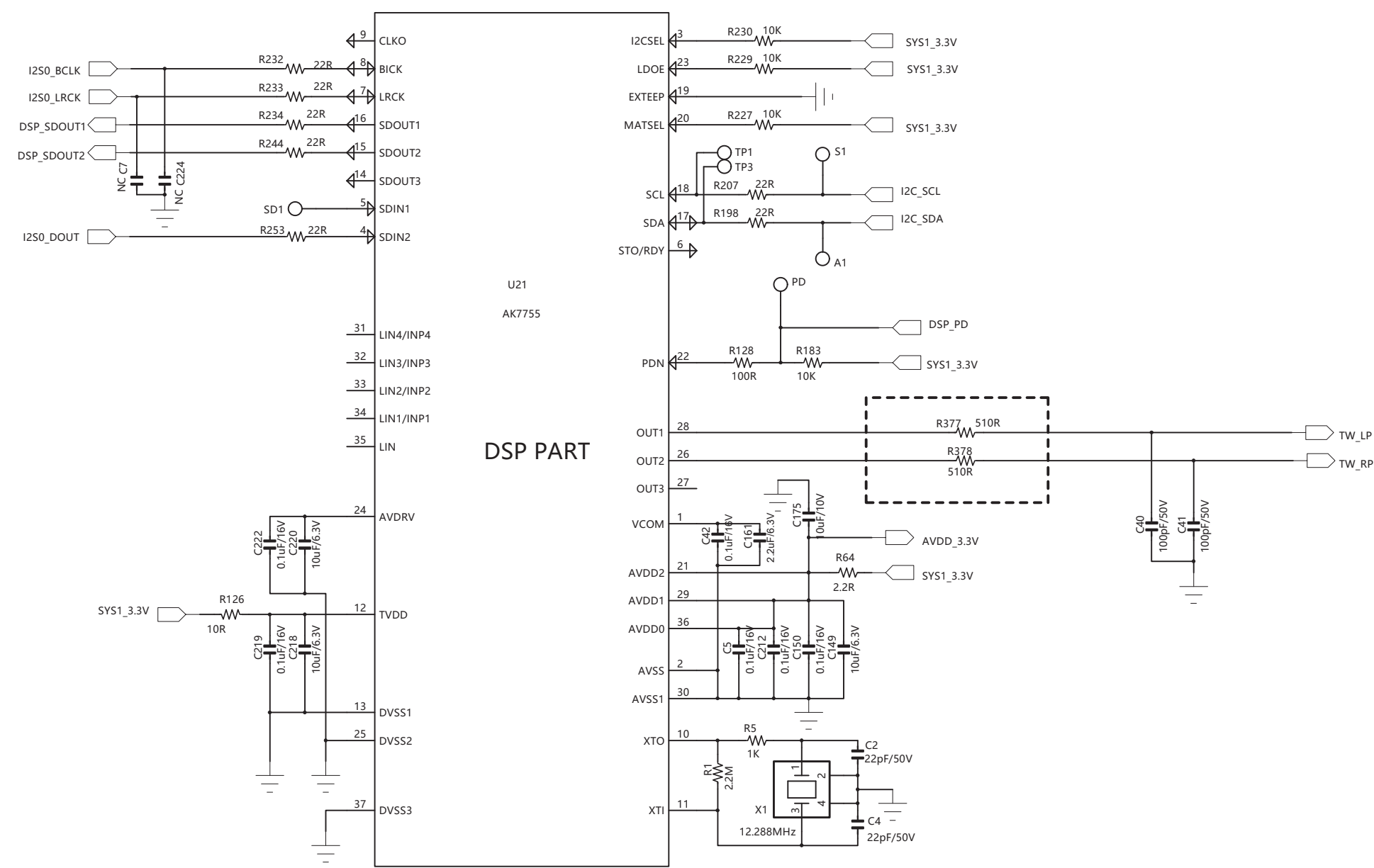
AUX OP PART



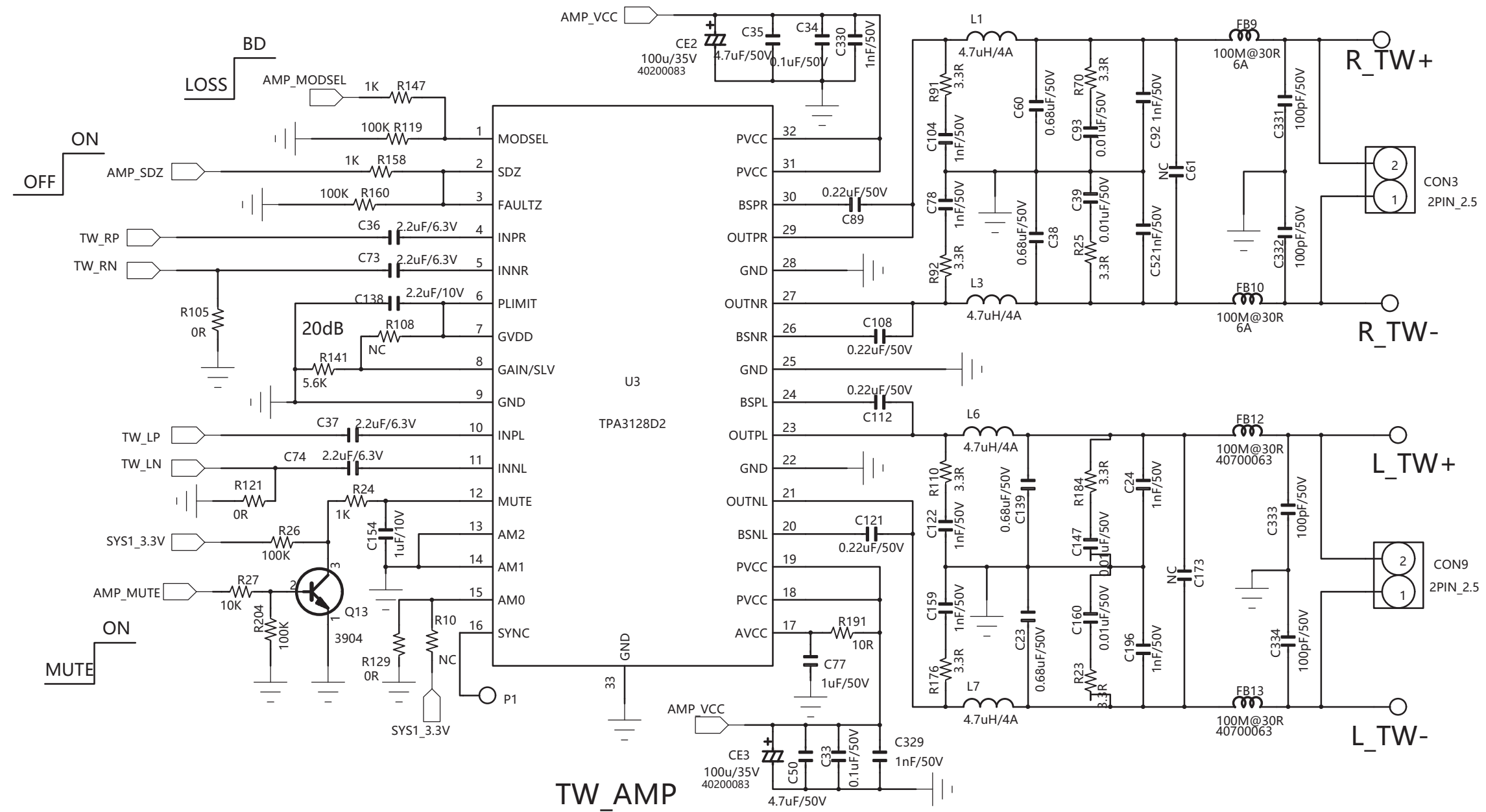
ADC PART



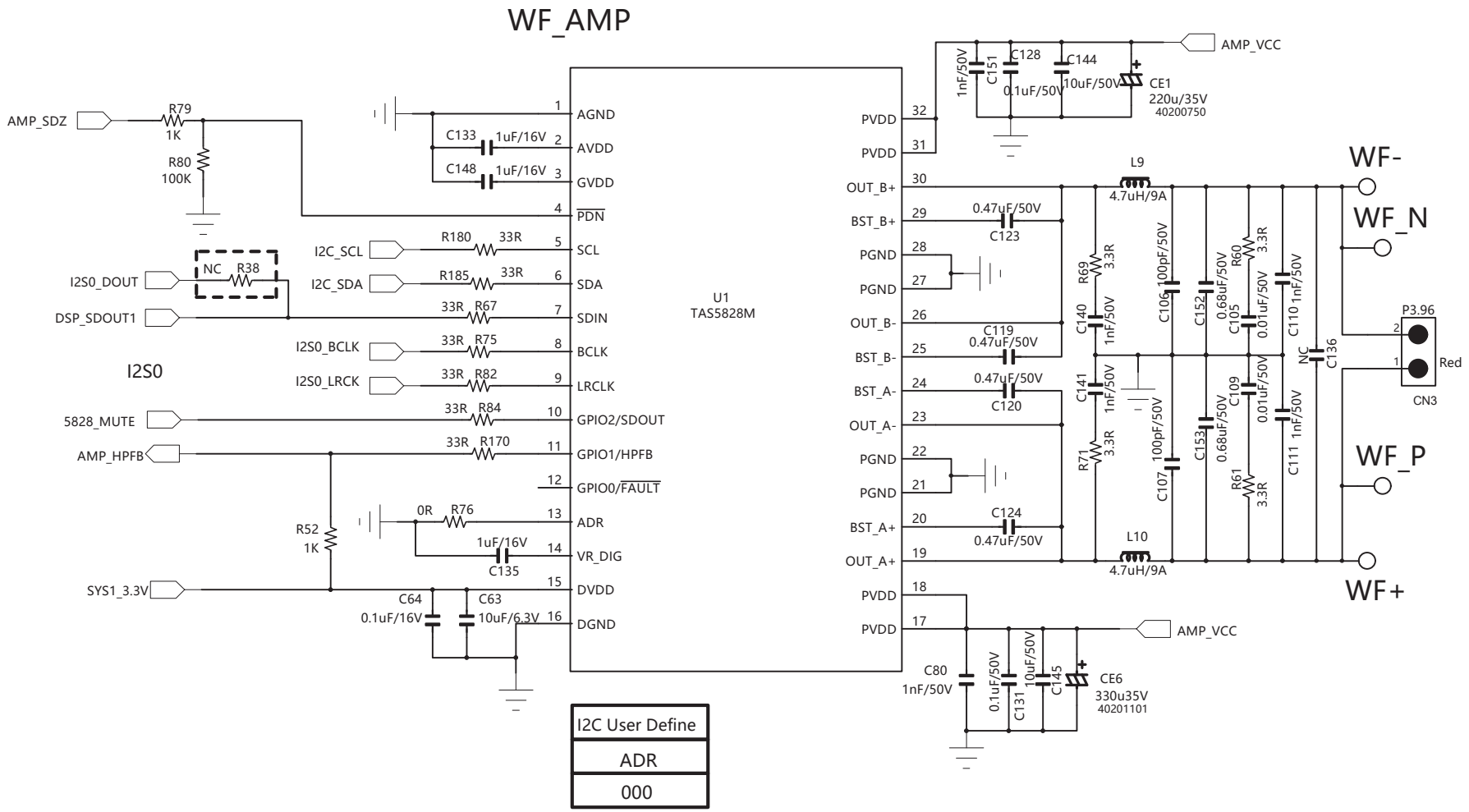
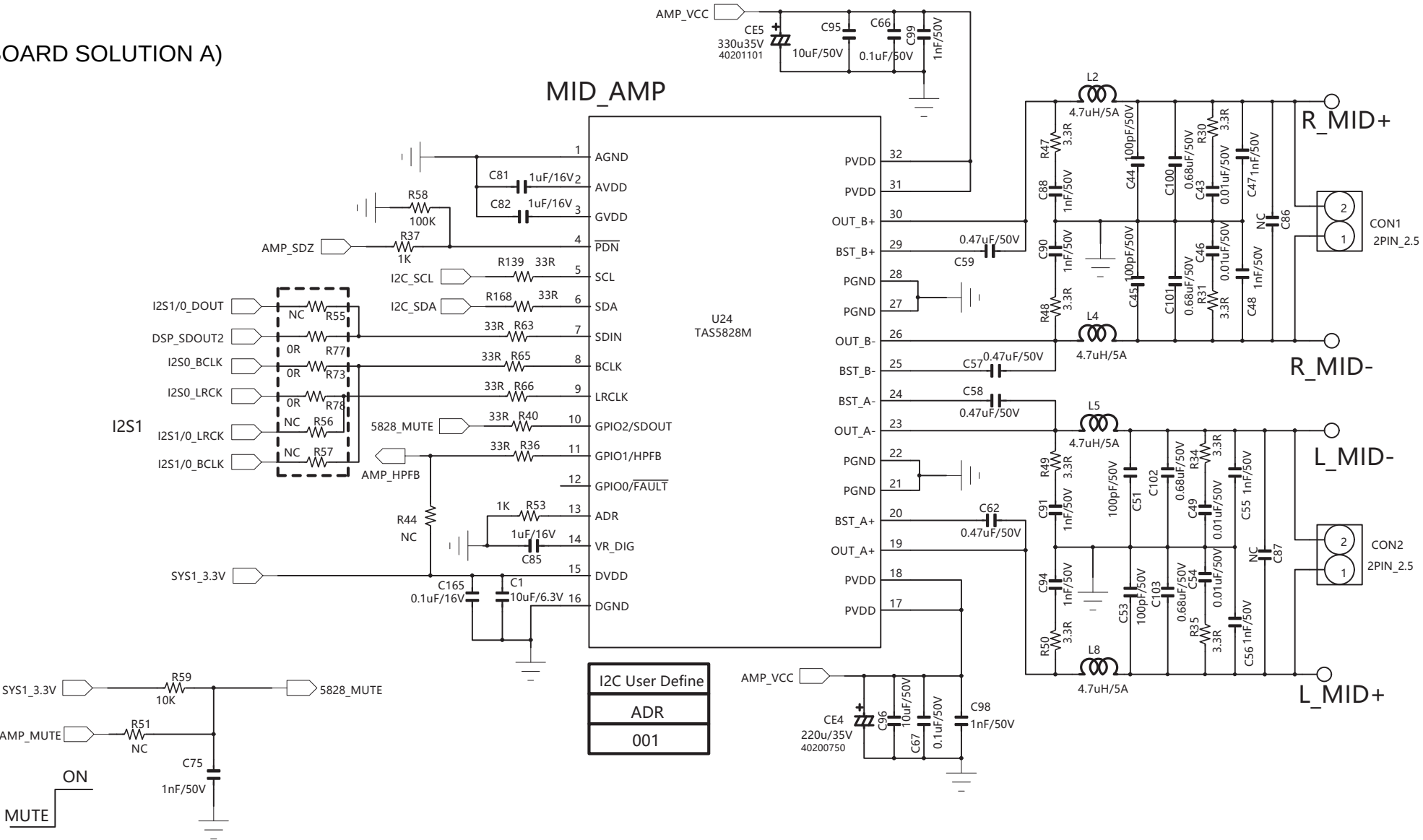
AUX DET PART



(MAIN BOARD SOLUTION A)

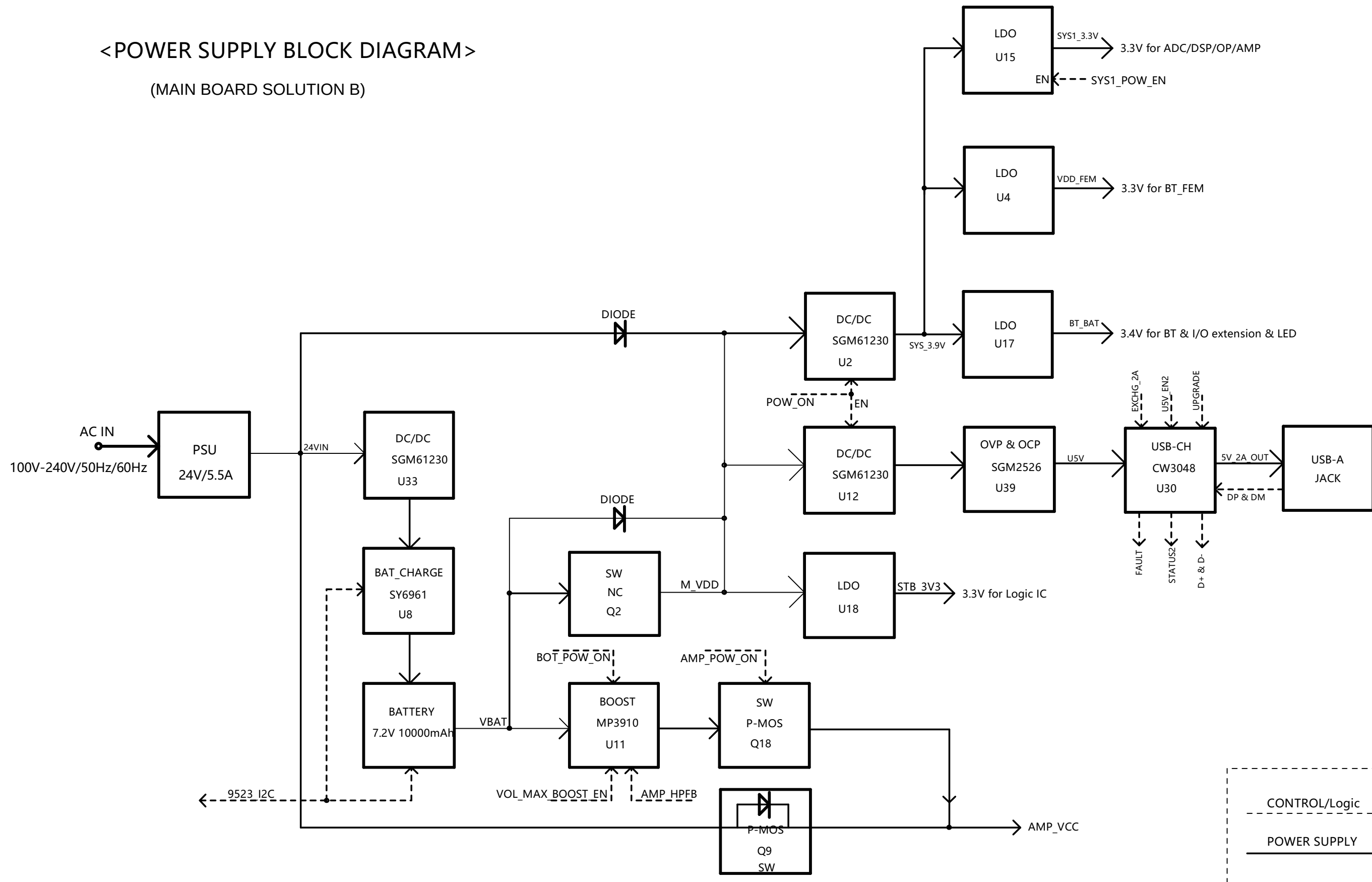


(MAIN BOARD SOLUTION A)

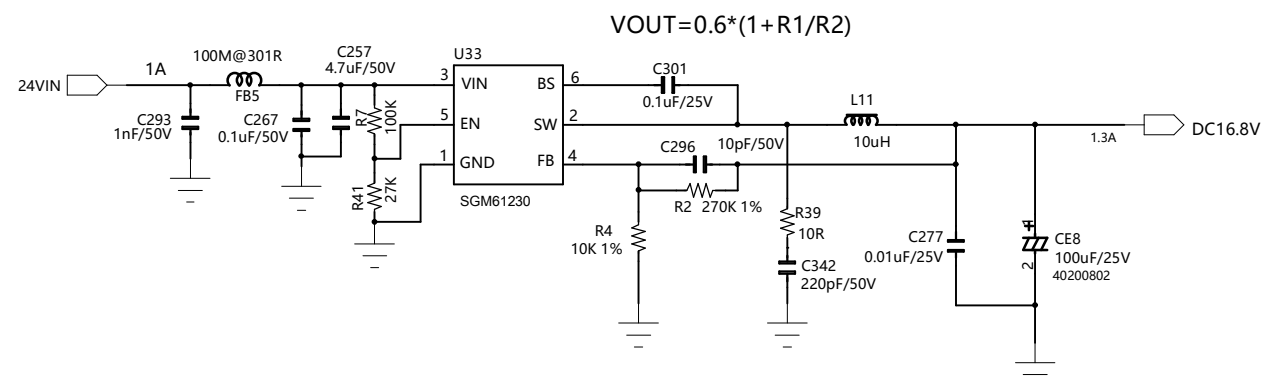
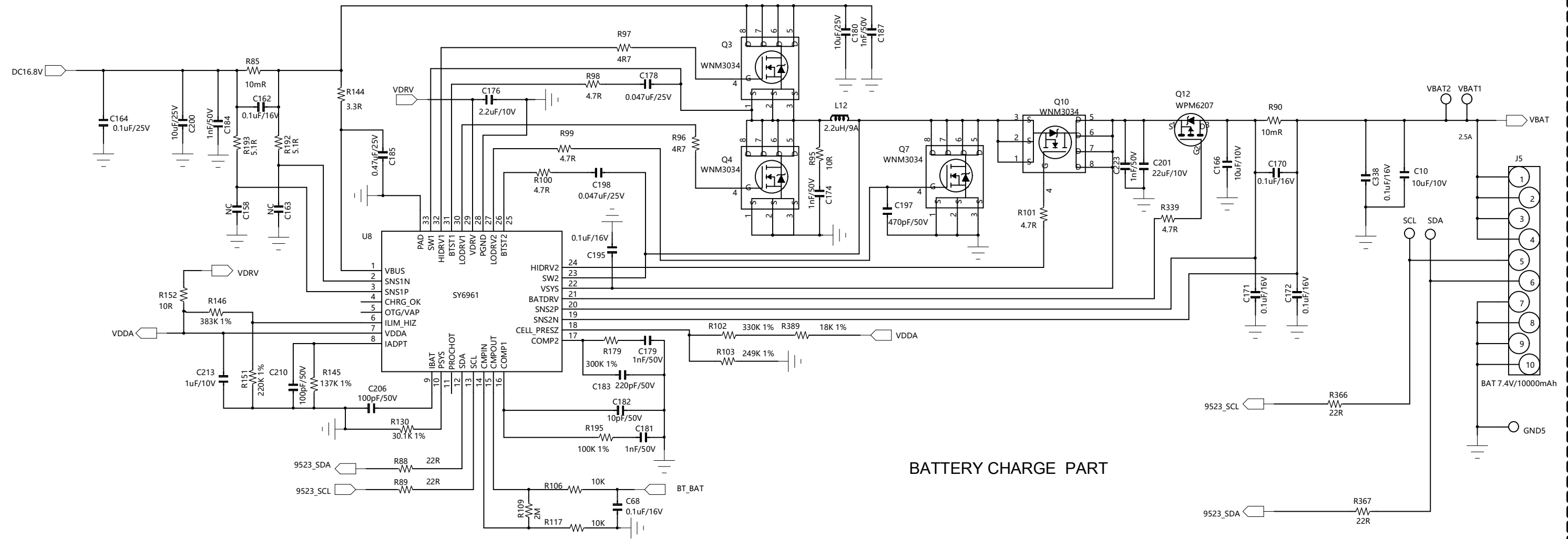


<POWER SUPPLY BLOCK DIAGRAM>

(MAIN BOARD SOLUTION B)

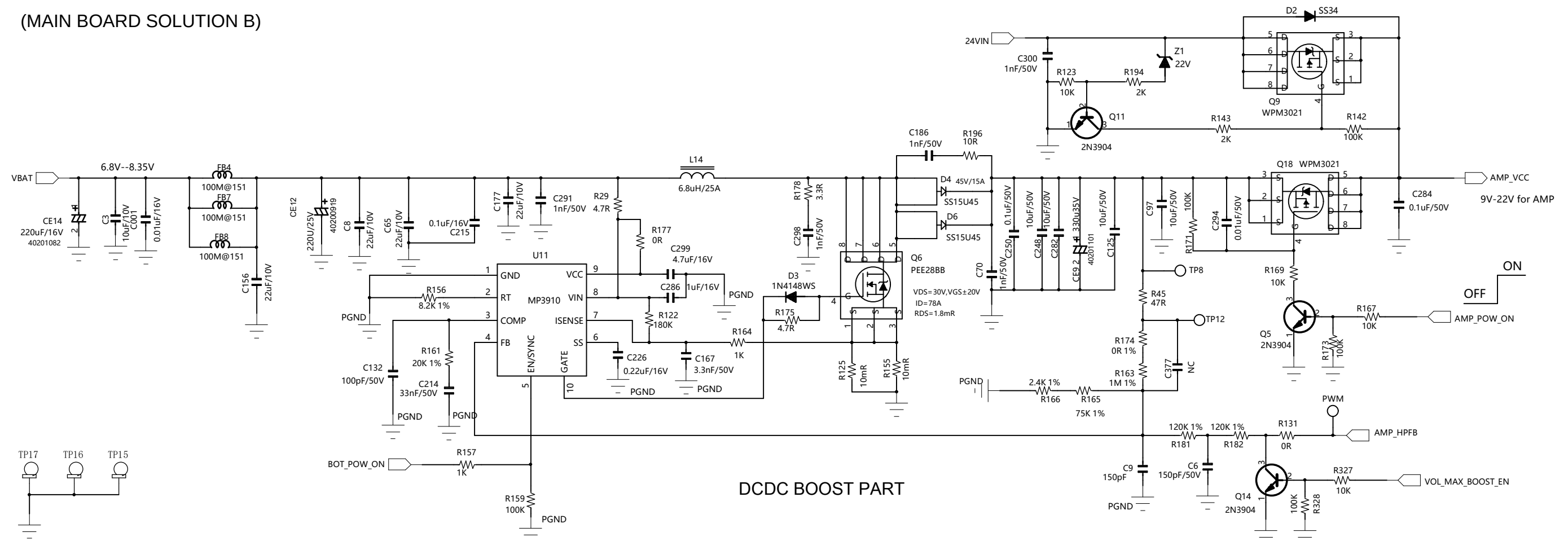


(MAIN BOARD SOLUTION B)

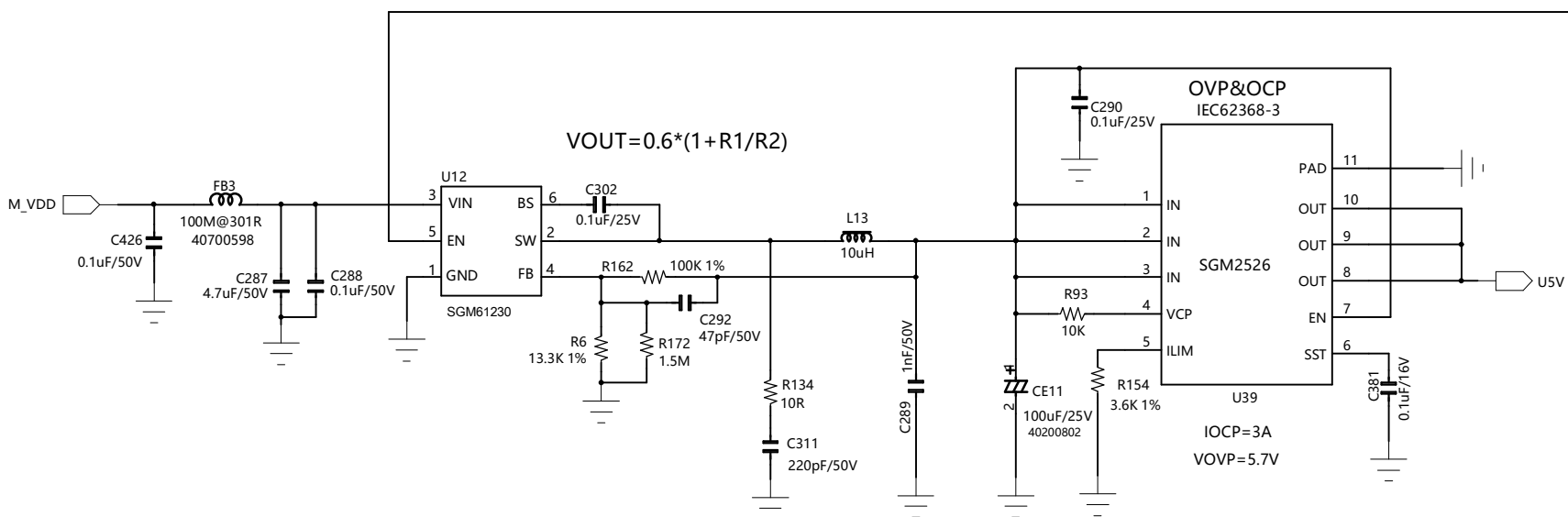


CHARGE POWER PART

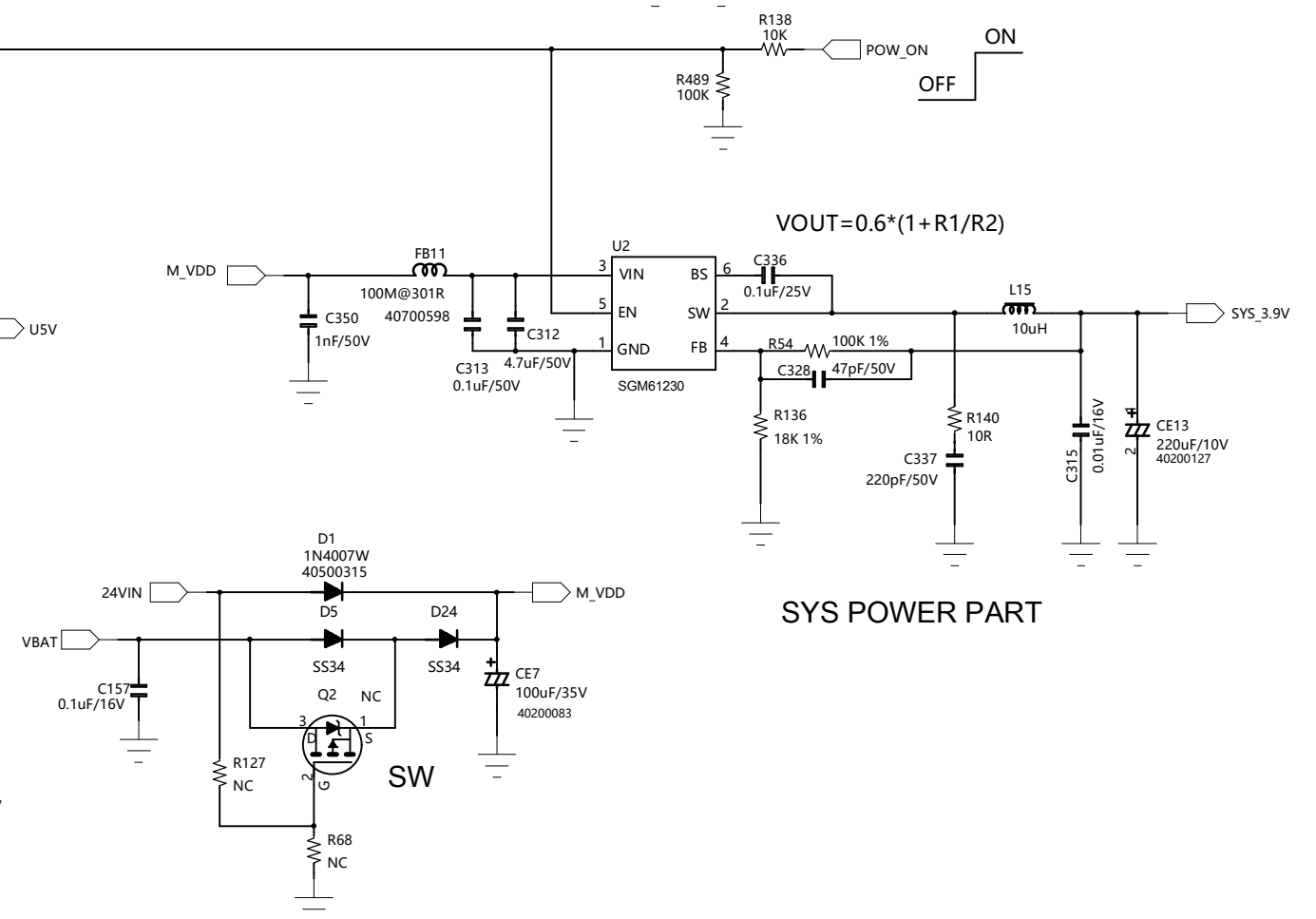
(MAIN BOARD SOLUTION B)



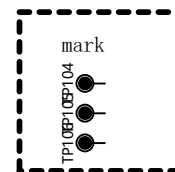
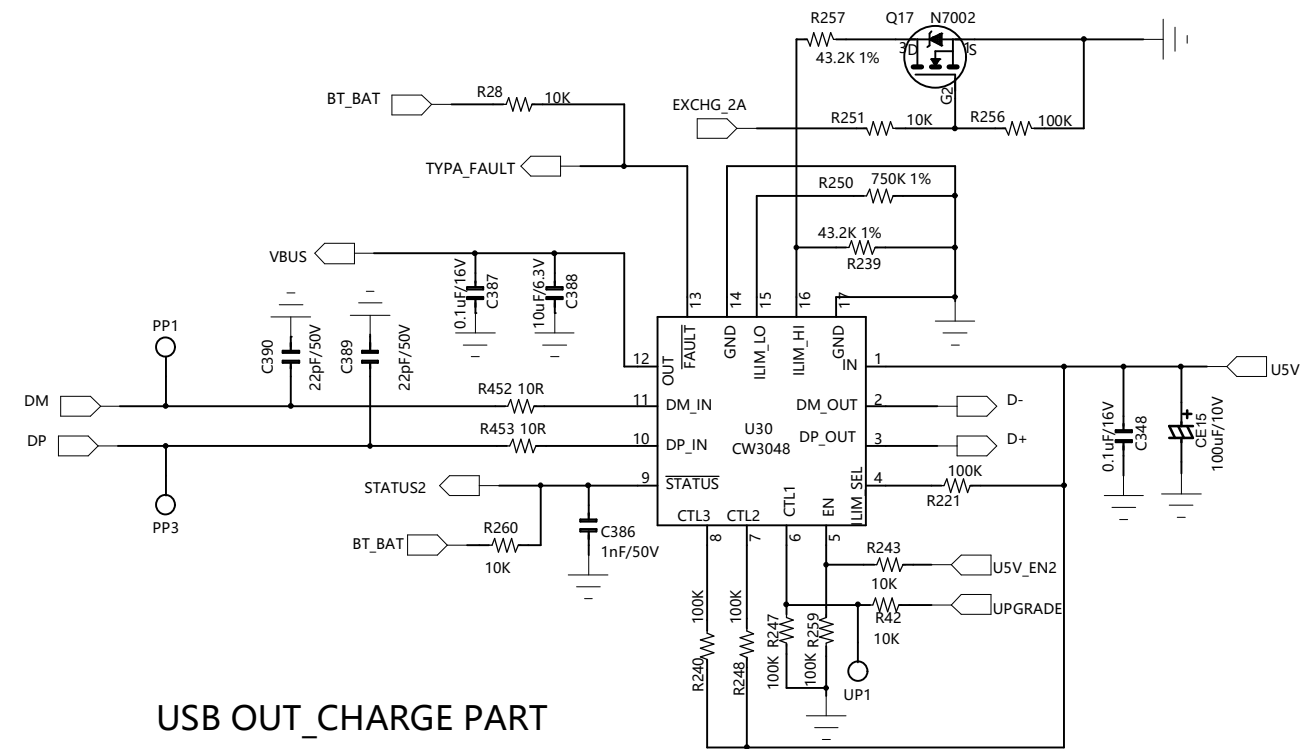
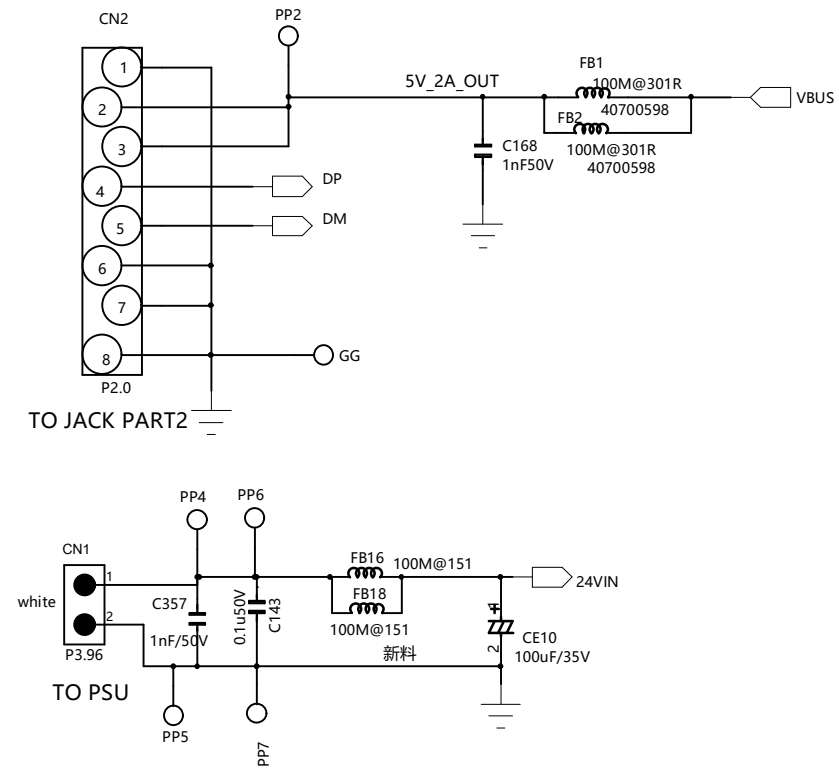
USB POWER PART



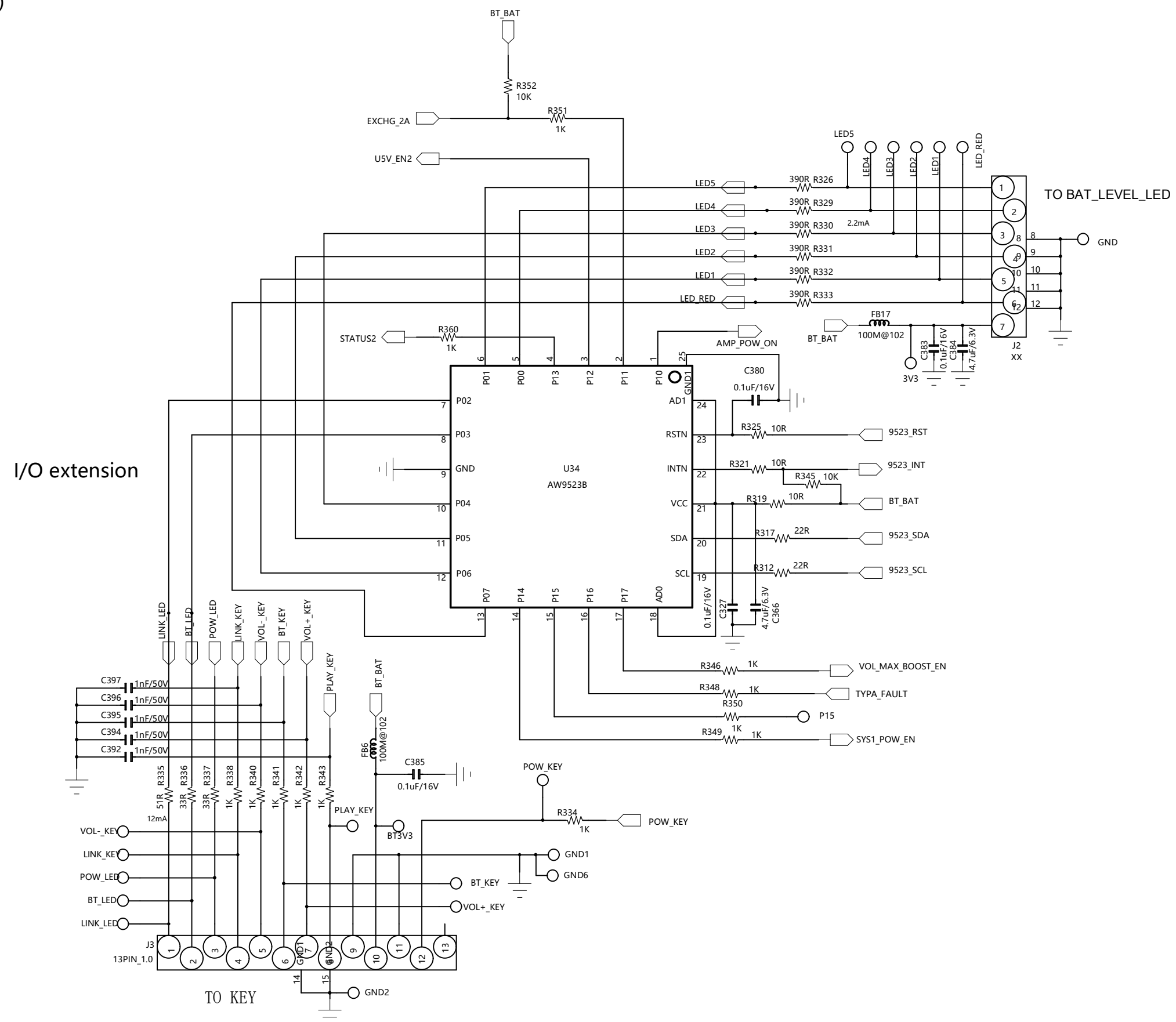
SYS POWER PART



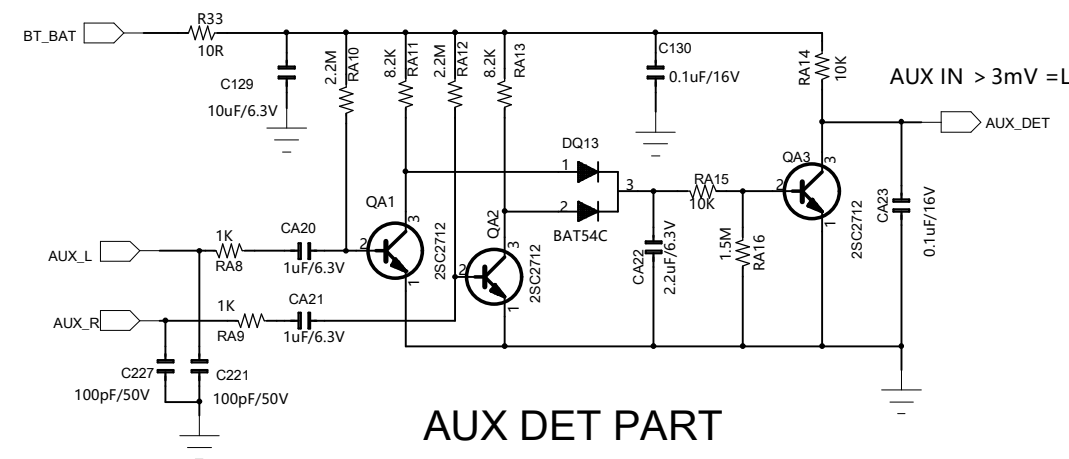
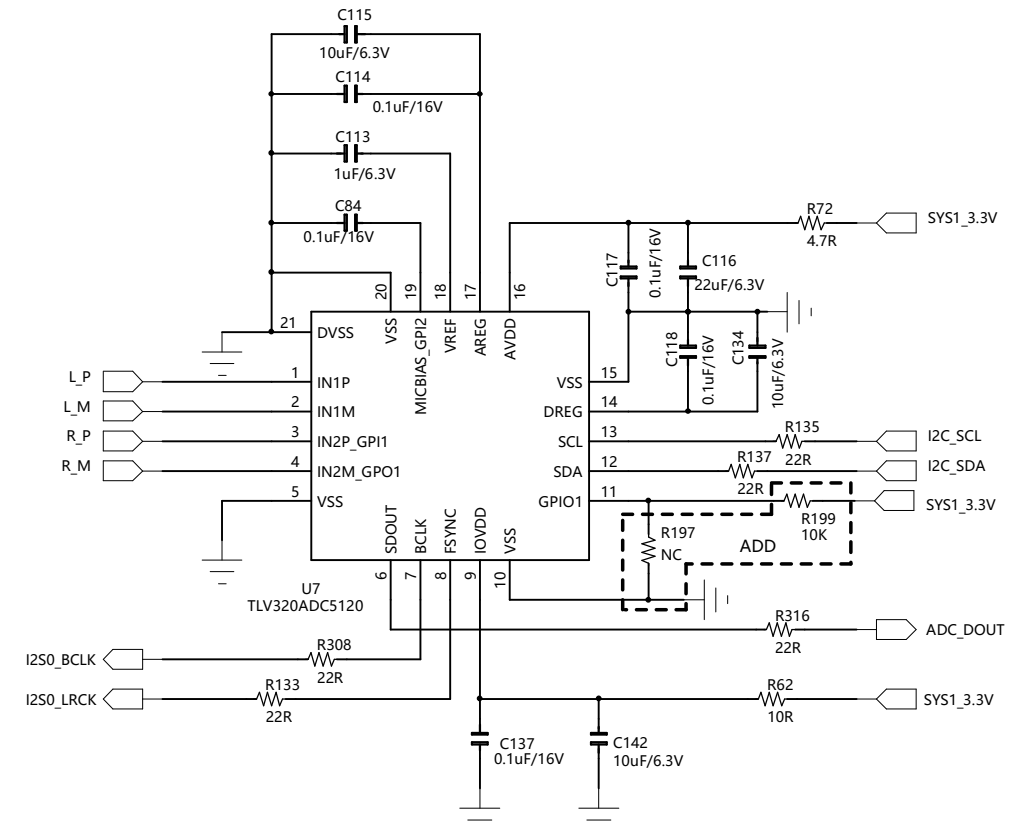
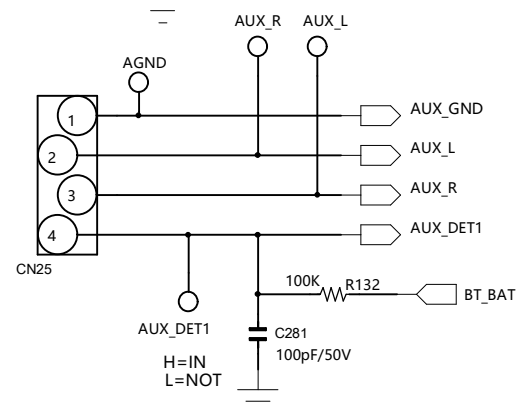
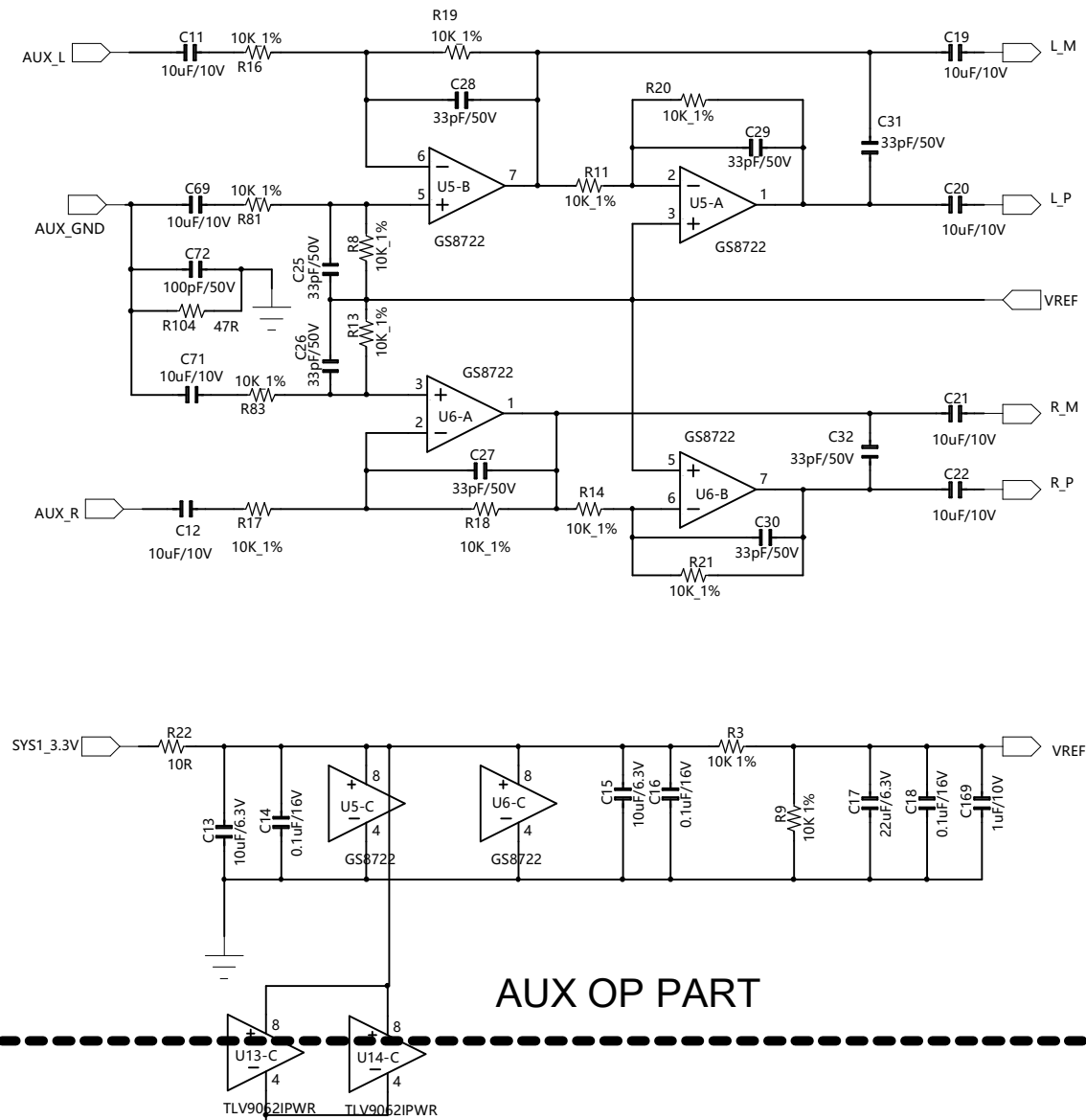
(MAIN BOARD SOLUTION B)



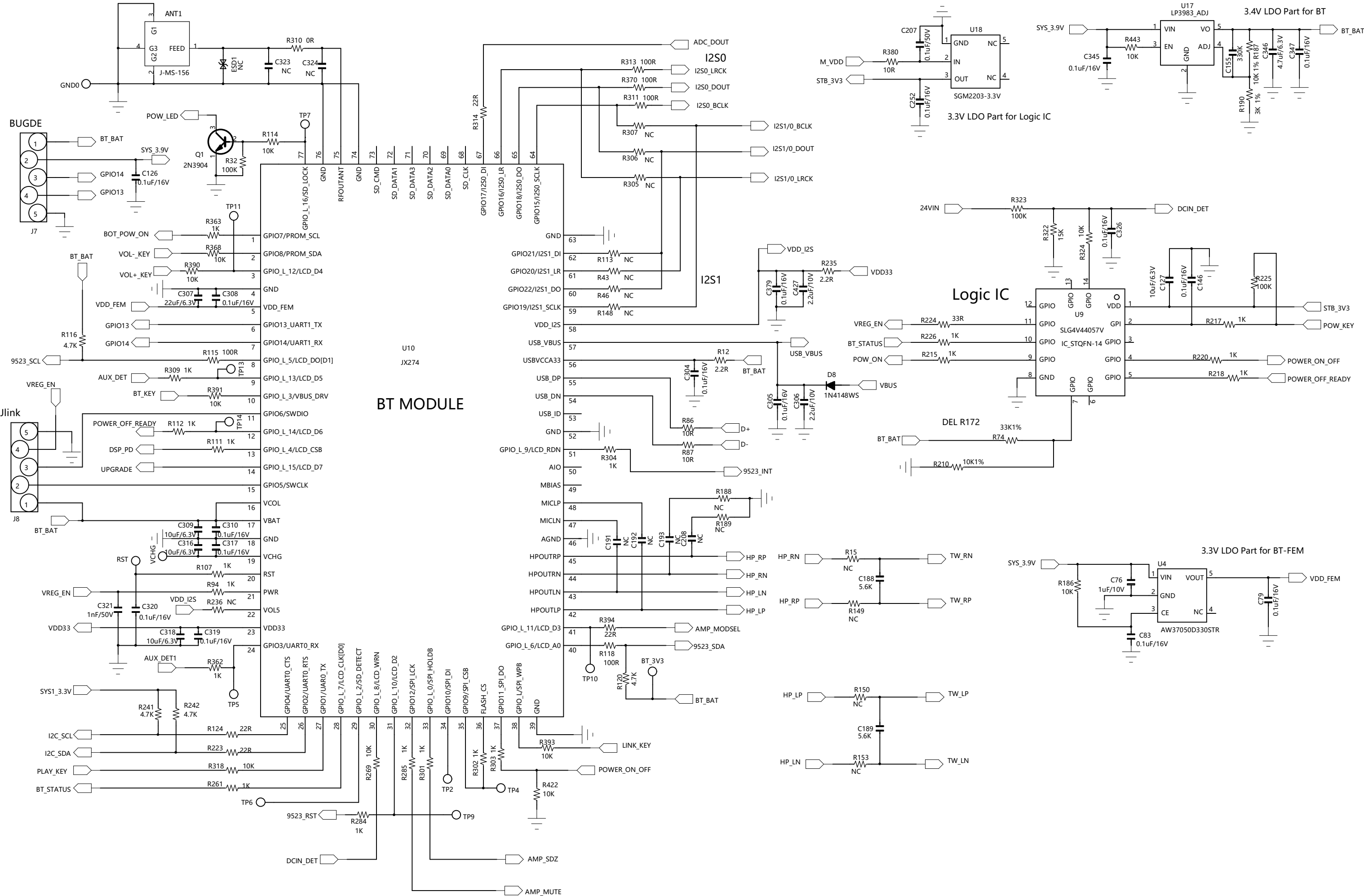
(MAIN BOARD SOLUTION B)



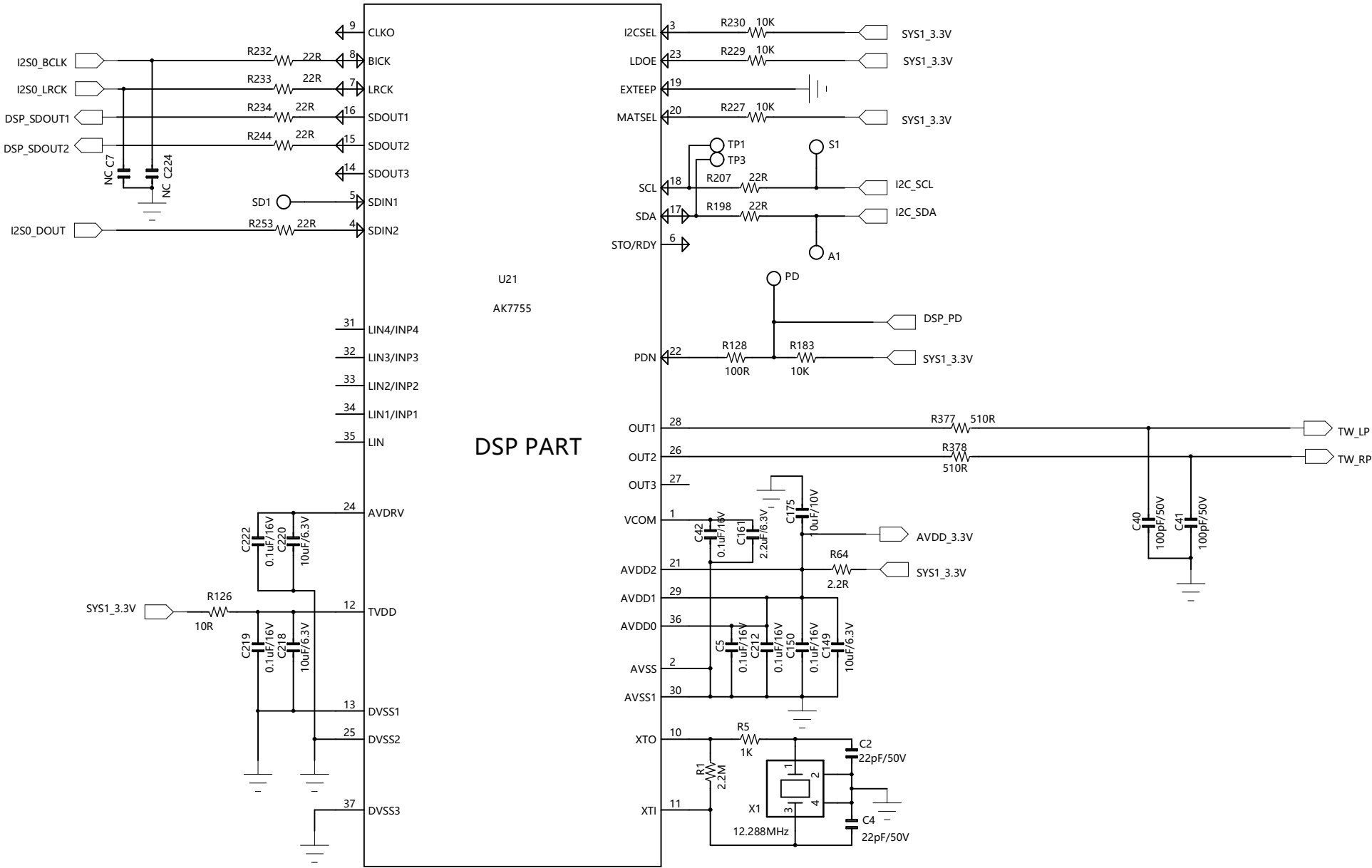
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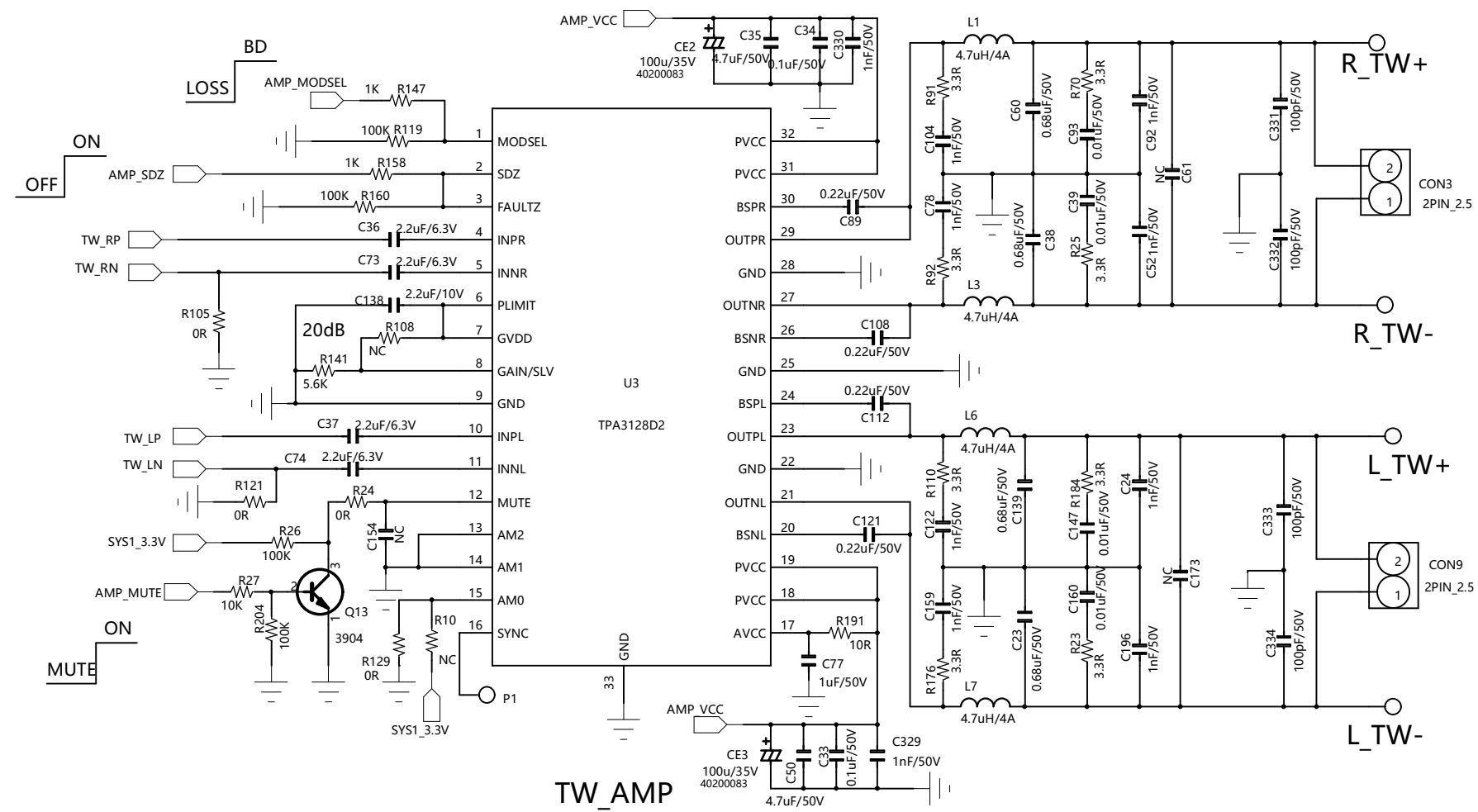
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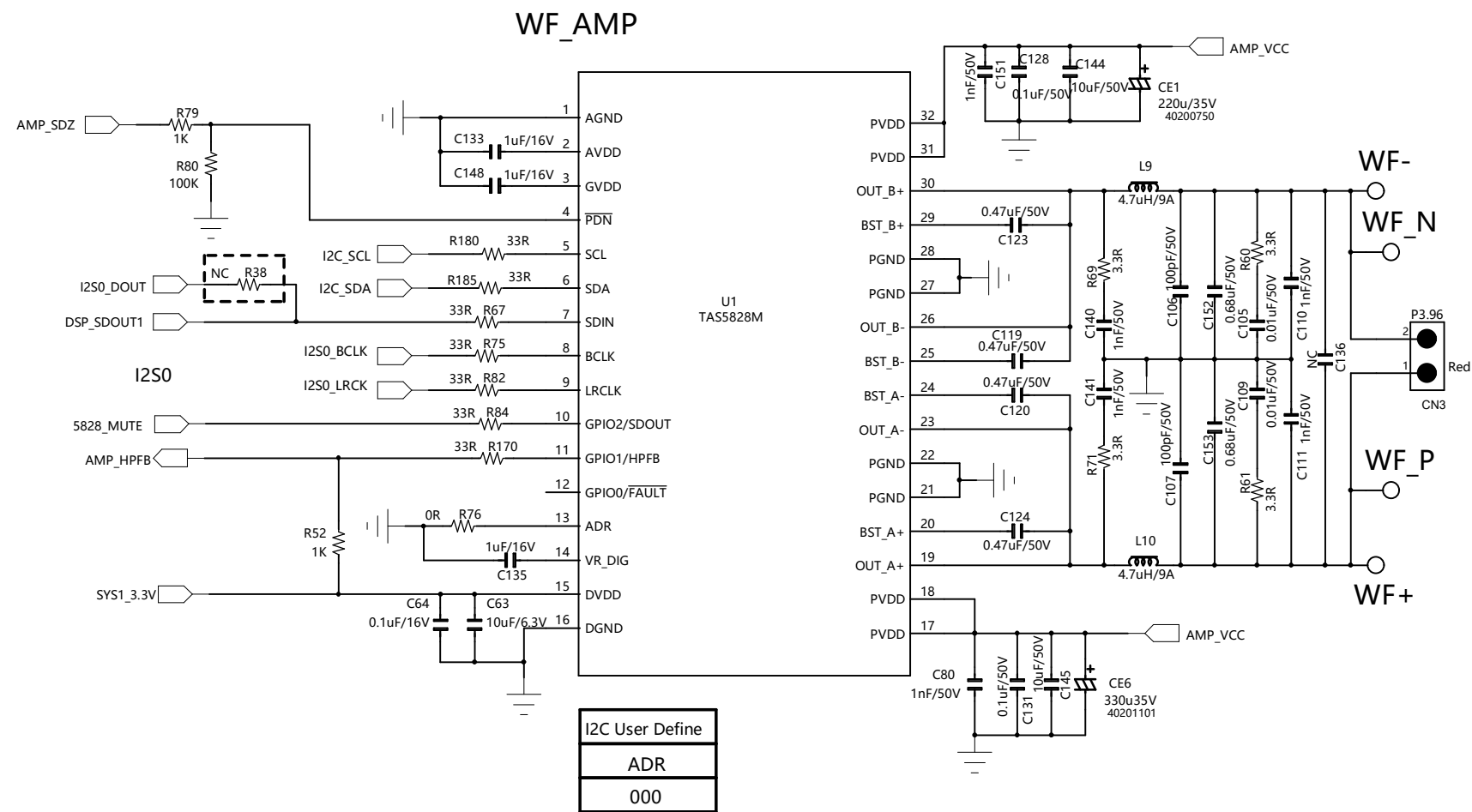
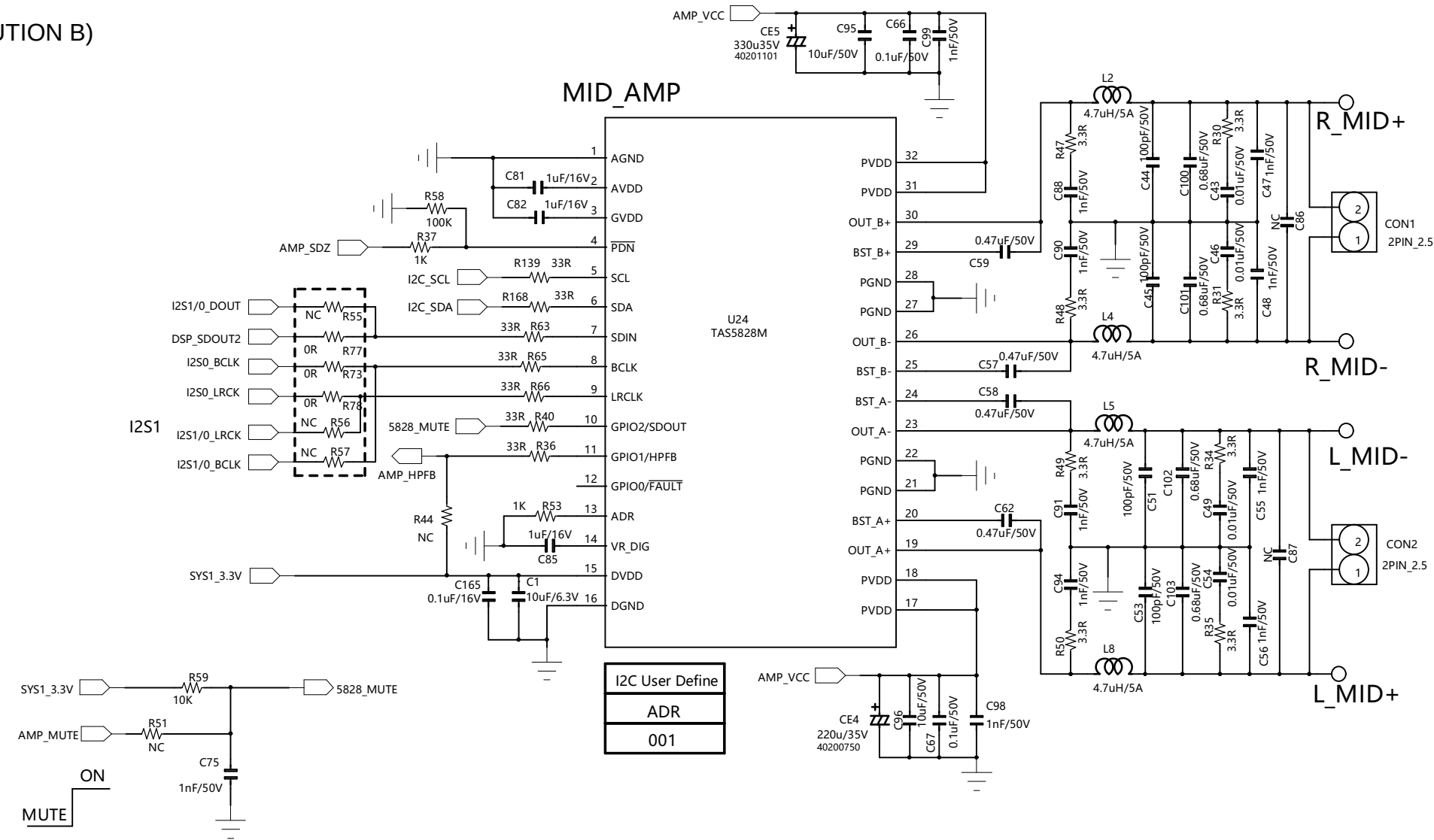
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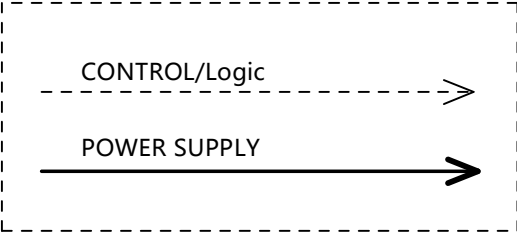
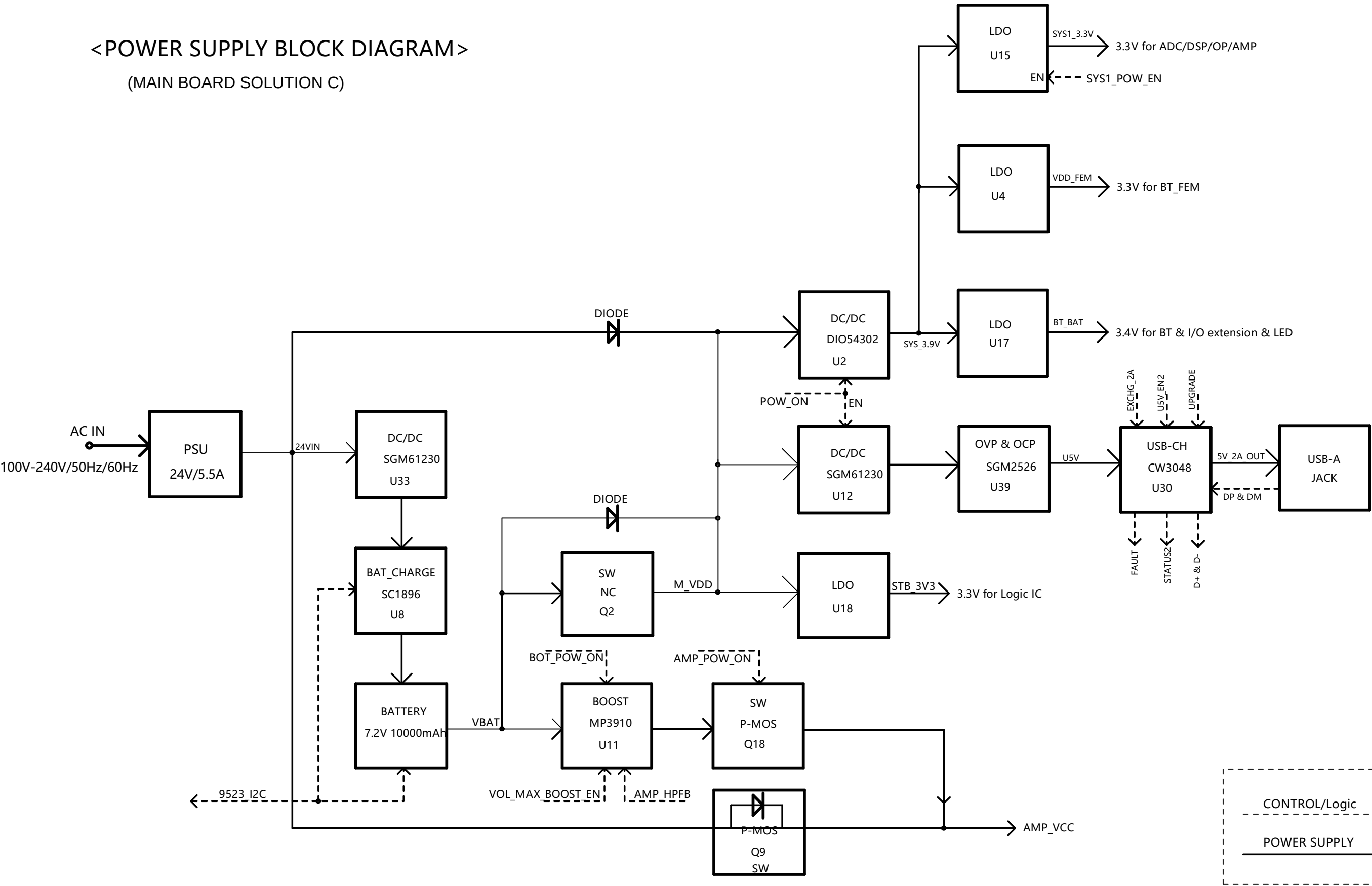
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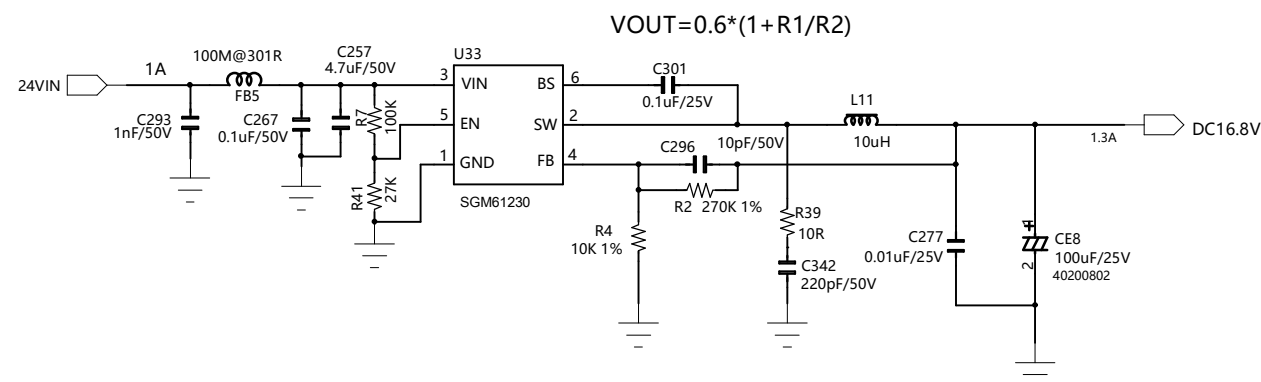
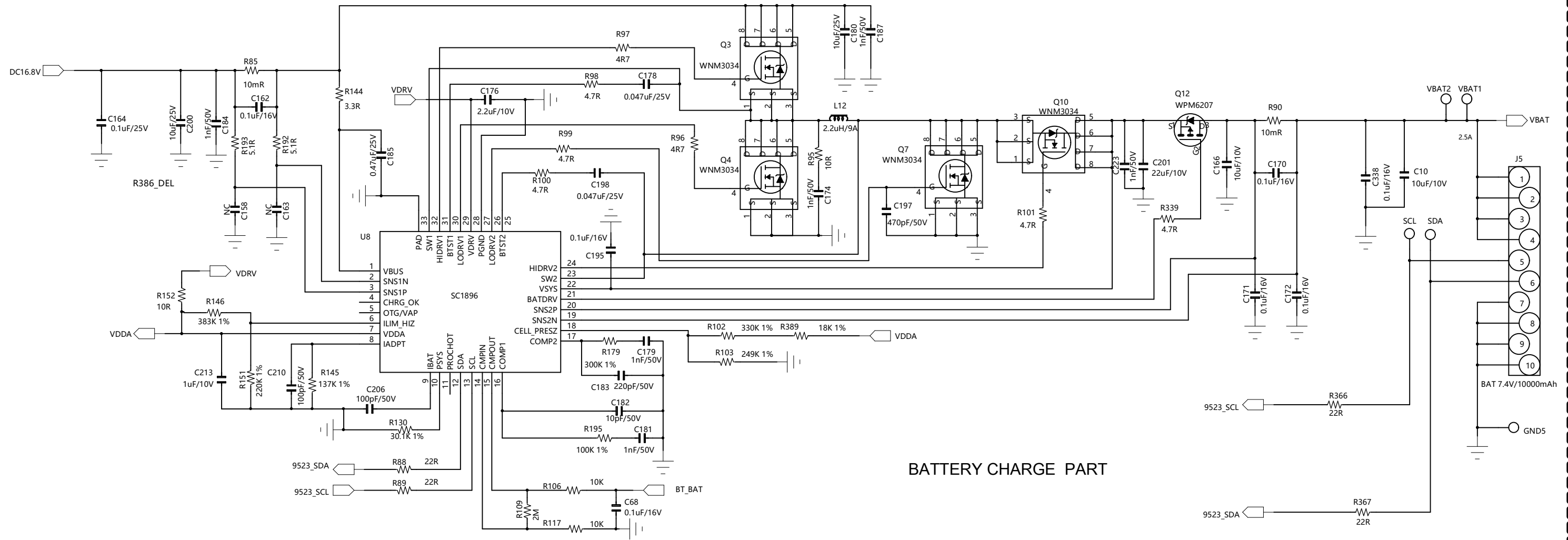
(MAIN BOARD SOLUTION B)



<POWER SUPPLY BLOCK DIAGRAM>
(MAIN BOARD SOLUTION C)

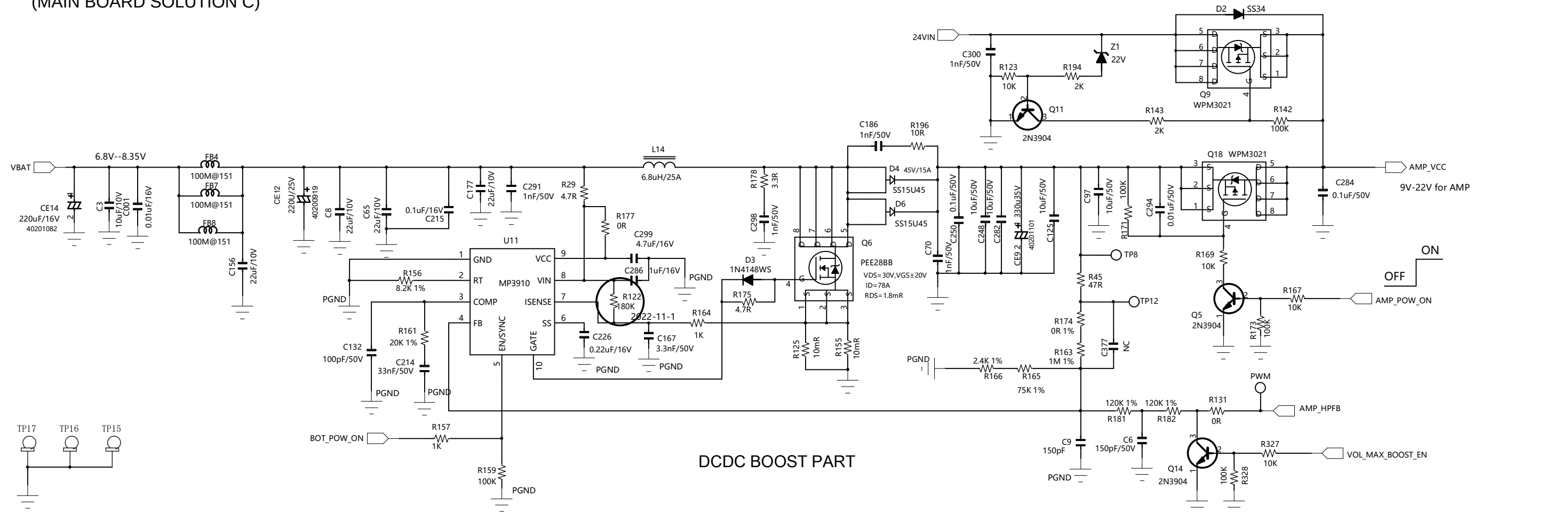


(MAIN BOARD SOLUTION C)

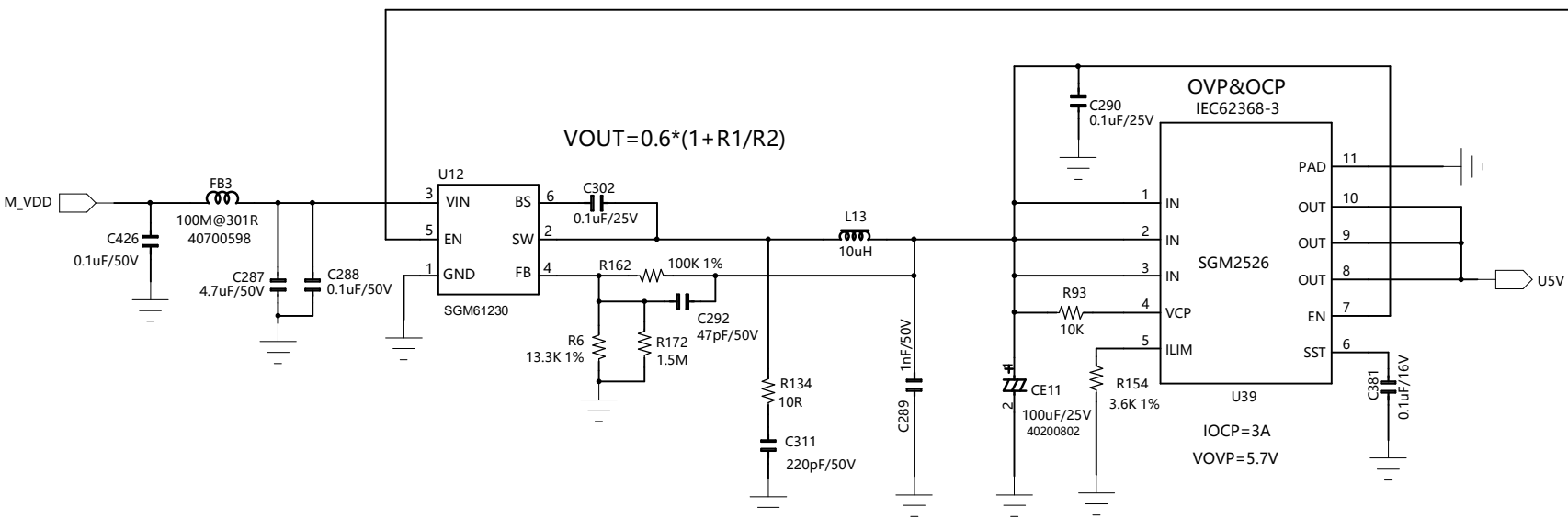


CHARGE POWER PART

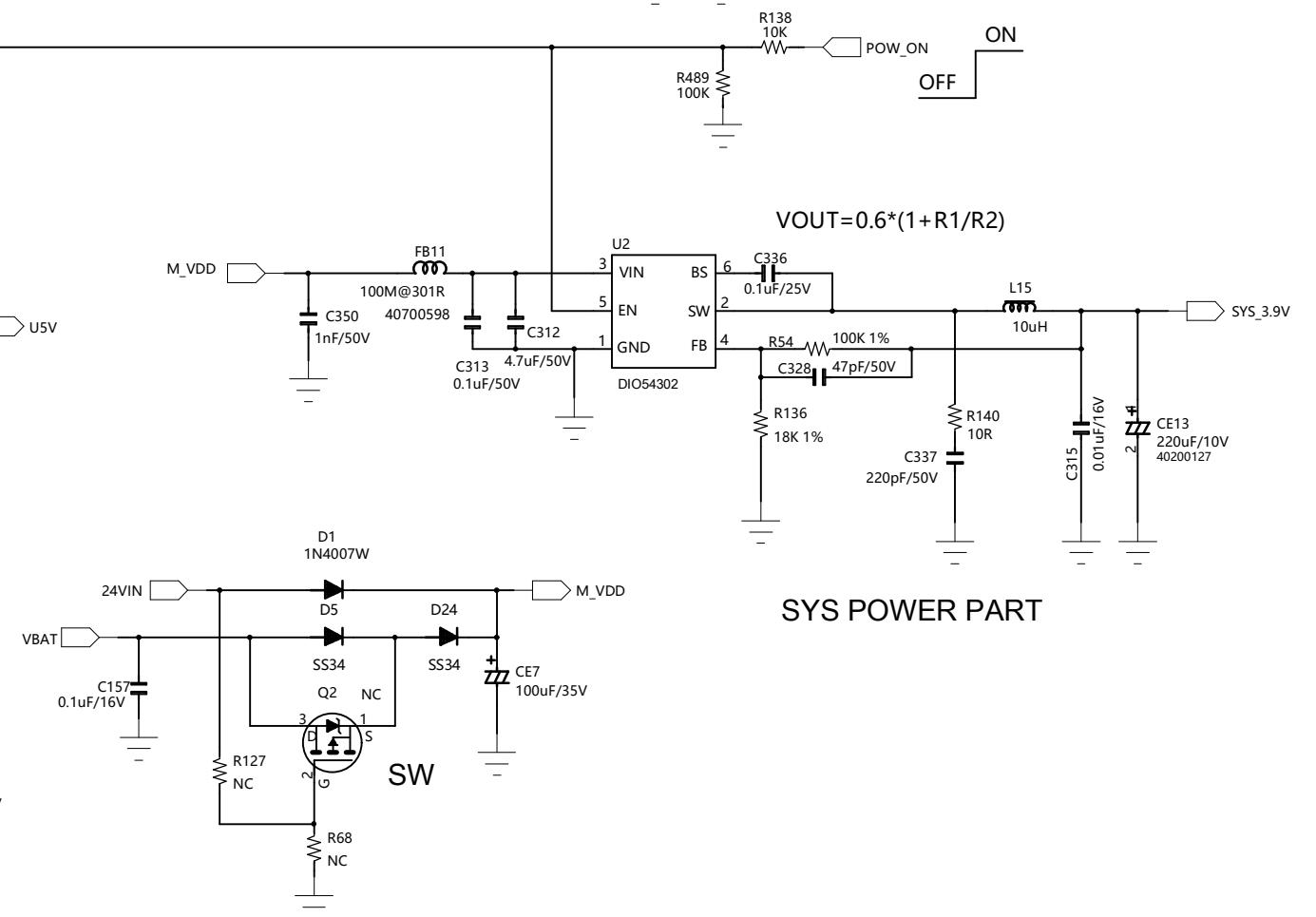
(MAIN BOARD SOLUTION C)



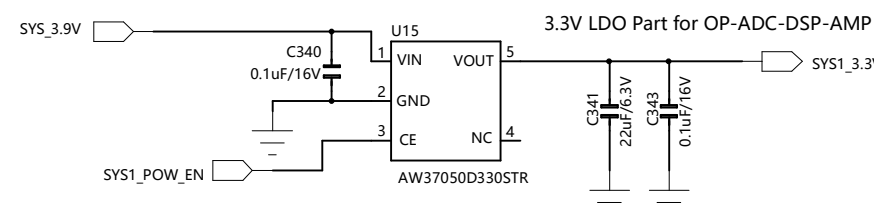
USB POWER PART



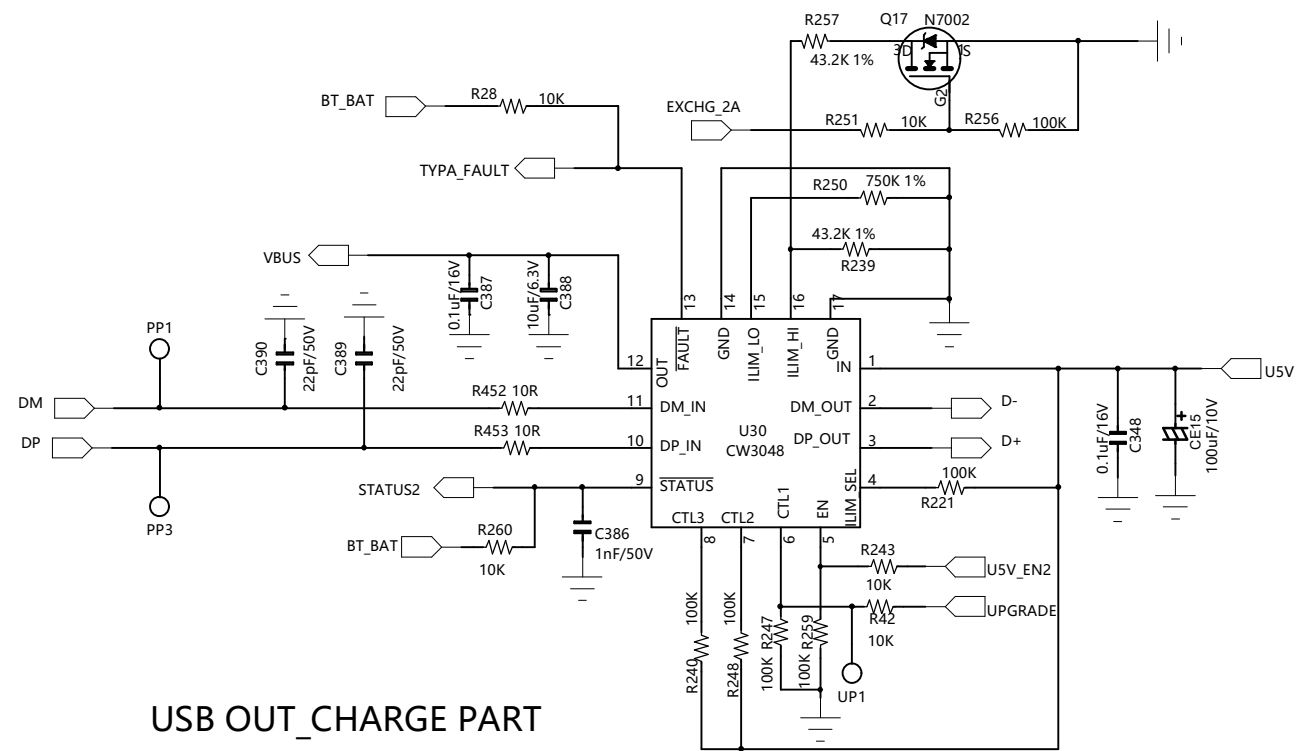
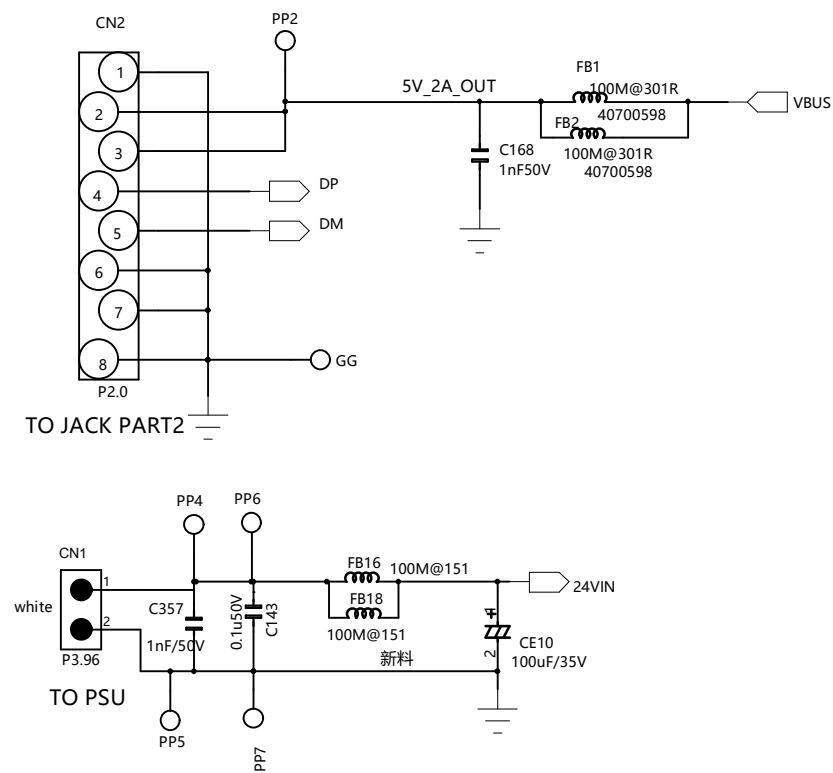
SYS POWER PART



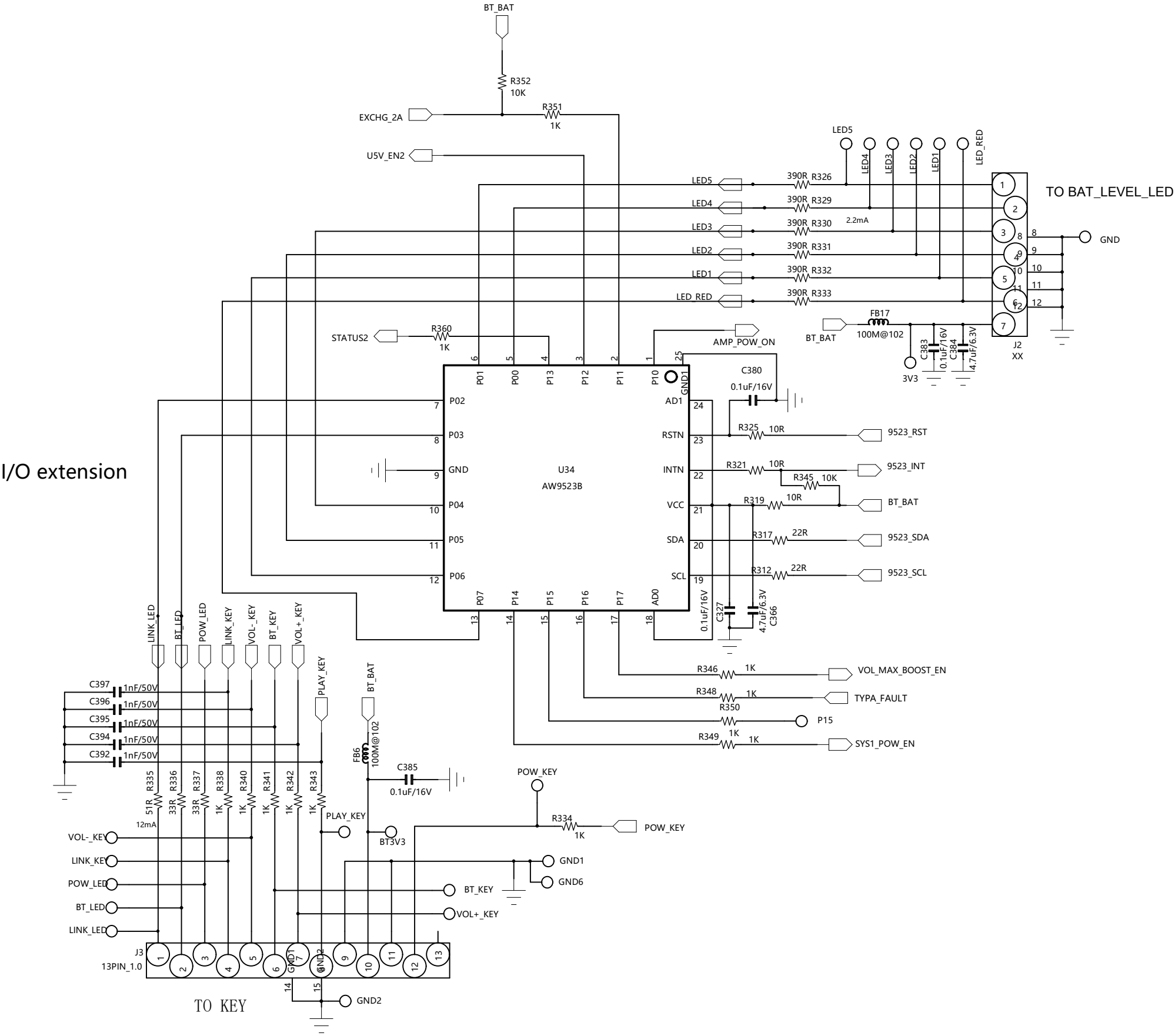
U15 3.3V LDO Part for OP-ADC-DSP-AMP



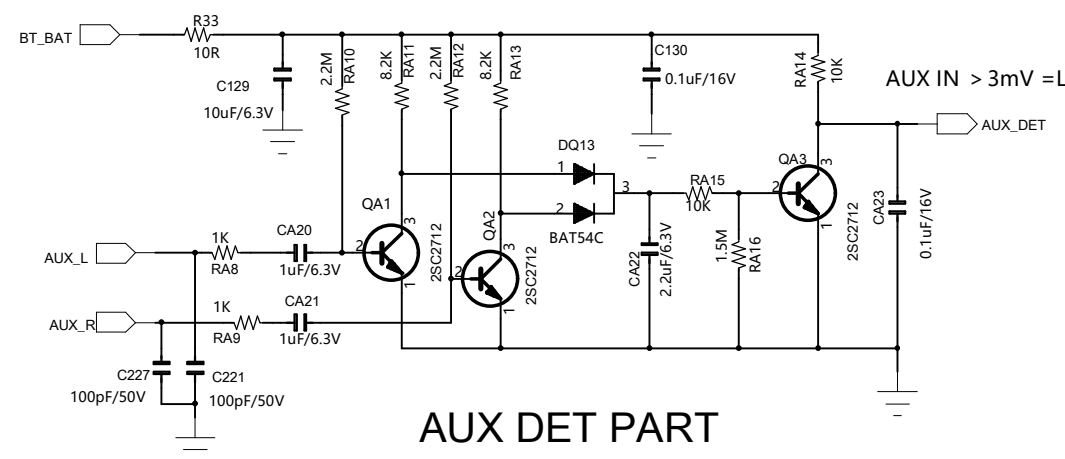
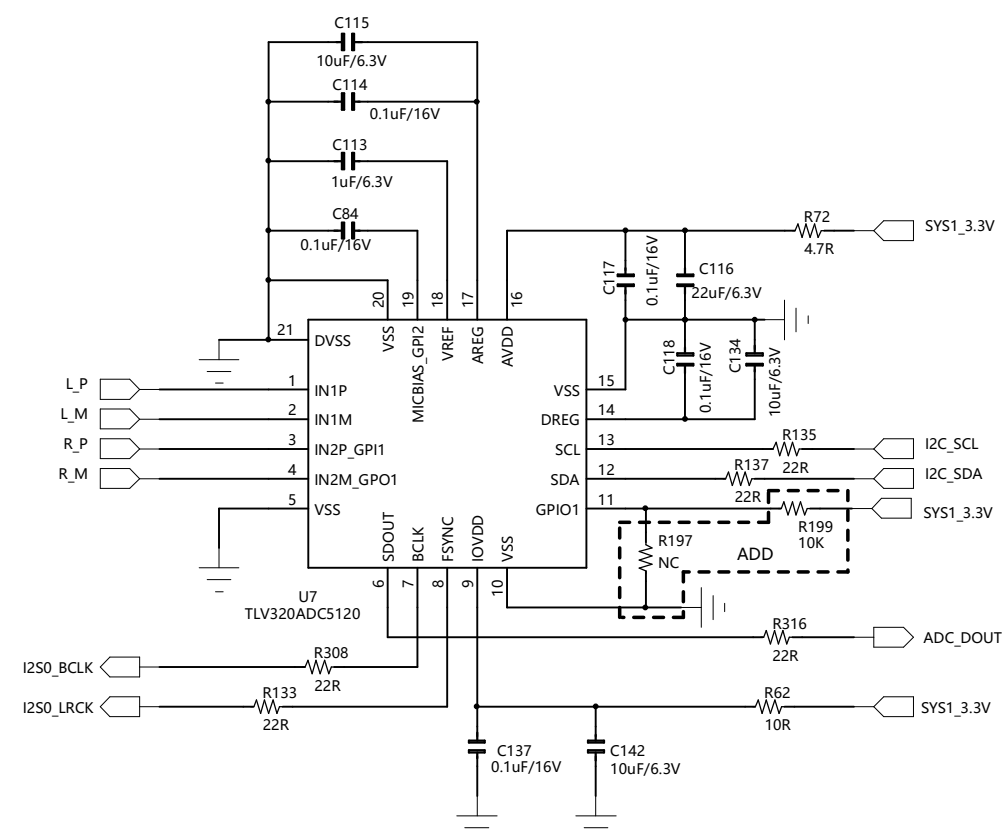
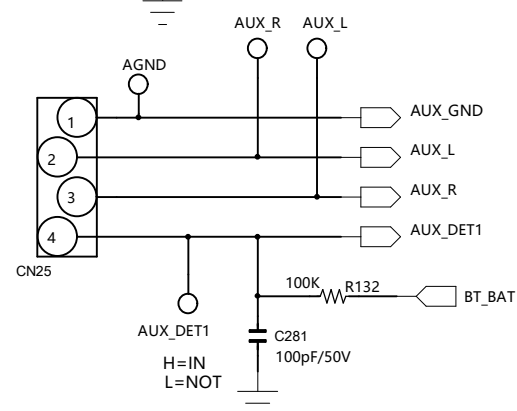
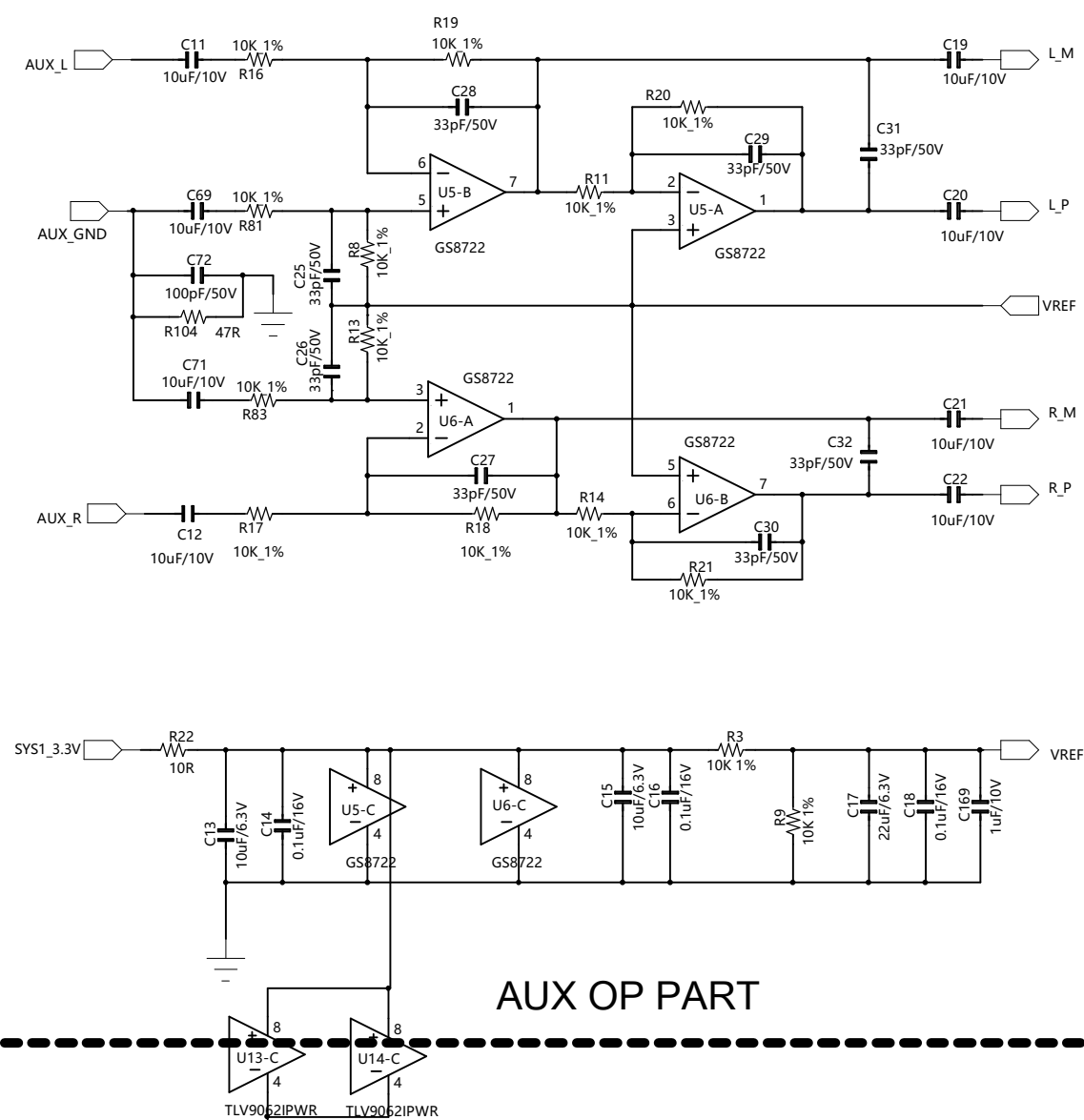
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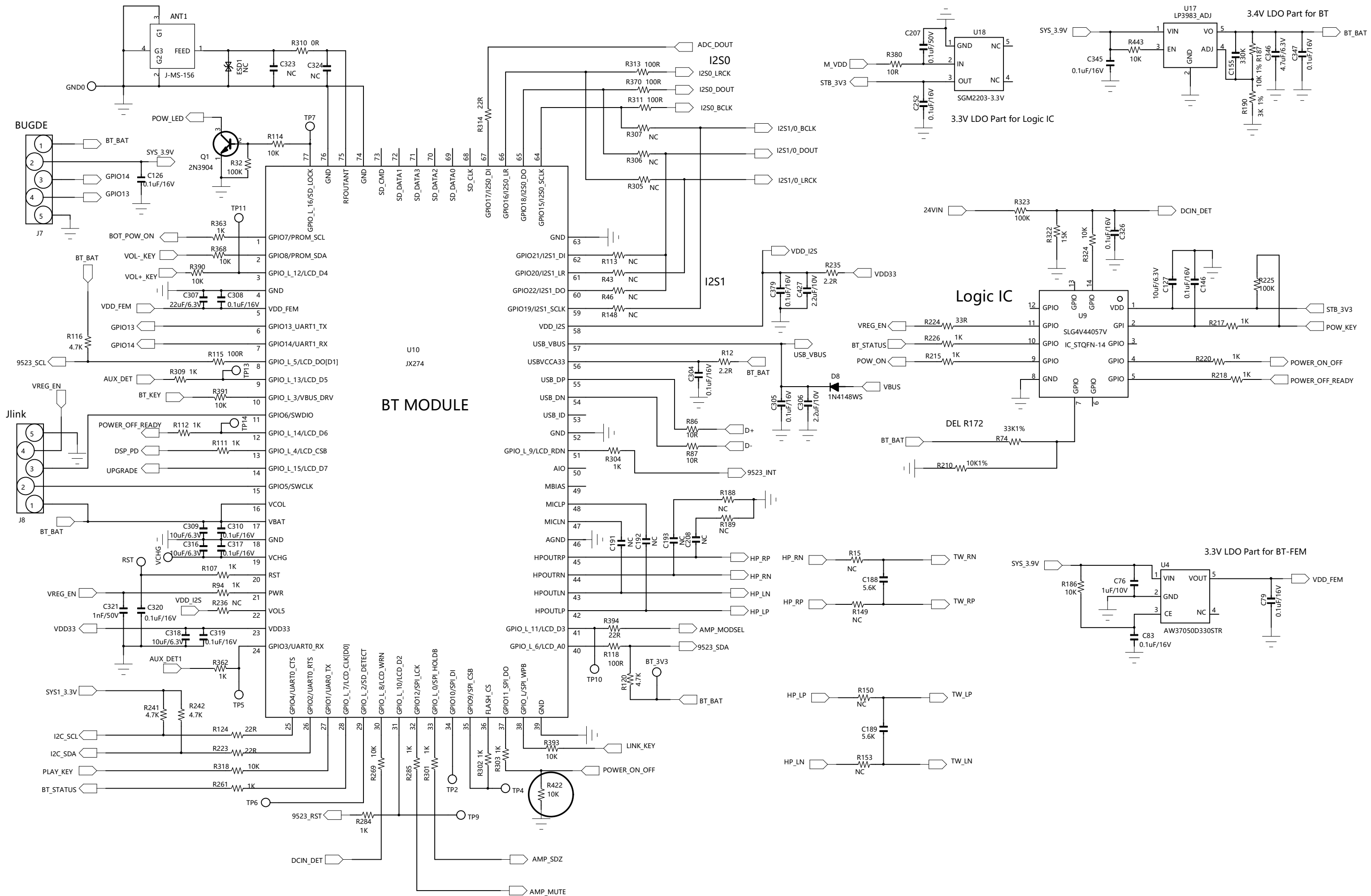
(MAIN BOARD SOLUTION C)



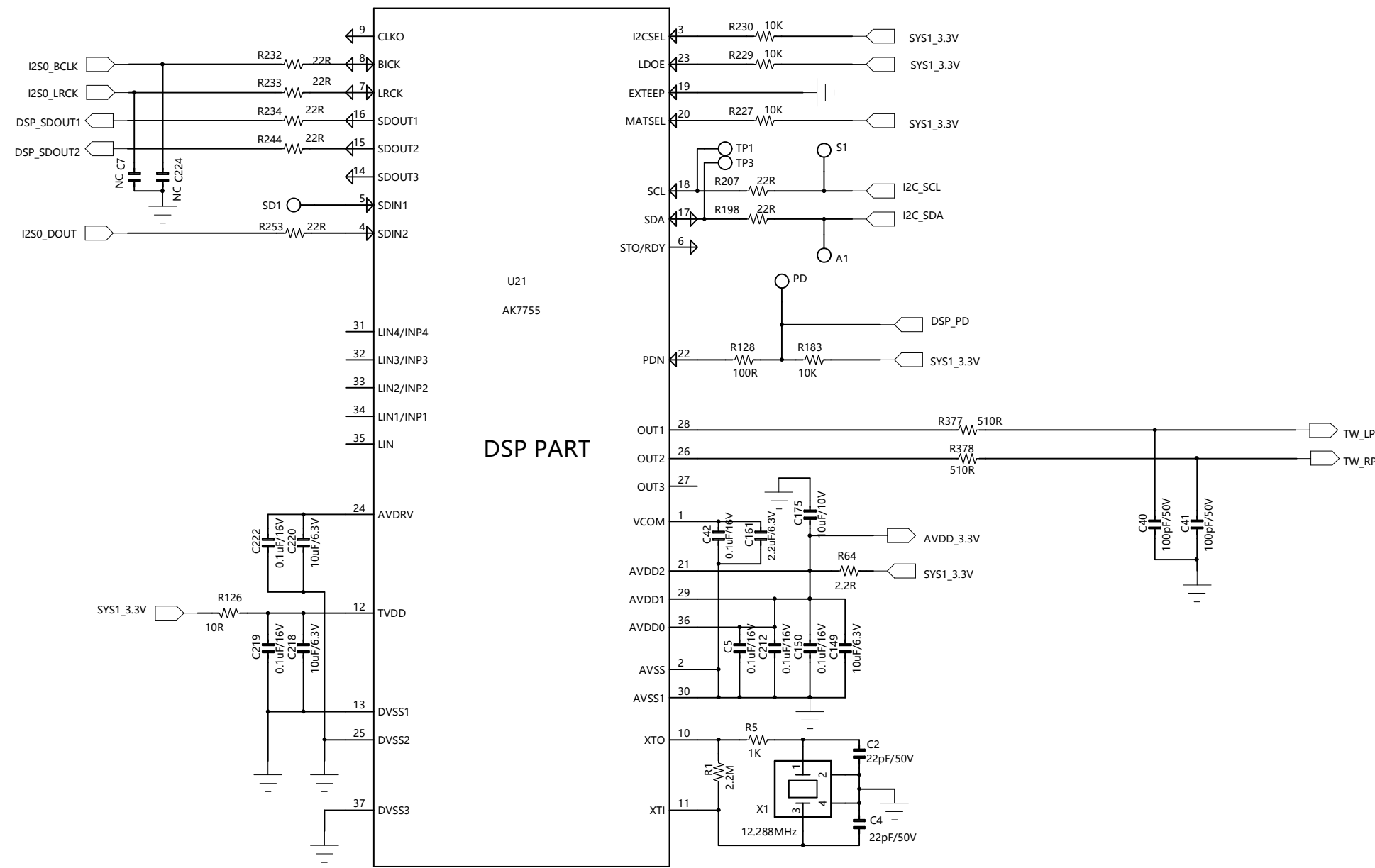
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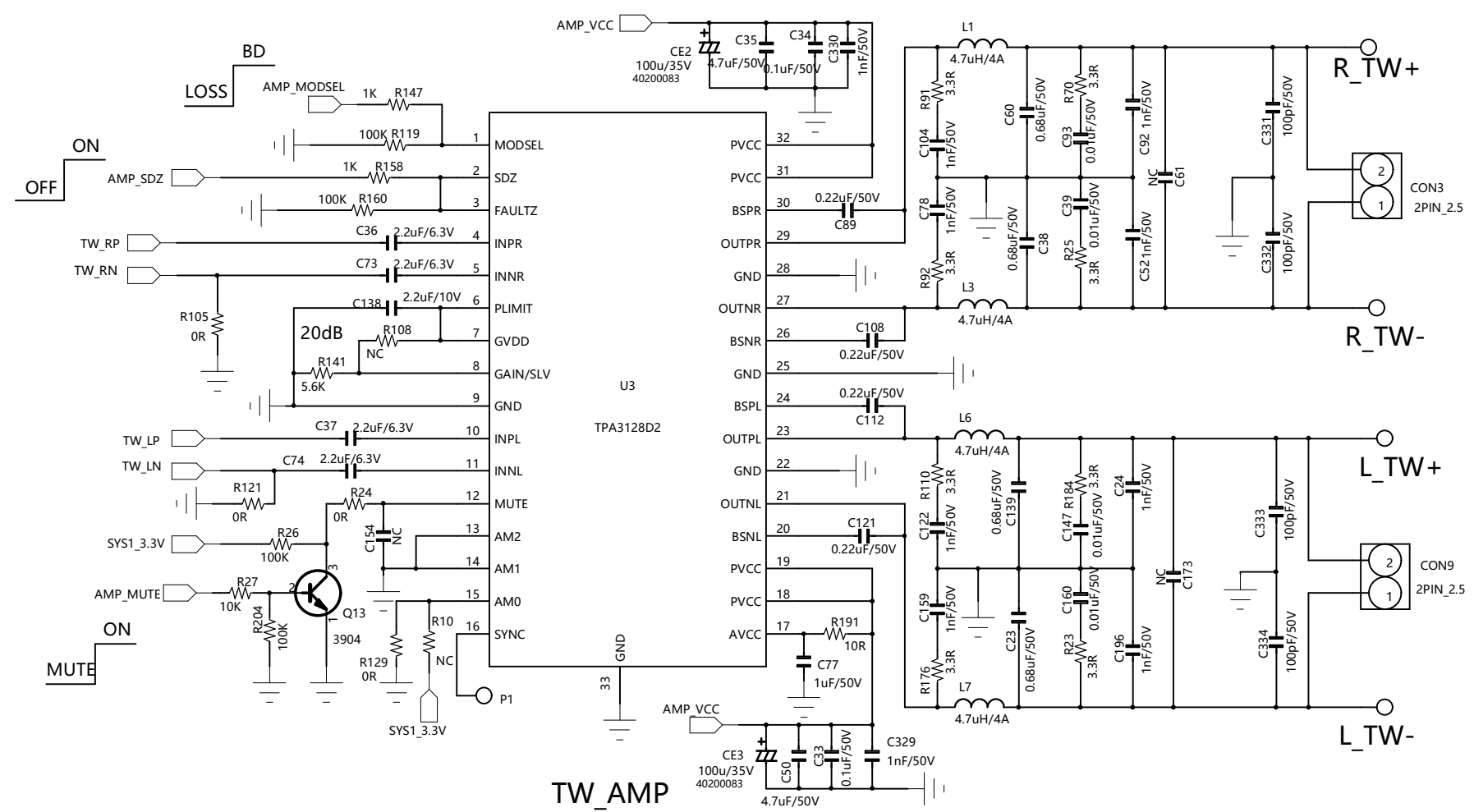
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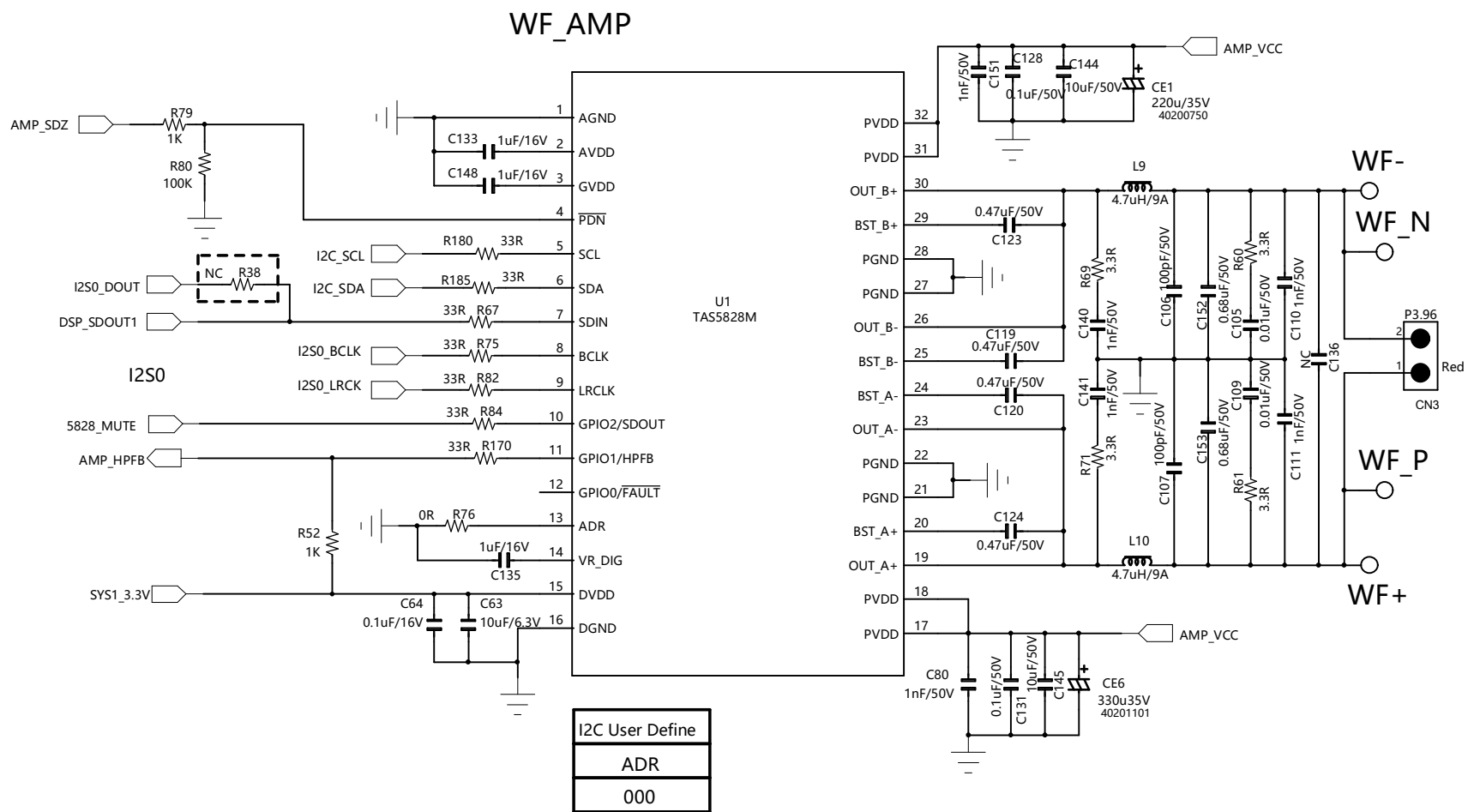
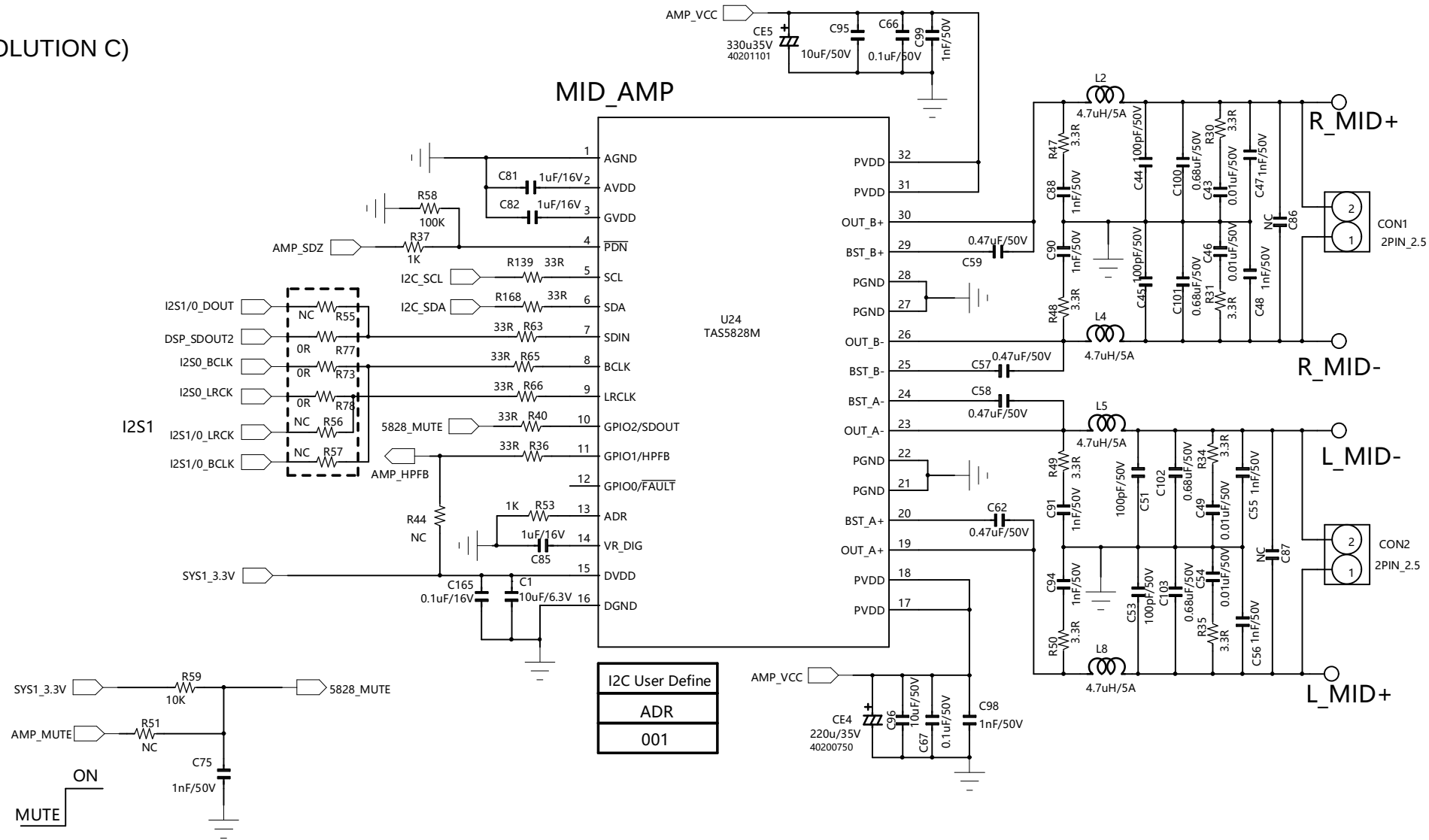
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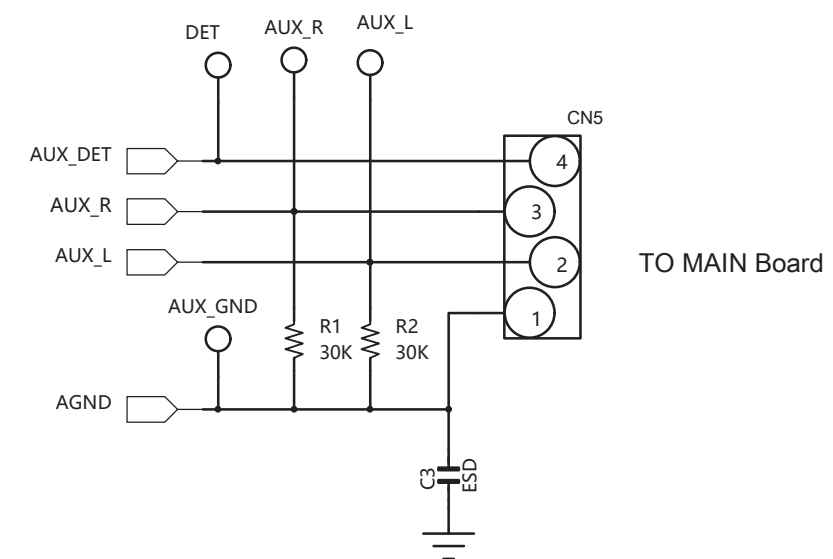
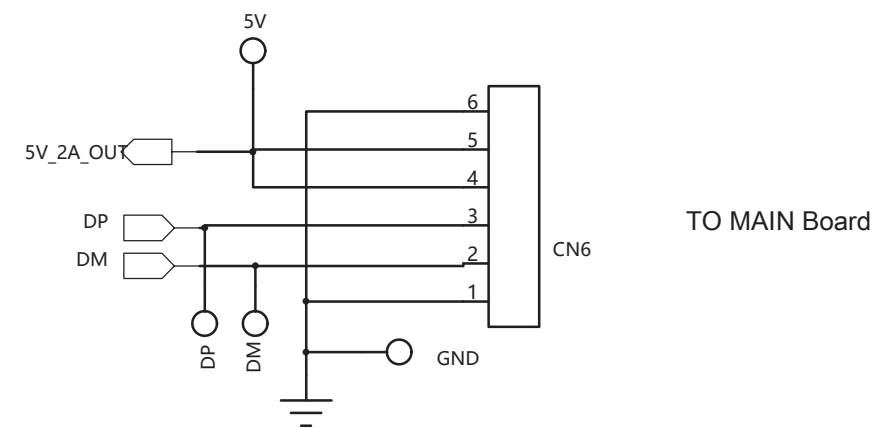


(MAIN BOARD SOLUTION C)

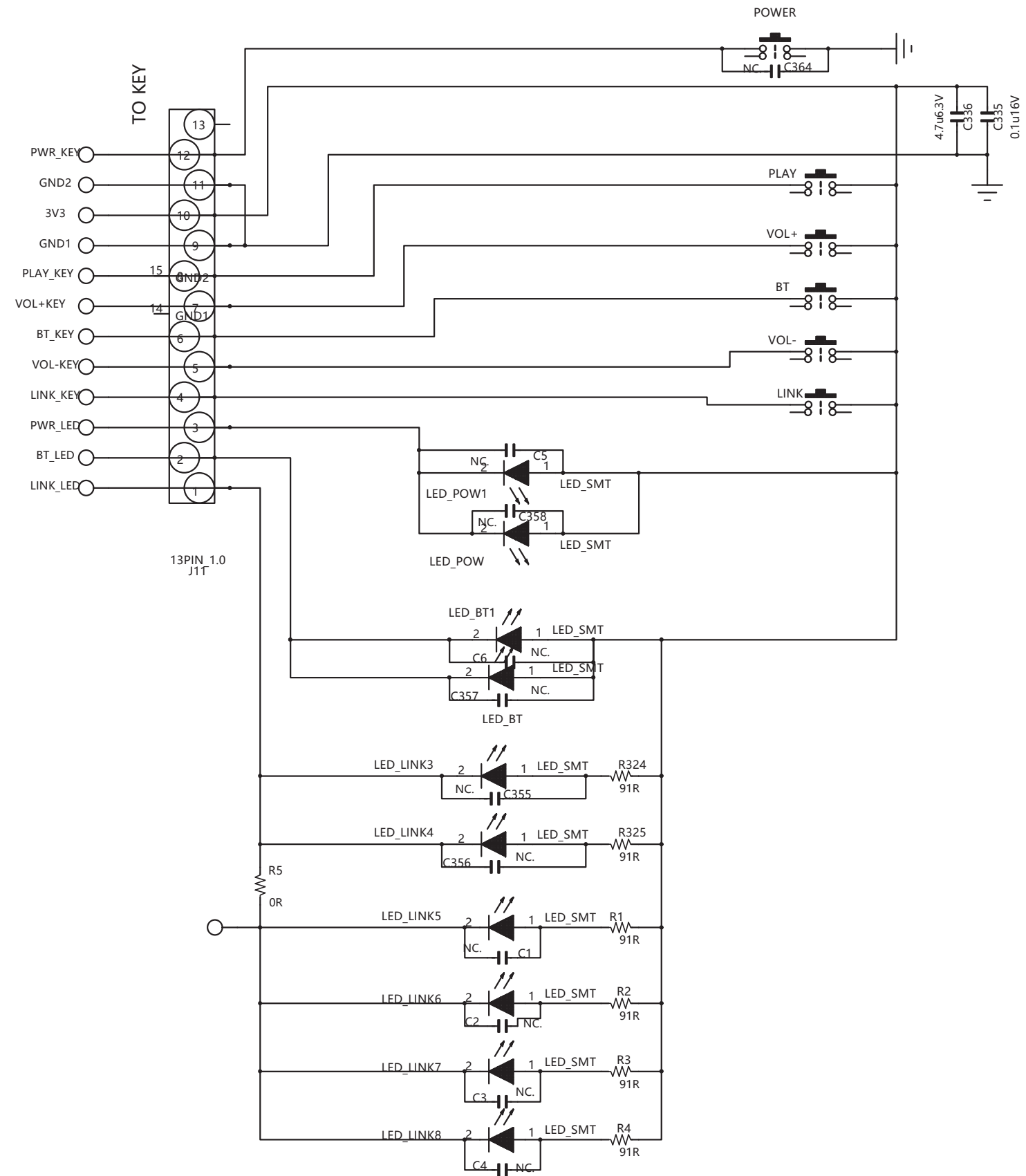


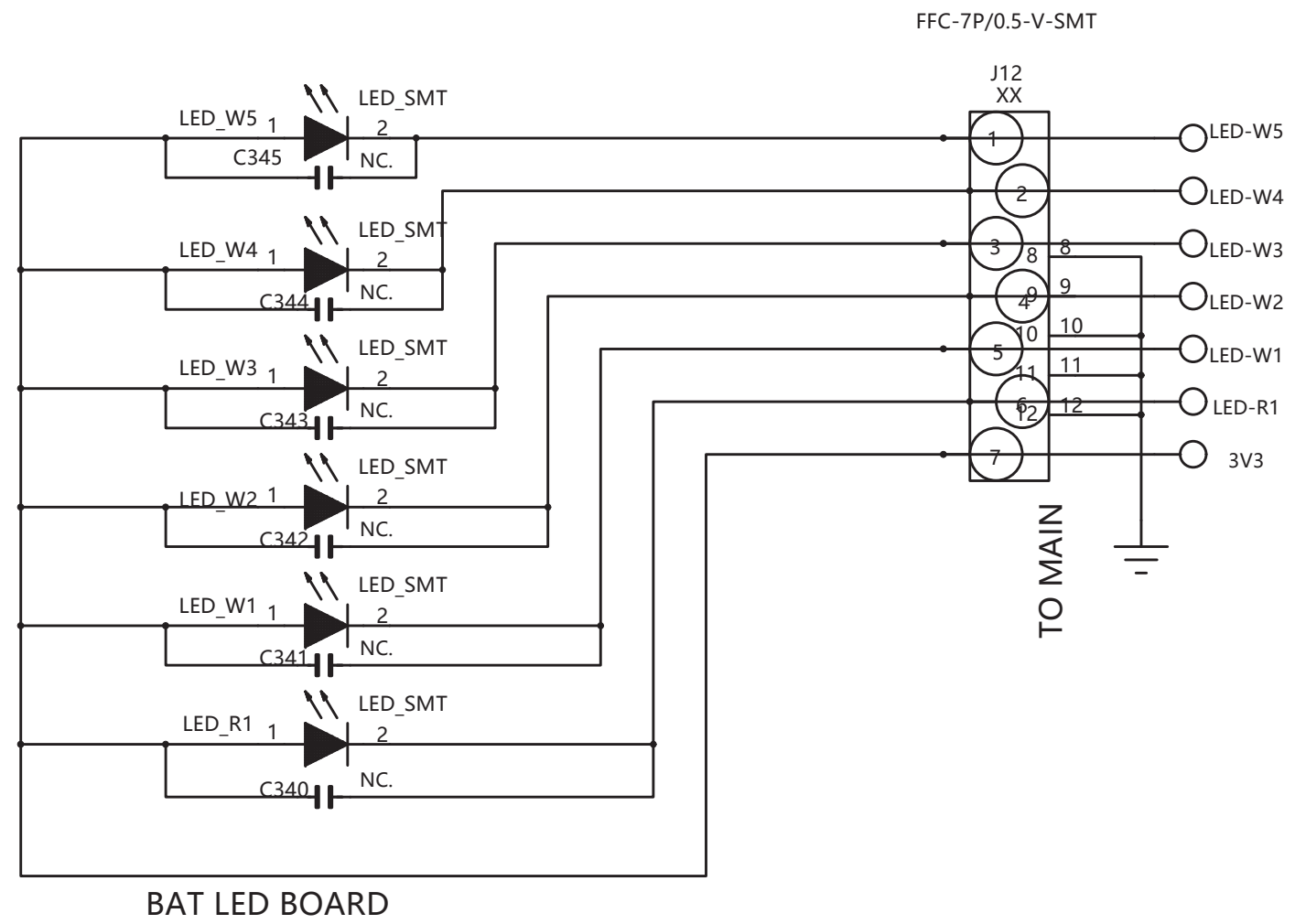
(MAIN BOARD SOLUTION C)



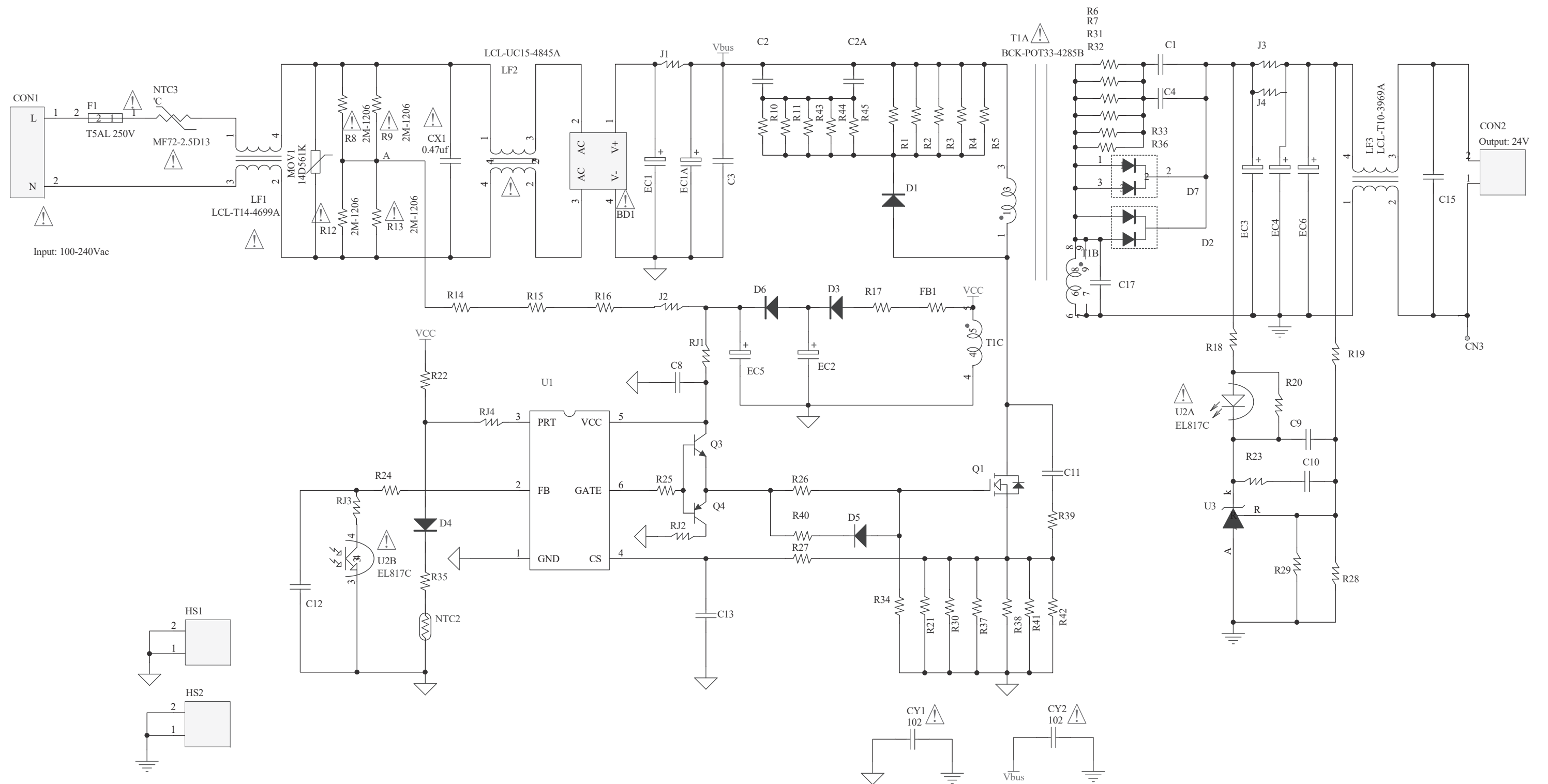


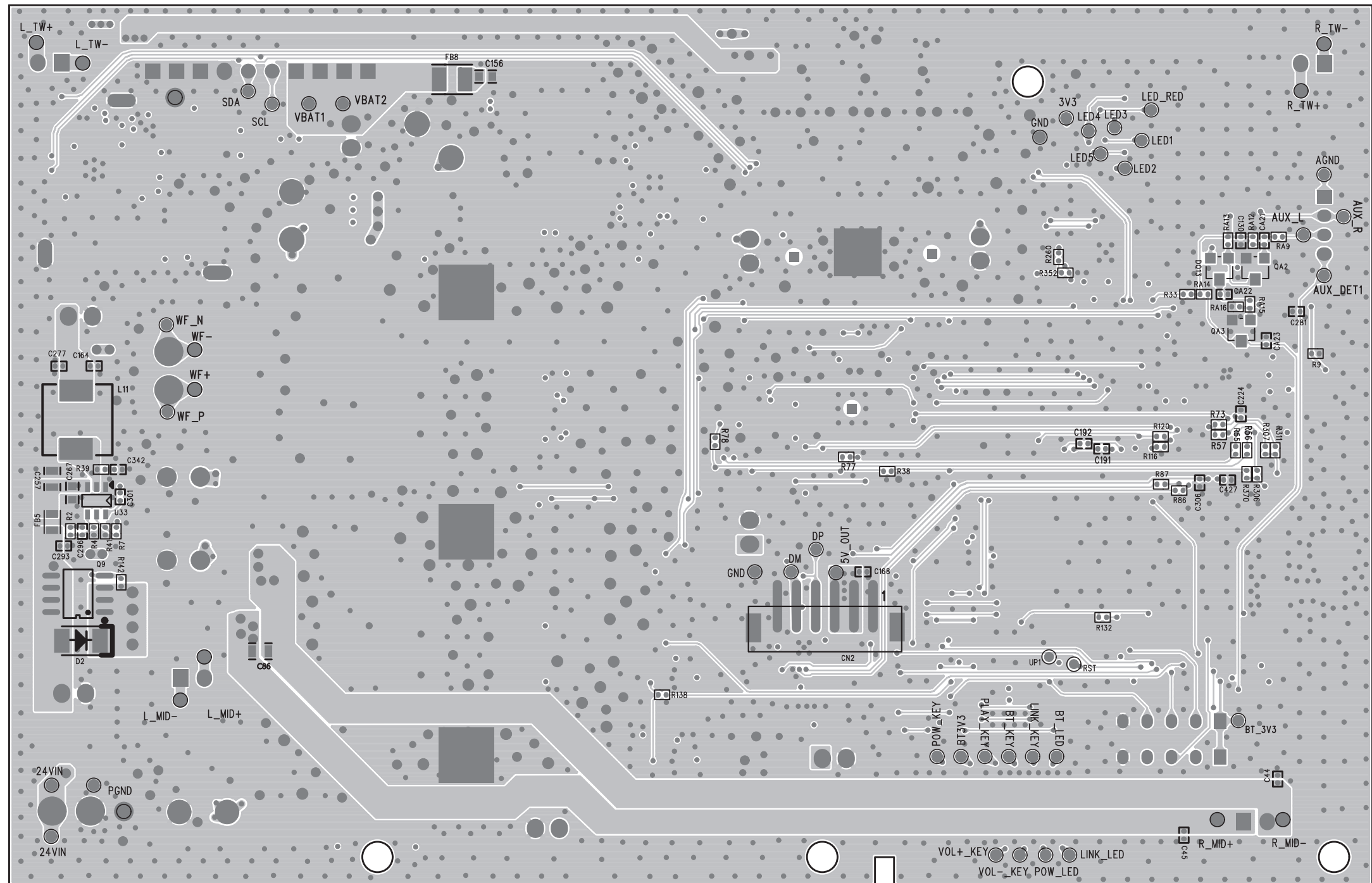
Circuit diagram---JACK board (1/1)



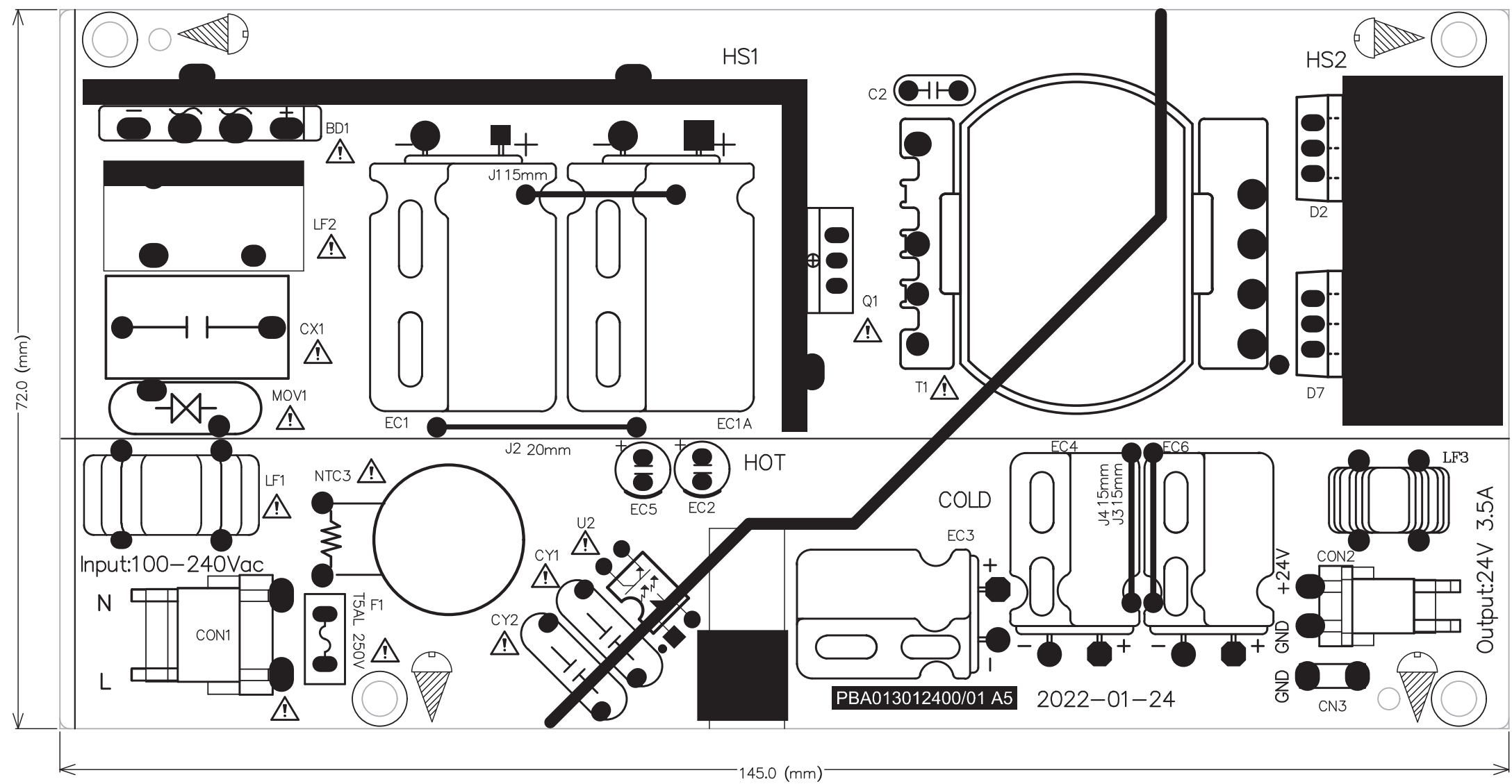


Circuit diagram---LED board (1/1)

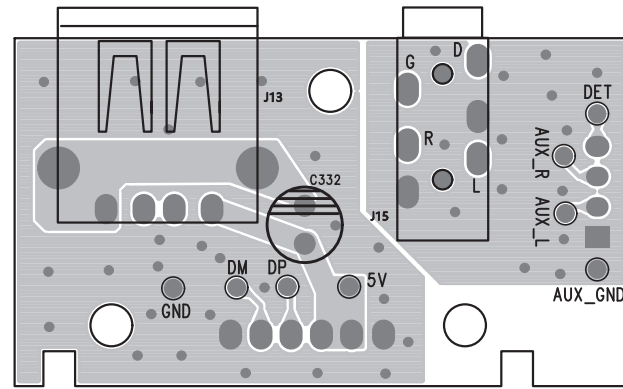




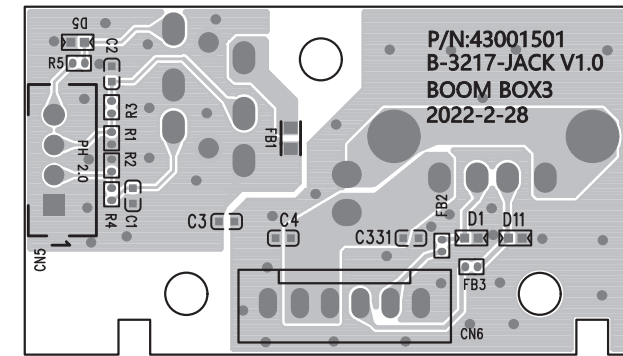
layout diagram---Main board_bottom



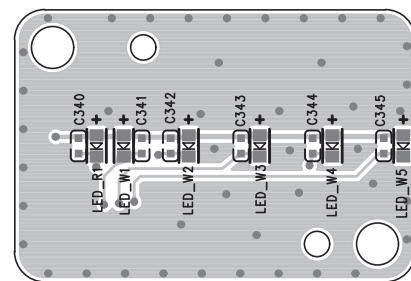
layout diagram---PSU board_top



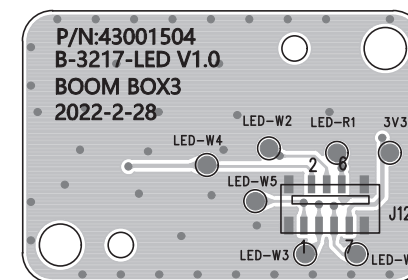
layout diagram---JACK board_top



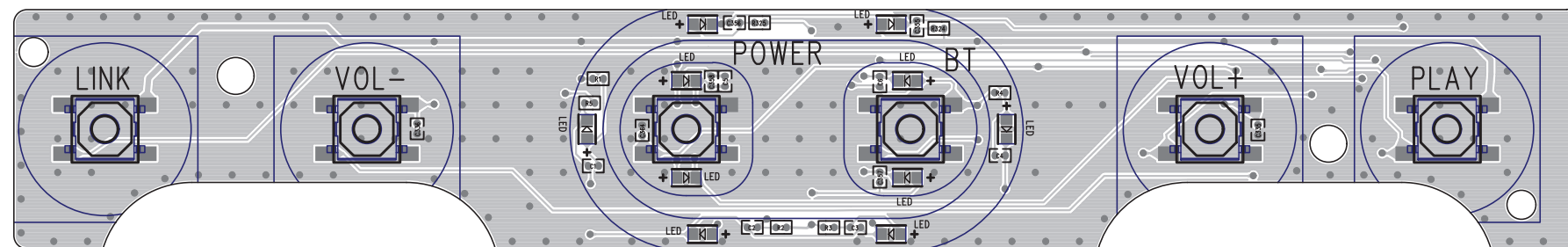
layout diagram---JACK board_bottom



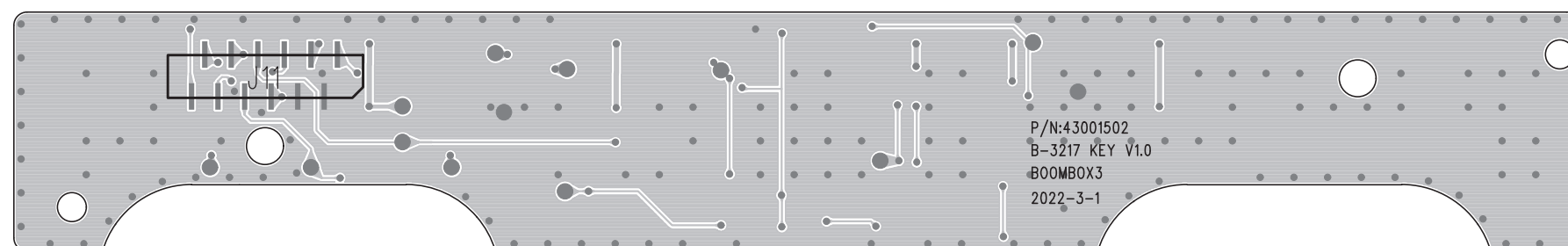
layout diagram---LED board_top



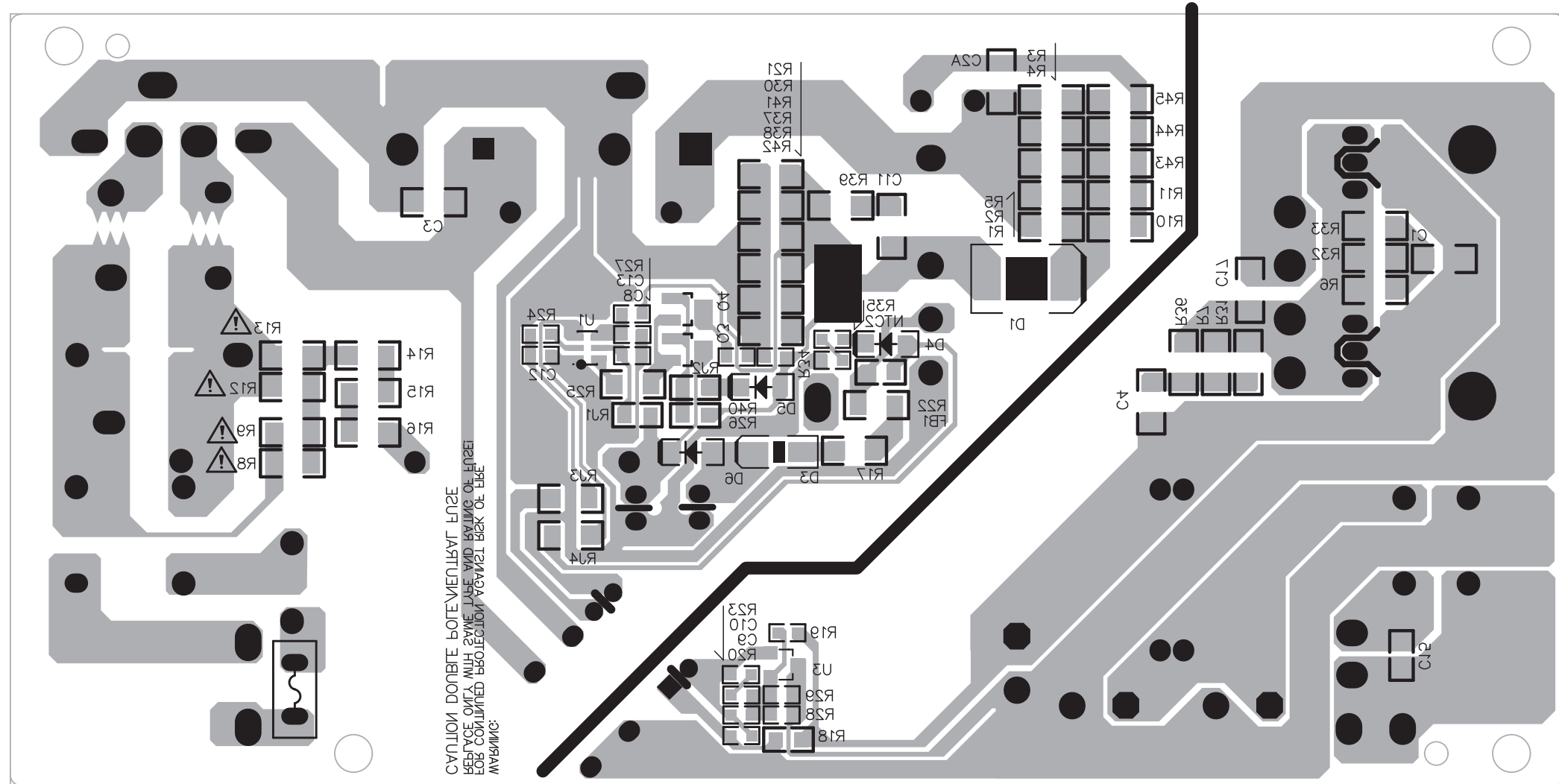
layout diagram---LED board_bottom



layout diagram---KEY board_top

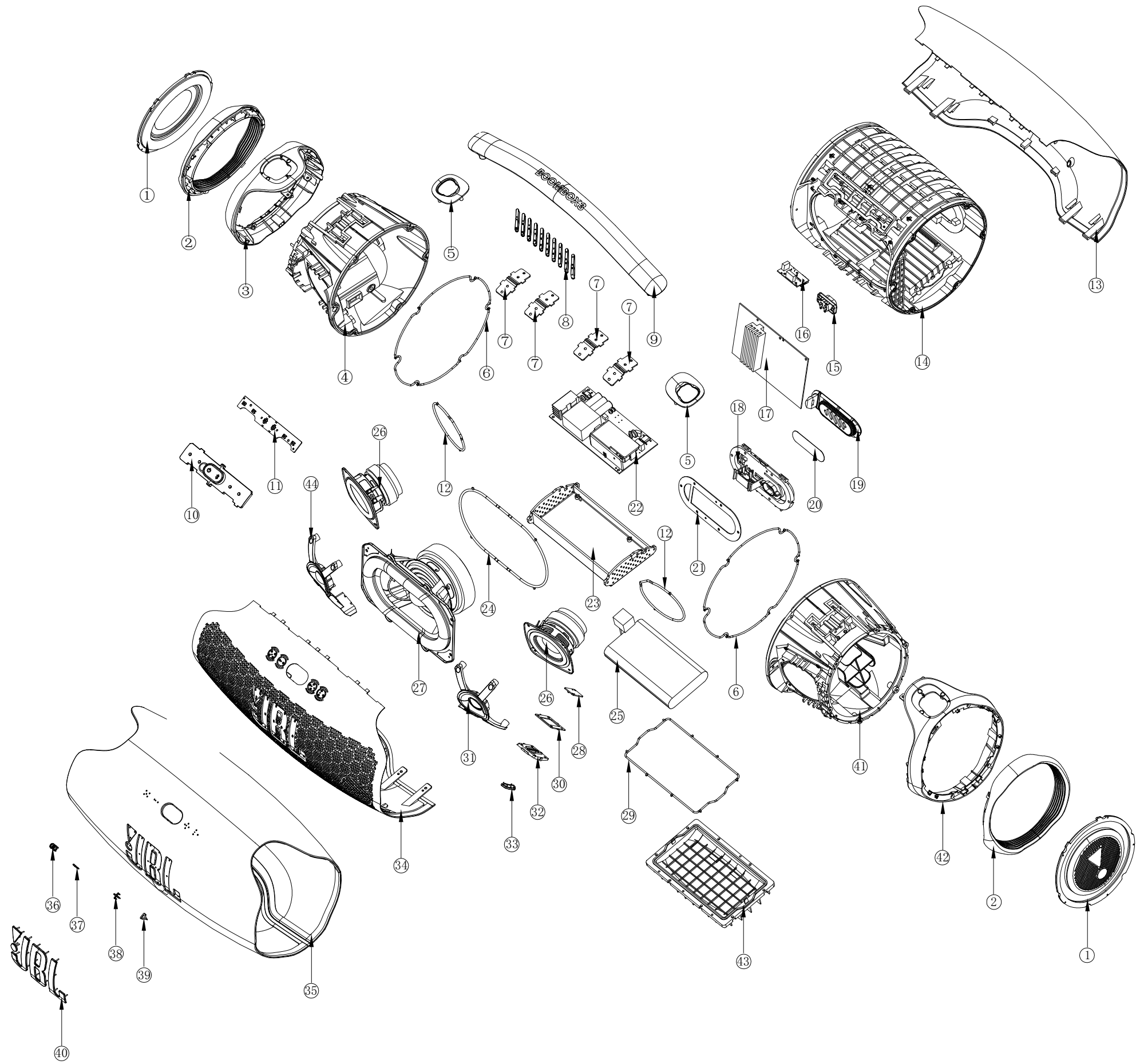


layout diagram---KEY board_bottom



layout diagram---PSU board_bottom

MECHANICAL EXPLODED VIEW



JBL BOOMBOX 3 SPARE PARTS LIST V1.2

Pos. No.	P/N	Description	UoM	Usage
1+4	32202790	PR BRACKET L+PR ASSY BOOMBOX3BLK	EA	1
1+4	32202792	PR BRACKET L+PR ASSY BOOMBOX3SQUAD	EA	1
1+41	32202789	PR BRACKET R+PR ASSY BOOMBOX3BLK	EA	1
1+41	32202791	PR BRACKET R+PR ASSY BOOMBOX3SQUAD	EA	1
2	31201532	DECORATIVE SIDE COVER BOOMBOX3BLK	EA	1
2	31201581	DECORATIVE SIDE COVER BOOMBOX3SQUAD	EA	1
3	31201530	SIDE COVER LEFT BOOMBOX3BLK	EA	1
3	31201579	SIDE COVER LEFT BOOMBOX3SQUAD	EA	1
5	31201533	SIDE CAP BRACKET BOOMBOX3BLK	EA	1
5	31201582	SIDE CAP BRACKET BOOMBOX3SQUAD	EA	1
6	45902099	CHAMBER O-RING BOOMBOX3	EA	1
7+13+33+34+ 35+36+37+38 +39+40	32202382	FABRIC GRILLE ASSY BOOMBOX3BLK	EA	1
7+13+33+34+ 35+36+37+38 +39+40	32202404	FABRIC GRILLE ASSY BOOMBOX3SQUAD	EA	1
8+9	31301406	HANDLE BOOMBOX3BLK	EA	1
8+9	31301416	HANDLE BOOMBOX3SQUAD	EA	1
10	45902094	CONTROL PANEL BOOMBOX3BLK	EA	1
10	45902125	CONTROL PANEL BOOMBOX3SQUAD	EA	1
11	31602888	KEY PCBA BOOMBOX3	EA	1
12	45902097	MID-RANG O-RING BOOMBOX3	EA	1
14	31105236	ACOUSTIC CHAMBER BOOMBOX3	EA	1
15	41600186	AC SCOKET BOOMBOX3	EA	1
16	31602892	JACK PCBA BOOMBOX3	EA	1
17	31603328	MAIN PCBA SOLUTION A BOOMBOX3	EA	1
17	31603326	MAIN PCBA SOLUTION B BOOMBOX3 MPS	EA	1
17	31603327	MAIN PCBA SOLUTION C BOOMBOX3	EA	1
18	31201529	I/O CONNECTOR BRACKET BOOMBOX3BLK	EA	1
18	31201578	I/O CONNECTOR BRACKET BOOMBOX3SQUAD	EA	1
19	45902095	I/O DOOR BOOMBOX3BLK	EA	1
19	45902126	I/O DOOR BOOMBOX3SQUAD	EA	1
20	45800254	COMPLIANCE PC FILM BOOMBOX3 MADE IN CN	EA	1
20	45800263	COMPLIANCE PC FILM BOOMBOX3 MADE IN VN	EA	1
21	45902100	IO PAD BOOMBOX3	EA	1
22	42200400	PSU PCBA BOOMBOX3	EA	1
23	31105243	PSU COVER BOOMBOX3	EA	1
24	45902096	WOOFER O-RING BOOMBOX3	EA	1
25	41700211	LI-ION BATT 9600MAH SDI+TI IC BOOMBOX3	EA	1
25	41700227	LI-ION BATT 9600MAH GP+TI IC BOOMBOX3	EA	1
25	41700236	LI-ION BATT 9600MAH GP+SINO IC BOOMBOX3	EA	1
26	81200780	MID-RANGE BOOMBOX3	EA	1
27	81200812	WOOFER BOOMBOX3	EA	1
28	31602889	LED PCBA BOARD BOOMBOX3	EA	1
29	45902098	BATTERY O-RING BOOMBOX3	EA	1
30	45902101	BATTERY LED PCB O-RING BOOMBOX3	EA	1
31	81200789	TWEETER ASSY RIGHT BOOMBOX3	EA	1
32	31105238	BATTERY LED BRACKET BOOMBOX3	EA	1
42	31201531	SIDE COVER RIGHT BOOMBOX3BLK	EA	1

42	31201580	SIDE COVER RIGHT BOOMBOX3SQUAD	EA	1
43	31105241	BATTERY COVER BOOMBOX3	EA	1
44	81200779	TWEETER ASSY LEFT BOOMBOX3	EA	1
	42001494	FFC L135 12P P=1.0MM BOOMBOX3	EA	1
	42001495	FFC L180 3P P=3.96MM BOOMBOX3	EA	1
	42001497	FFC L150 4P P=2.0MM BOOMBOX3	EA	1
	42001498	FFC L100 6P 22AWG BOOMBOX3	EA	1
	42001500	FFC L160 2P P=3.96MM BOOMBOX3	EA	1
	42001565	FFC L120 7P P=0.5MM BOOMBOX3	EA	1
	42001566	FFC L90 2P P=3.96MM BOOMBOX3	EA	1
	42001568	FFC L210 2P 20AWG BLK BOOMBOX3	EA	1
	42001569	FFC L210 2P 20AWG BLU BOOMBOX3	EA	1
	42300256	BT ANTENNA BOOMBOX3	EA	1
	42900900	POWER CORD BOOMBOX3 EU&RU	EA	1
	42900938	POWER CORD BOOMBOX3 AM	EA	1
	42900942	POWER CORD BOOMBOX3 BR	EA	1
	42900943	POWER CORD BOOMBOX3 CN	EA	1
	42900944	POWER CORD BOOMBOX3 IN	EA	1
	42900945	POWER CORD BOOMBOX3 KO	EA	1
	42900946	POWER CORD BOOMBOX3 JN	EA	1
	42900947	POWER CORD BOOMBOX3 AU	EA	1
	42900948	POWER CORD BOOMBOX3 UK	EA	1
	42900949	POWER CORD BOOMBOX3 TH	EA	1
	45400275	WATERPROOF FILM BOOMBOX3	EA	1
	45902102	TWEETER O-RING BOOMBOX3	EA	1
	47103820	GIFT BOX BOOMBOX3BLK NON-AM	EA	1
	47103869	GIFT BOX BOOMBOX3SQUAD NON-AM	EA	1
	47103973	GIFT BOX BOOMBOX3BLKAM MADE IN VN	EA	1
	47103974	GIFT BOX BOOMBOX3SQUADAM MADE IN VN	EA	1
	47103997	GIFT BOX BOOMBOX3SQUADAM MADE IN CN	EA	1
	47103998	GIFT BOX BOOMBOX3BLKAM MADE IN CN	EA	1
	47103999	GIFT BOX BOOMBOX3SQUADIN&RU MADE IN VN	EA	1
	47104000	GIFT BOX BOOMBOX3BLKIN&RU MADE IN VN	EA	1
	47408082	UPC LABEL BOOMBOX3BLKUK	EA	1
	47408083	UPC LABEL BOOMBOX3BLKAS	EA	1
	47408084	UPC LABEL BOOMBOX3BLKBR	EA	1
	47408085	UPC LABEL BOOMBOX3BLKRU	EA	1
	47408086	UPC LABEL BOOMBOX3BLKIN	EA	1
	47408087	UPC LABEL BOOMBOX3BLKJN	EA	1
	47408088	UPC LABEL BOOMBOX3BLKCN	EA	1
	47408125	UPC LABEL BOOMBOX3SQUADUK	EA	1
	47408126	UPC LABEL BOOMBOX3SQUADAS	EA	1
	47408127	UPC LABEL BOOMBOX3SQUADBR	EA	1
	47408128	UPC LABEL BOOMBOX3SQUADRU	EA	1
	47408129	UPC LABEL BOOMBOX3SQUADIN	EA	1
	47408130	UPC LABEL BOOMBOX3SQUADJN	EA	1
	47408131	UPC LABEL BOOMBOX3SQUADCN	EA	1
	47500817	FABRIC BAG BOOMBOX3	EA	1



Service Info

Service Info # 2022-034 Ver. 1.2

Apr-2023

To: **All JBL Service Centers**

Models: **JBL Boombox 3**

Subject: **PCBA/Battery changes – Main PCBA, Li-ion Battery**



Part Change in new revision:

1. JBL Boombox 3 has introduced new hardware modules due to new ICs phasing in.
 - a. There is no serial number cut-in, please replace according to the manufacture number of the three kinds of Main Boards, three kinds of Li-ion Batteries – see identity guide below.
 - b. For main board with old manufacture P/N 43001500 or 43001671, please order the original part - main board (solution A) as long as available.
2. There are 3 kinds of Main Boards and 3 kinds of Batteries, the below is the table of Part No. for them.

Cat.	Item	Description	P/N
I	1	MAIN BOARD SOLUTION A	43001661 or 31603328
	2	MAIN BOARD SOLUTION B	31603326
	3	MAIN BOARD SOLUTION C	31603327
II	1	BATTERY W/SDI CELL+TI GAUGE IC	41700211
	2	BATTERY W/GP CELL+TI GAUGE IC	41700227
	3	BATTERY W/GP CELL+SINO GAUGE IC	41700236

3. Hardware is interchangeable with following actions:
 - a. The original Main Board (solution A) with P/N 43001661 or 31603328 must be used with battery with P/N 41700211 & P/N 41700236
 - b. 2nd Main Board (solution B) with P/N 31603326 must be used with battery with P/N 41700227 & P/N 41700236.
 - c. 3rd Main Board (solution C) with P/N 31603327 can use the battery with P/N 41700227 & P/N 41700236, which is the same as Main Board (solution B).

d. 3rd Main Board (solution C) is pin to pin compatible with 2nd Main Board (solution B)

MATRIX - MAIN BOARDS vs BATTERIES

DESCRIPTIONS	BATTERY W/SDI CELL + TI GAUGE IC (PN 41700211)	BATTERY W/GP CELL + TI GAUGE IC (PN 41700227)	BATTERY W/GP CELL + SINO GAUGE IC (PN 41700236)
MAIN BOARD SOLUTION A (PN 43001661 or 31603328)	OK	NA	OK
MAIN BOARD SOLUTION B (PN 31603326)	NA	OK	OK
MAIN BOARD SOLUTION C (PN 31603327)	NA	OK	OK

To identify three kinds of Main Board

1) The first Main Board (solution A)

---manufacture P/N on the PCBA: **43001500 or 43001671**, as shown in Fig. 1

---component L14: **H3R3**, as shown Fig. 1

---component U8: "**DRNxyz**" on IC package, as shown in Fig. 2

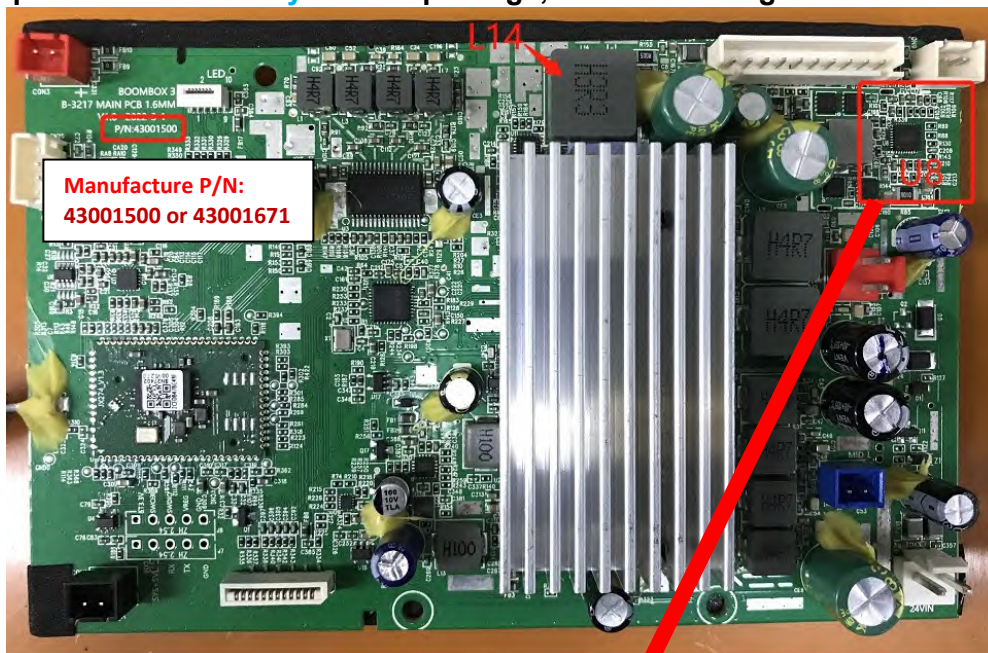


Fig. 1

The component U8 "**DRNxyz**"

DRN=device code, x=year code, y=week code, z=lot number code



Fig. 2

2) The second Main Board (solution B)

---manufacture P/N on the PCBA: **43001668 or 43001675**, as shown in Fig. 3

---And component L14: **H6R8**, as shown in Fig. 3

---And component U8: device Information shows "**DRNxyz**"

DRN=device code, **x=**year code, **y=**week code, **z=**lot number code

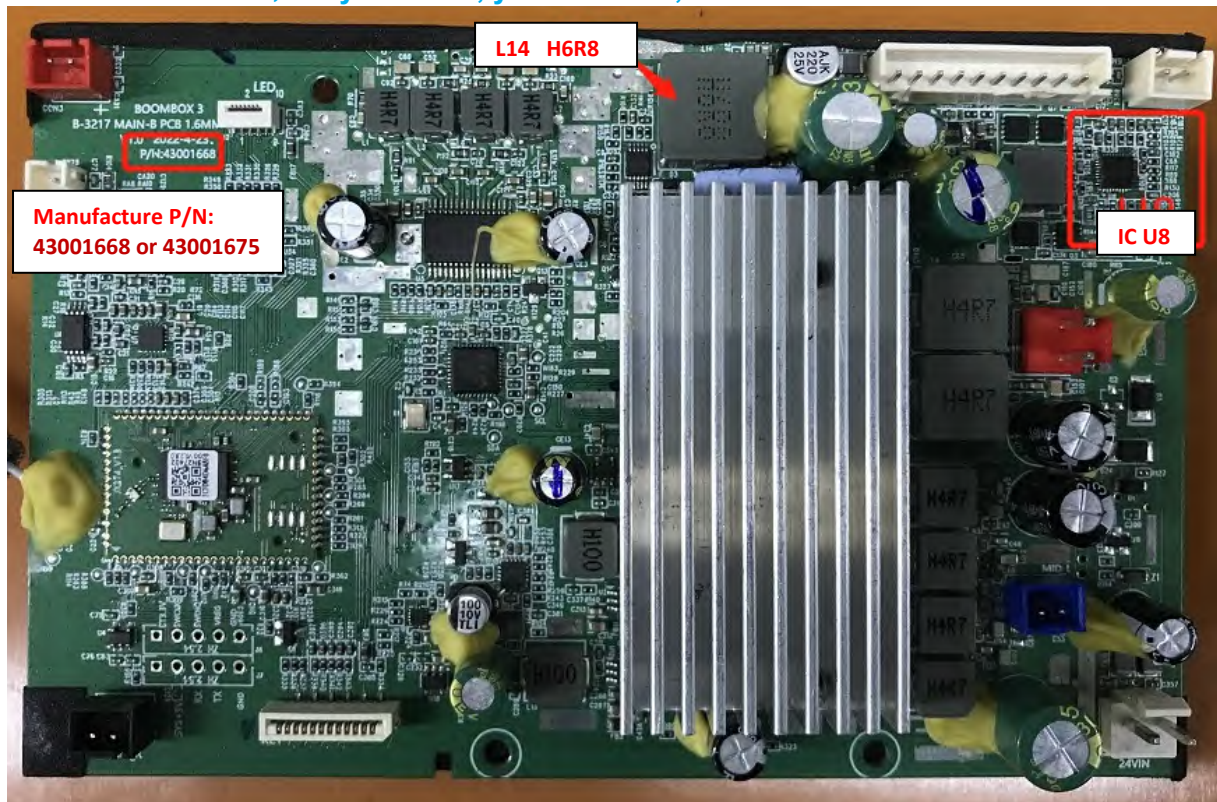


Fig. 3

3) 3rd Main Board (solution C)

---manufacture P/N: the same as Solution B, P/N **43001668 or 43001675**

---And component L14: the same as Solution B, **H6R8**

---And component U8: **SC1896QDER**, it is only different from Solution B, as shown in Fig. 4

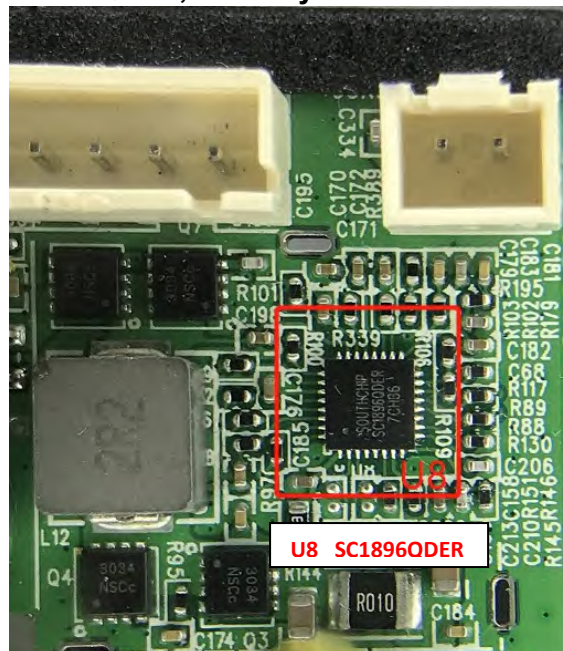


Fig. 4

How to identify three kinds of batteries

- 1) Battery w/SDI cell +TI gauge IC (PN 41700211), Model=**ICA068GA**, Nominal Voltage=7.26V, rated capacity=69.696Wh, as shown in Fig. 5

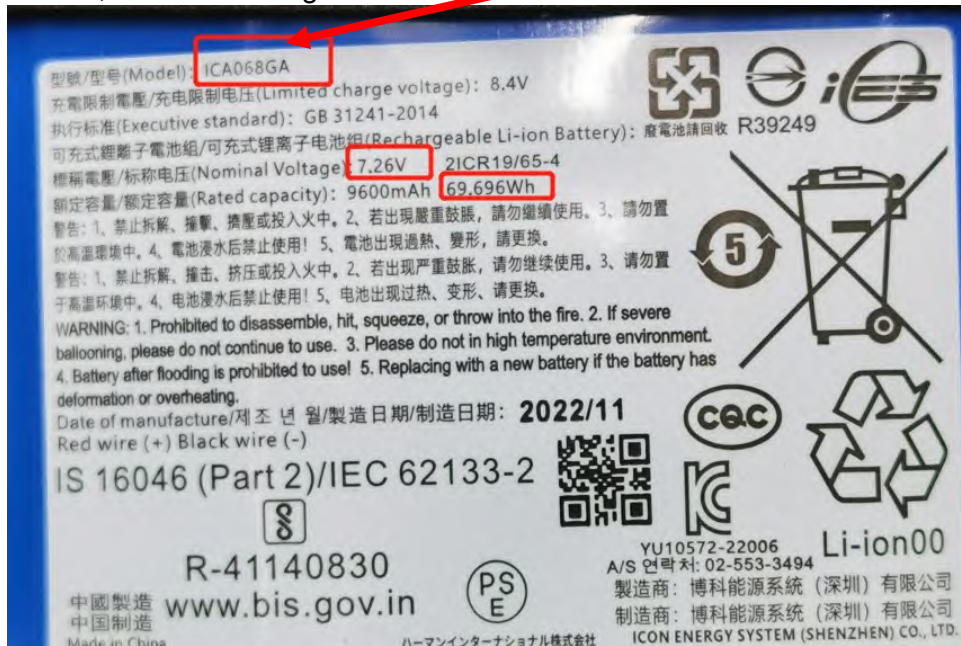


Fig. 5

- 2) Battery w/GP cell +TI gauge IC (PN 41700227), Model = **IDA109GA**, Nominal Voltage=7.2V, rated capacity=69.12Wh indicated, as shown in Fig. 6.

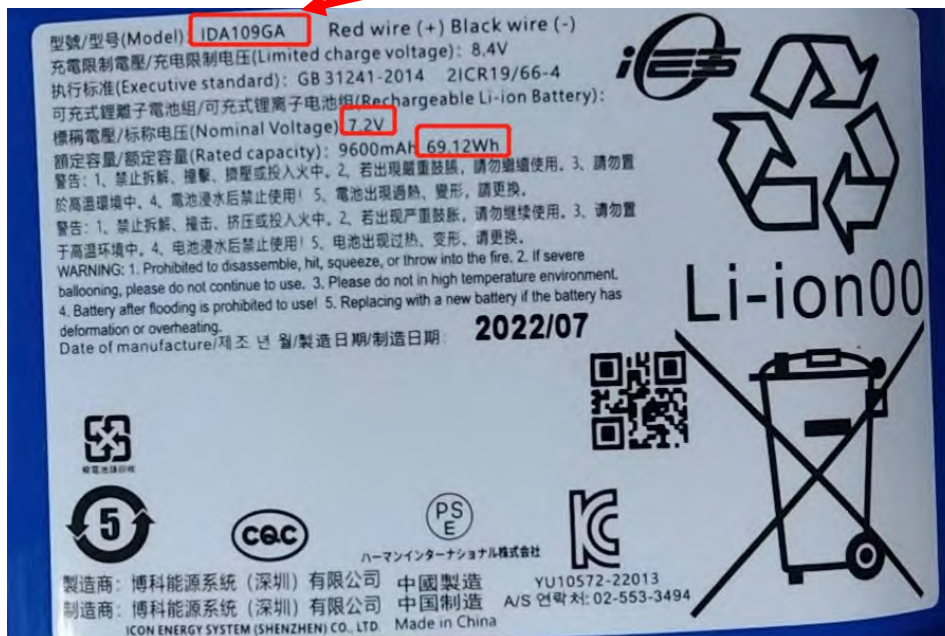


Fig. 6

- 3) Battery w/GP cell + SINO GAUGE IC (PN 41700236), Model = **IDA109GA**, Nominal Voltage = 7.2V, Rated capacity=69.12Wh indicated, as shown in Fig. 6.

4) Scan the QR code shown in below picture to distinguish the 2nd and 3rd batteries from each other.



Fig. 7

- It is a 2nd Battery with GP cell + TI gauge IC (PN 41700227) if the result is **IDA109GA-XXXXXXXXXXXXX**.
- It is a 3rd Battery with GP cell + SINO gauge IC (PN 41700236) if the result is **IDA109GC-XXXXXXXXXXXXX**.

Model	Serial number:	Status	Action	PN used
Boombox 3	ND version	If issue is confirmed	Replace boards and battery	As mentioned

Revision List

Version 1.0

- * Initial release for JBL Boombox 3. 2022-5

Version 1.1

- * Add "how to reset, how to check software version and Activate/de-activate Demo-mode" in page 7. 2022-7

Version 1.2

- * Add Service Info to clarify the relationship among 3 kinds of main board and 3 kinds of battery. Update main board P/Ns and battery P/Ns. 2022-12

Version 1.3

- * Update Service Info to version 1.2 to add more explanation for the component U8. 2023-04

Version 1.4

- * Combine Passive Radiator (Pos. 1) and Passive Radiator Bracket (Pos. 4 or 41) to one assembled part. 2023-08

Version 1.5

- * Add Block Diagrams on page 14 - 15 and Circuit Diagrams on page 26 - 45 for Main Board Solution B and C. 2023-09