



# Service Manual

## IRX108BT

Powered 8" Portable Speaker with Bluetooth





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## HIGHLIGHTS ■

### Big Sound, Small Box

Class-leading output and frequency response in a compact design

### Bluetooth 5.0 Audio Streaming

Easily stream audio with greater wireless range, speed and accuracy using Bluetooth 5.0

### Feedback Suppression

dbx® Automatic Feedback Suppression for trouble-free operation

### EQ Presets

Four selectable EQ presets to easily tune the speaker for a range of applications

### Music Ducking

Soundcraft®-designed ducking automatically attenuates music when speech is detected

The JBL IRX108BT portable powered speaker delivers class-leading output and clarity, total ease of use and an unrivaled feature set at our most affordable price point. Sound amazing with a custom, pro-grade PA engineered to outperform larger competing systems. EQ presets let you dial in optimal tone in an instant—no experience necessary—and built-in dbx feedback suppression lets you crank it up with confidence. Play music, soundtracks and backing tracks with Bluetooth 5.0 audio streaming, and ensure your voice carries over background music with one-touch ducking. Two mic/line combo inputs and an XLR pass-thru output round out this lightweight, durable PA.

Performers, content producers, fitness instructors and presenters on the go can count on the versatile, full-featured IRX108BT to serve up stunning, pro-quality sound, every time.

## KEY MESSAGES ■

### CLASS-LEADING OUTPUT AND CLARITY

The IRX108BT draws from seven decades of legendary JBL engineering to deliver the highest measured output and the widest frequency response in its class, with SPL, wattage and performance ratings equivalent to larger competitive loudspeakers.

### BLUETOOTH AND AUDIO I/O

Bluetooth 5.0 audio streaming lets you play backing tracks, video soundtracks or recorded music between sets with greater wireless range, speed and accuracy—even link two speakers to create a true stereo image. Two XLR/TRS combo inputs and an XLR pass-thru output to connect additional speakers round out I/O options.

### RUGGED AND ROAD-TESTED

Like every JBL speaker, the IRX108BT undergoes 100 hours of stress testing to ensure it'll perform flawlessly in real-world conditions.

## IN THE BOX ■

IRX108BT  
IEC Power Cable  
Quick Start Guide

### TAKE THE GUESSWORK OUT OF GREAT SOUND

Sound your best in seconds with four EQ presets modeled after a range of common performance scenarios. Built-in dbx feedback suppression protects speakers—and your ears—by automatically stopping feedback before it starts. One-touch, Soundcraft-designed ducking automatically lowers music volume when speech input is detected, ensuring every word is heard loud and clear.

### POWERFUL GETS MORE PORTABLE

The IRX108BT is engineered to deliver big-system sound in a compact footprint. Its ultra-lightweight, durable polypropylene cabinet will have you loading in and out in minutes, and ergonomic handles make transport a breeze. In short, you'll enjoy big, crystal-clear sound without the hassle of hauling a huge system.





## APPLICATIONS ■

### MUSICIANS/PERFORMERS

Musicians and performers looking for a great-sounding, easy-to-use sound reinforcement speaker in a portable, affordable package.

### PRESENTERS/INSTRUCTORS

Mobile presenters and fitness instructors looking for an easy-to-use, compact PA solution with Bluetooth audio and built-in music ducking.

### HOSPITALITY/GOVERNMENT INSTALLATIONS

Hospitality/government installations requiring professional sound quality with ease of use and minimal setup time.

## FEATURES ■

- Four EQ presets take the guesswork out of optimizing sound
- dbx AFS stops feedback before it starts
- Bluetooth integration allows stereo streaming of music, soundtracks and backing tracks
- One-touch ducking automatically lowers music volume when speech input is detected
- Wide frequency response: 54 Hz – 20 kHz
- Lightweight design
- 2 XLR/TRS combo input jacks and 1 XLR output offer a range of connectivity choices
- Input accepts mic or line source to enhance versatility
- Ergonomic handles make transport quick and easy
- Durable honeycomb steel grille is road-tested for reliability
- Built-in pole mount expands system setup options

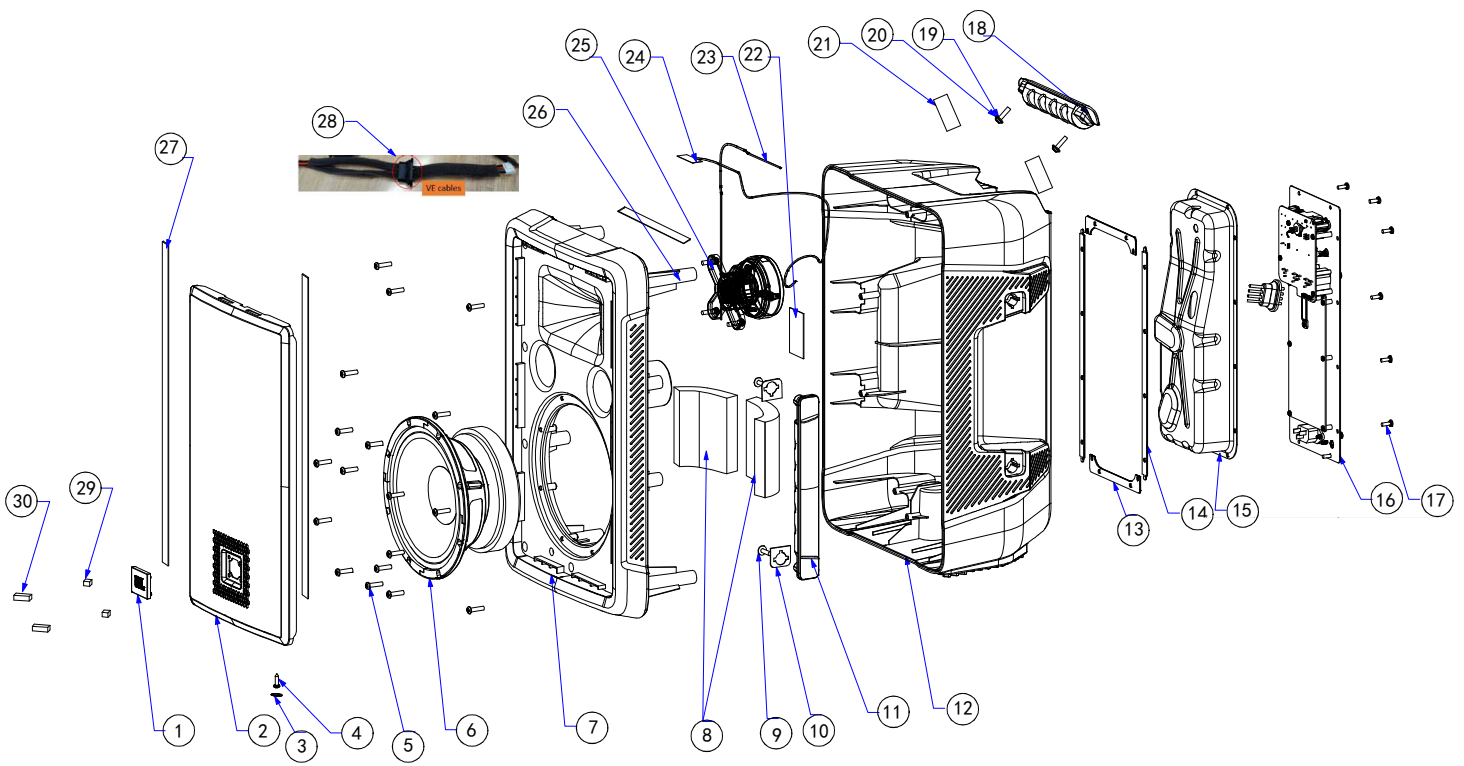
## TECHNICAL SPECIFICATIONS ■

<b>SYSTEM TYPE:</b>	Powered 8" two-way
<b>CABINET:</b>	Polypropylene with full grille
<b>MAX SPL:</b>	124 dB peak
<b>FREQUENCY RESPONSE (±3 dB):</b>	54 Hz – 20 kHz
<b>POWER RATING:</b>	1300 watts peak
<b>INPUT IMPEDANCE:</b>	10k ohm balanced
<b>COVERAGE PATTERN:</b>	90° (horizontal) x 60° (vertical) nominal
<b>BLUETOOTH:</b>	Audio streaming, Bluetooth version 5.0
<b>DSP:</b>	4 presets, feedback suppression, ducking
<b>I/O:</b>	2 XLR/TRS combo mic/line inputs, 1 XLR pass-thru output
<b>MOUNTING:</b>	35 mm pole socket
<b>NET WEIGHT:</b>	17.4 lb (7.9 kg)
<b>DIMENSIONS (D x W x H):</b>	10.15 x 12.32 x 19.15 in (258 x 313 x 486 mm)

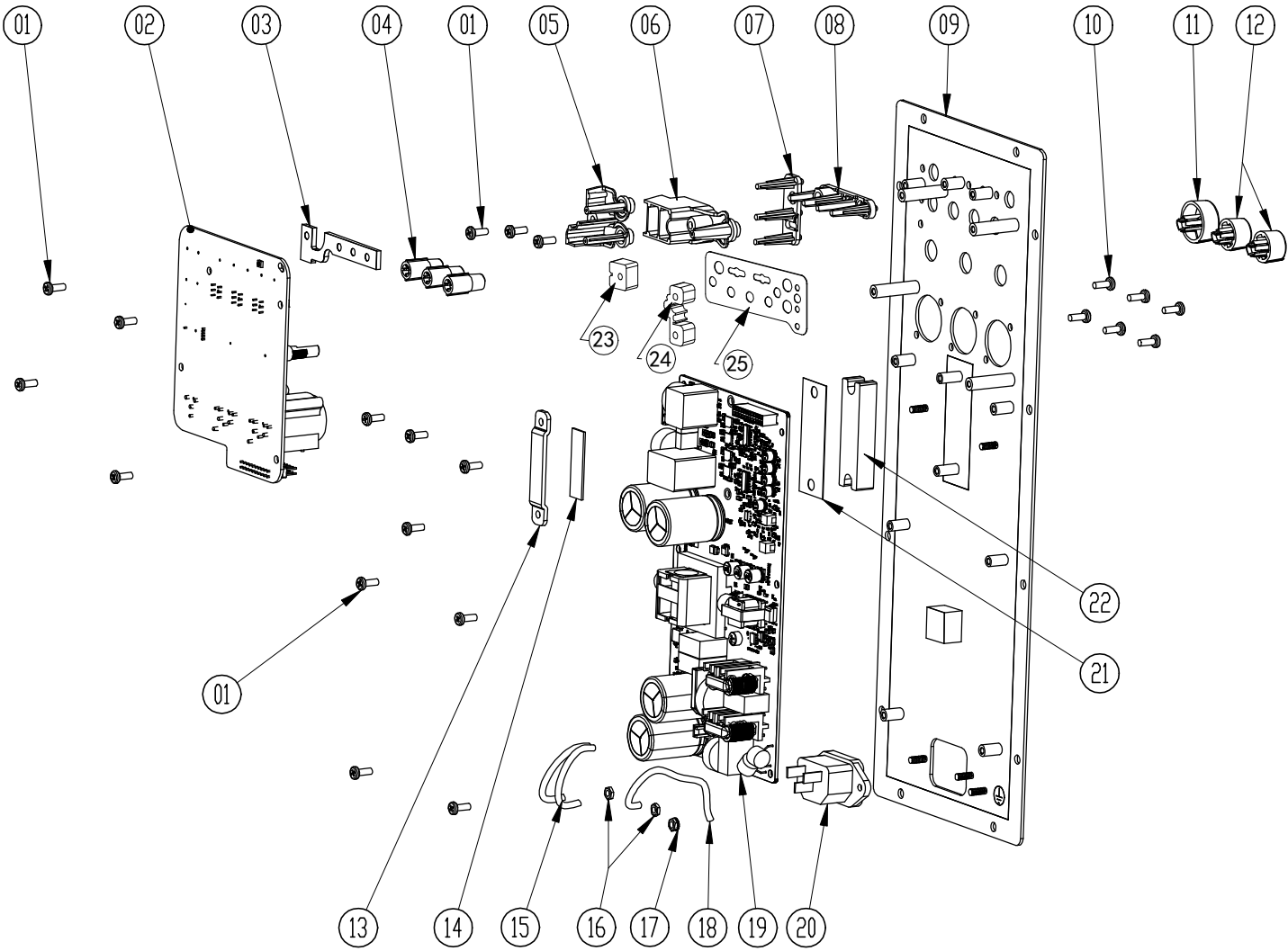
## ORDER SPECIFICATIONS ■

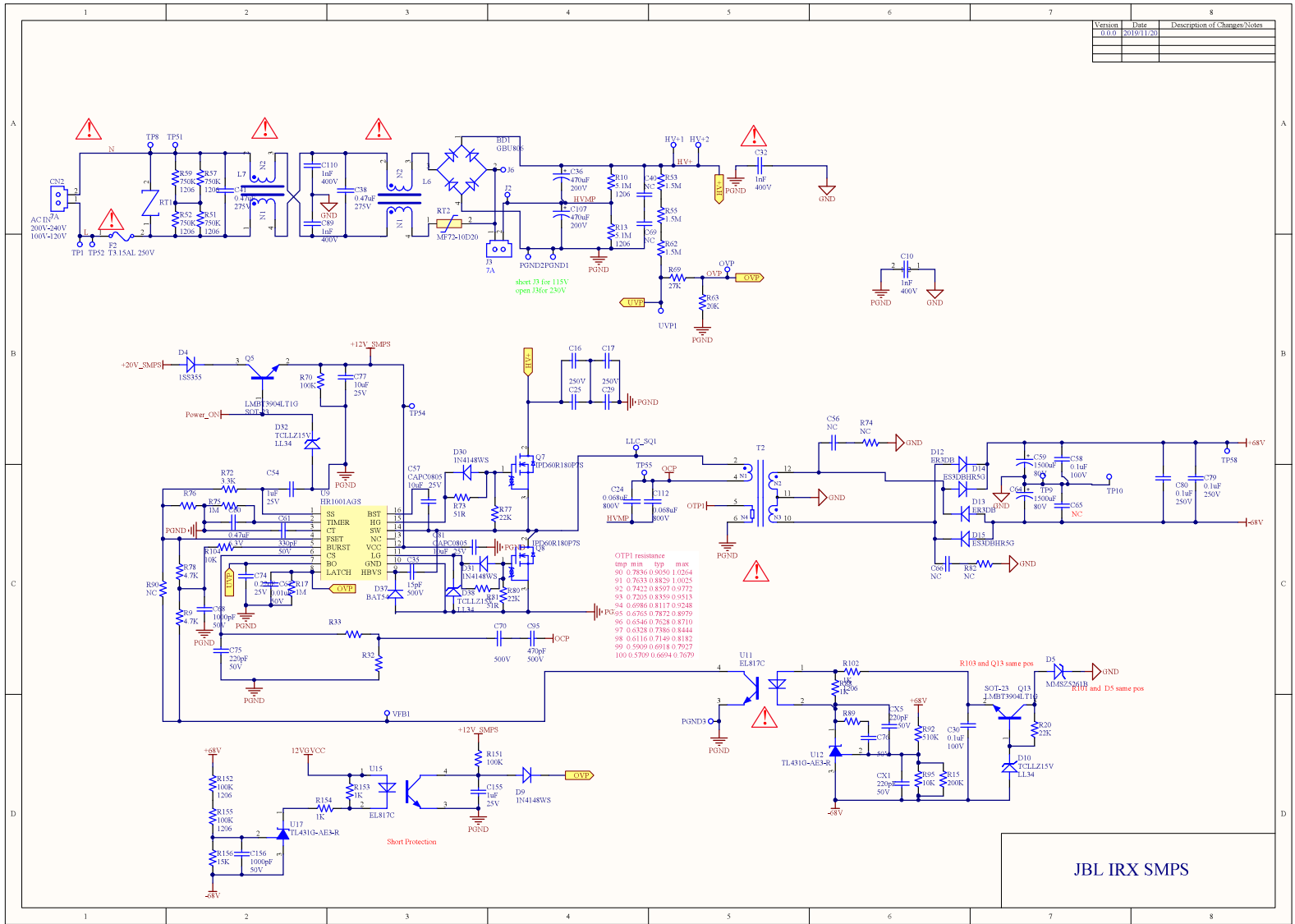
<b>SHIPPING CARTON (L x W x H):</b>	10.87 x 13.35 x 20.35 in (276 x 339 x 517 mm)
<b>SHIPPING WEIGHT:</b>	20.5 lb (9.3 kg)
<b>UPC CODE:</b>	691991033506

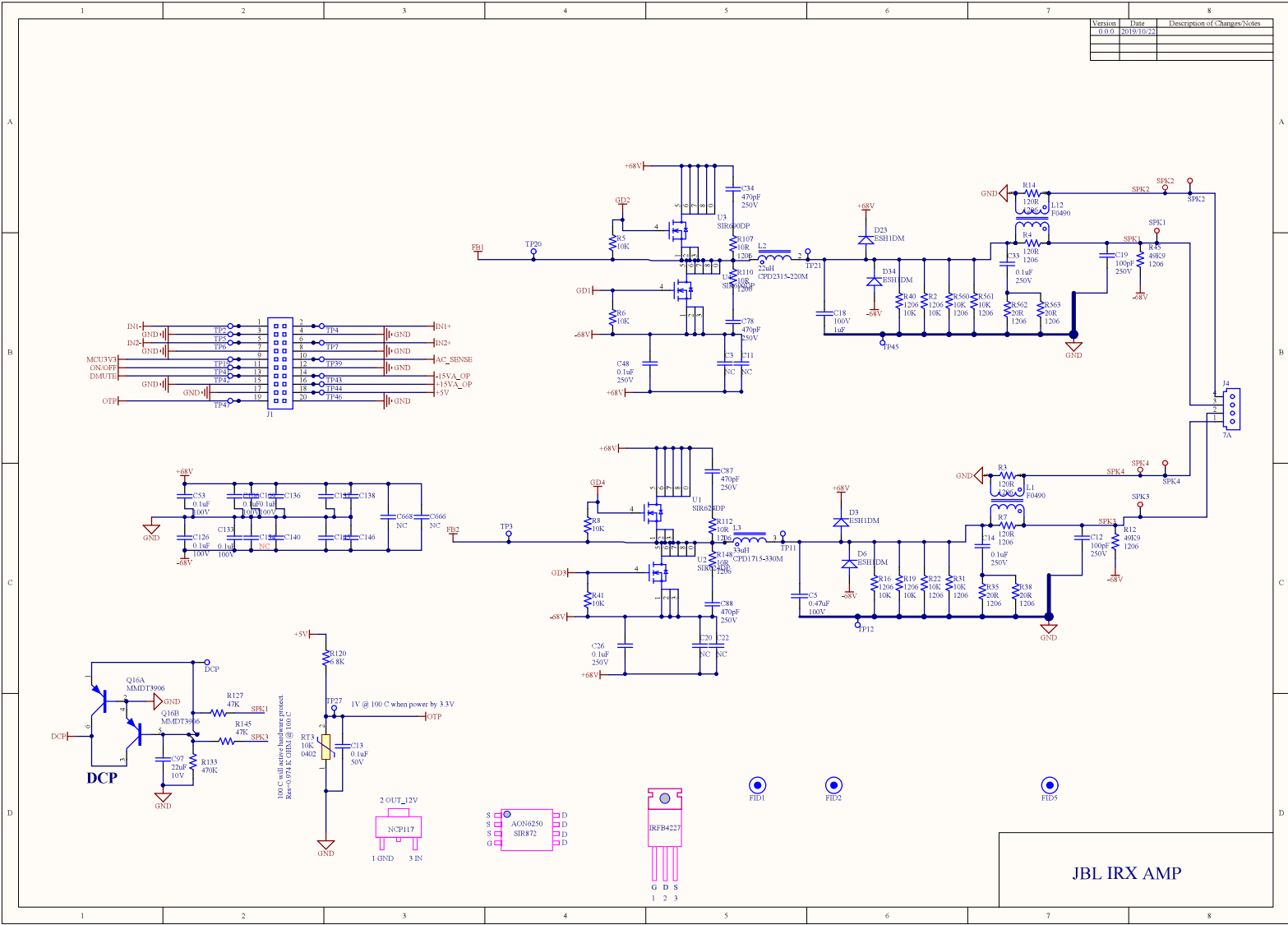
IRX108BT\_MAIN ASSY\_EXPLODED VIEW



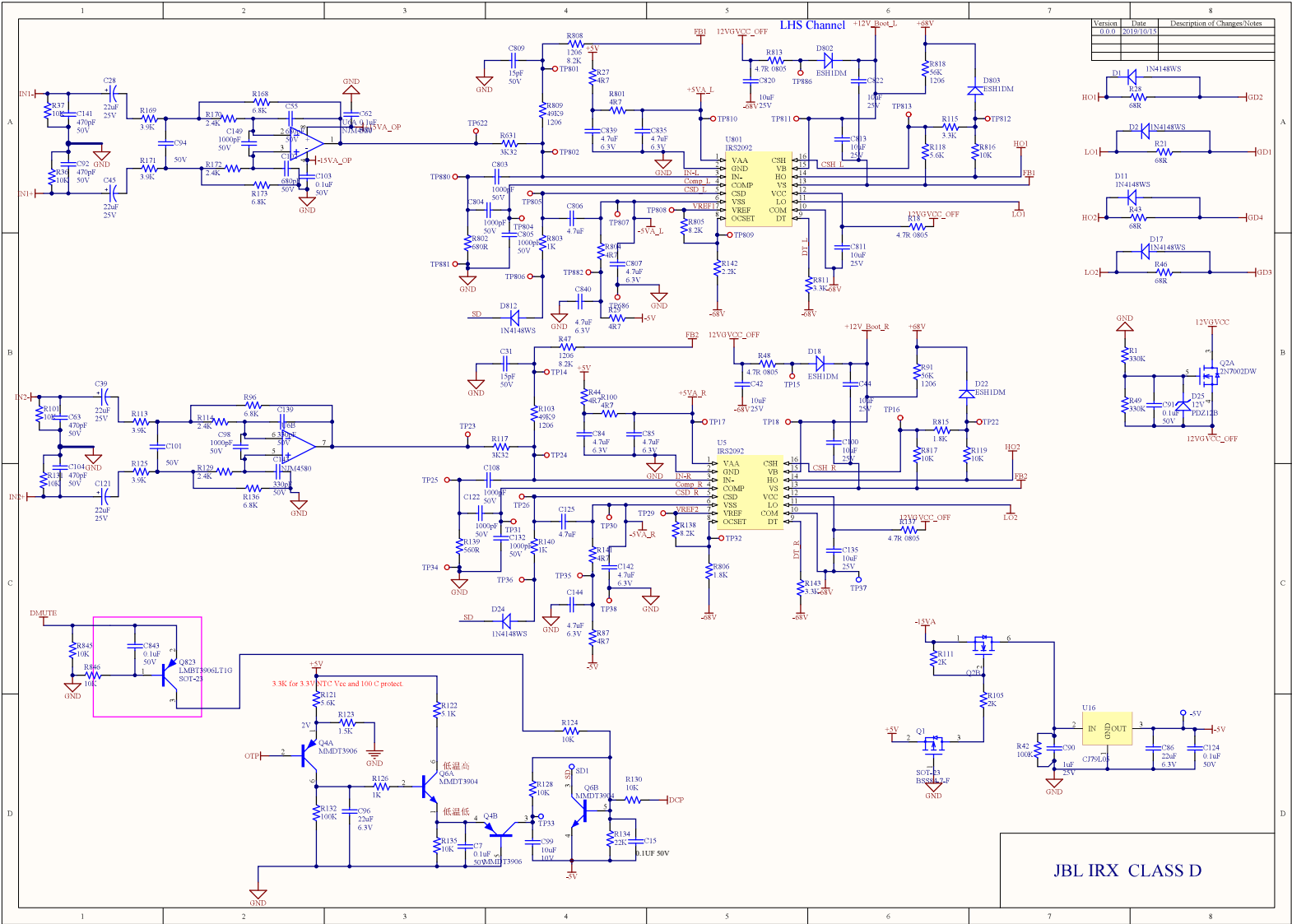
IRX108BT\_REAR PLATE ASSY\_EXPLODED VIEW



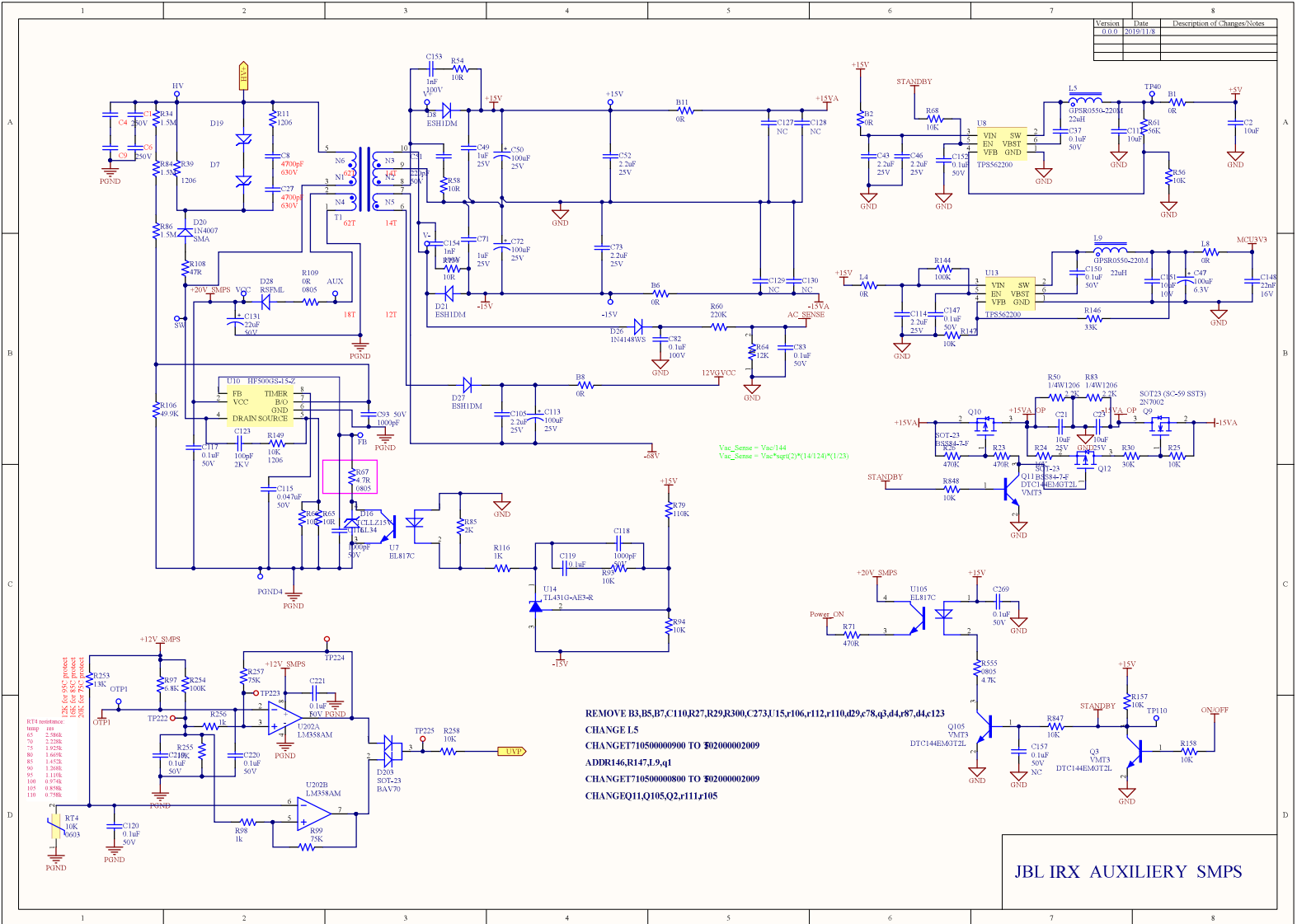


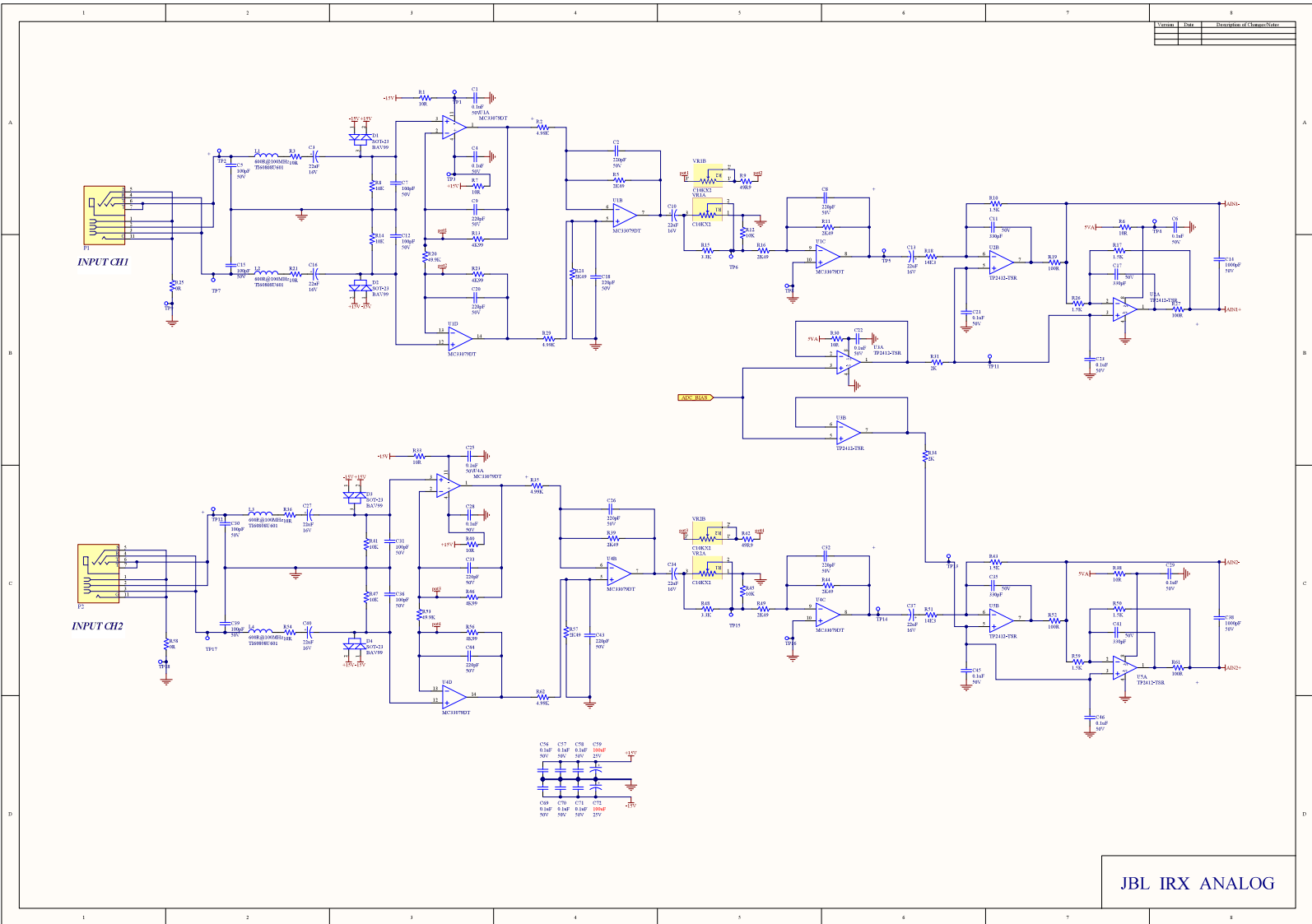


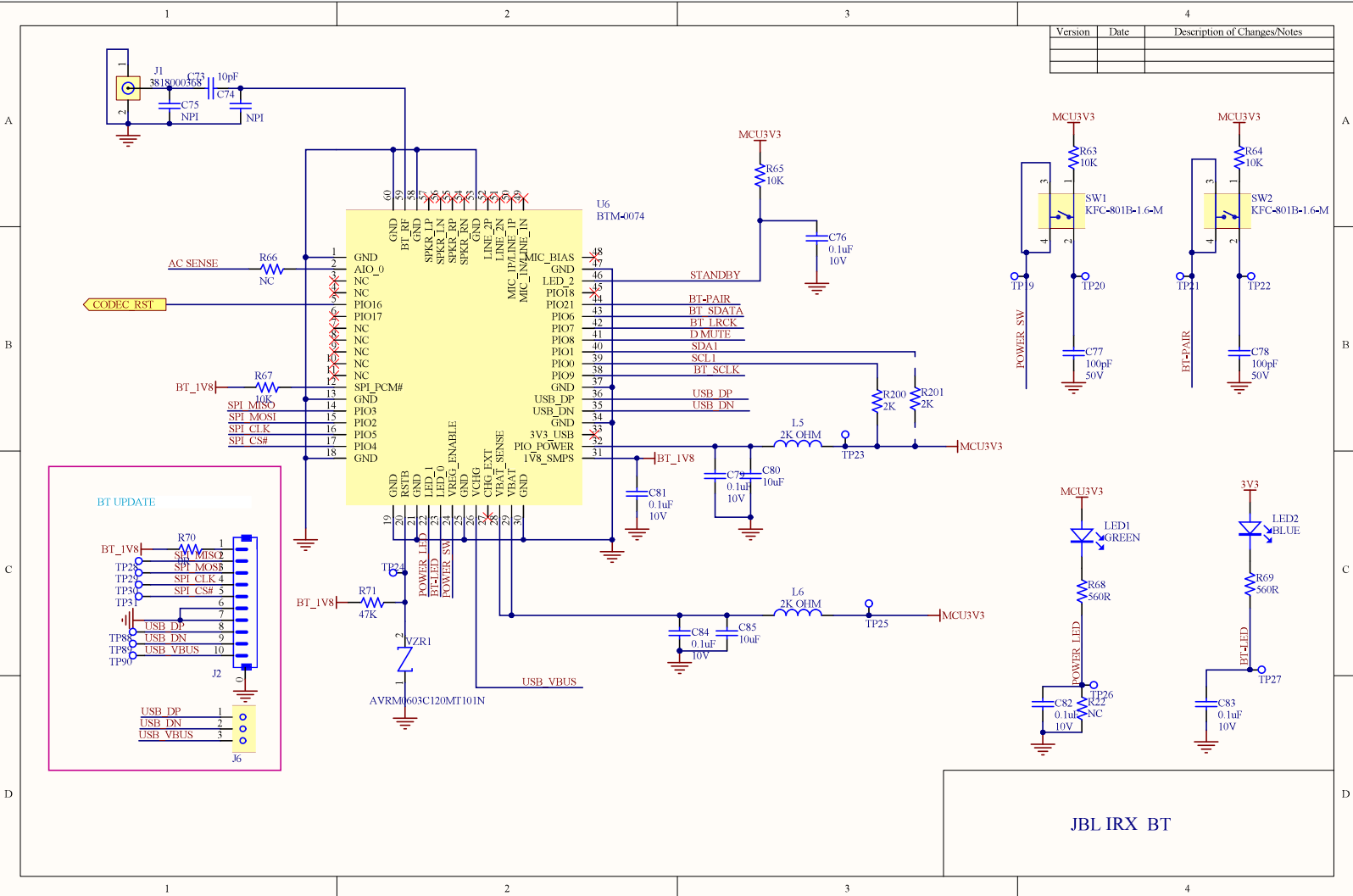




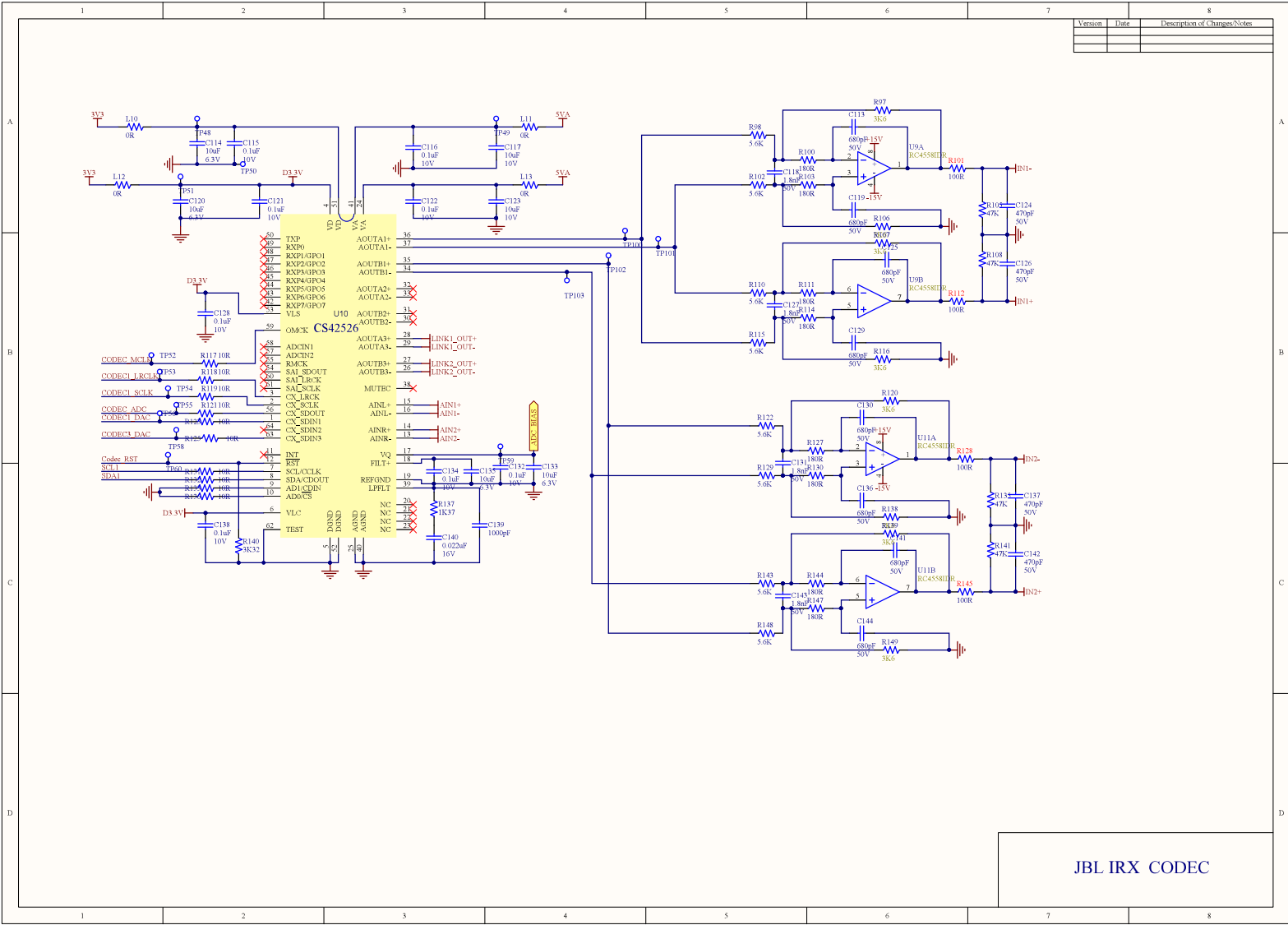
JBL IRX CLASS D



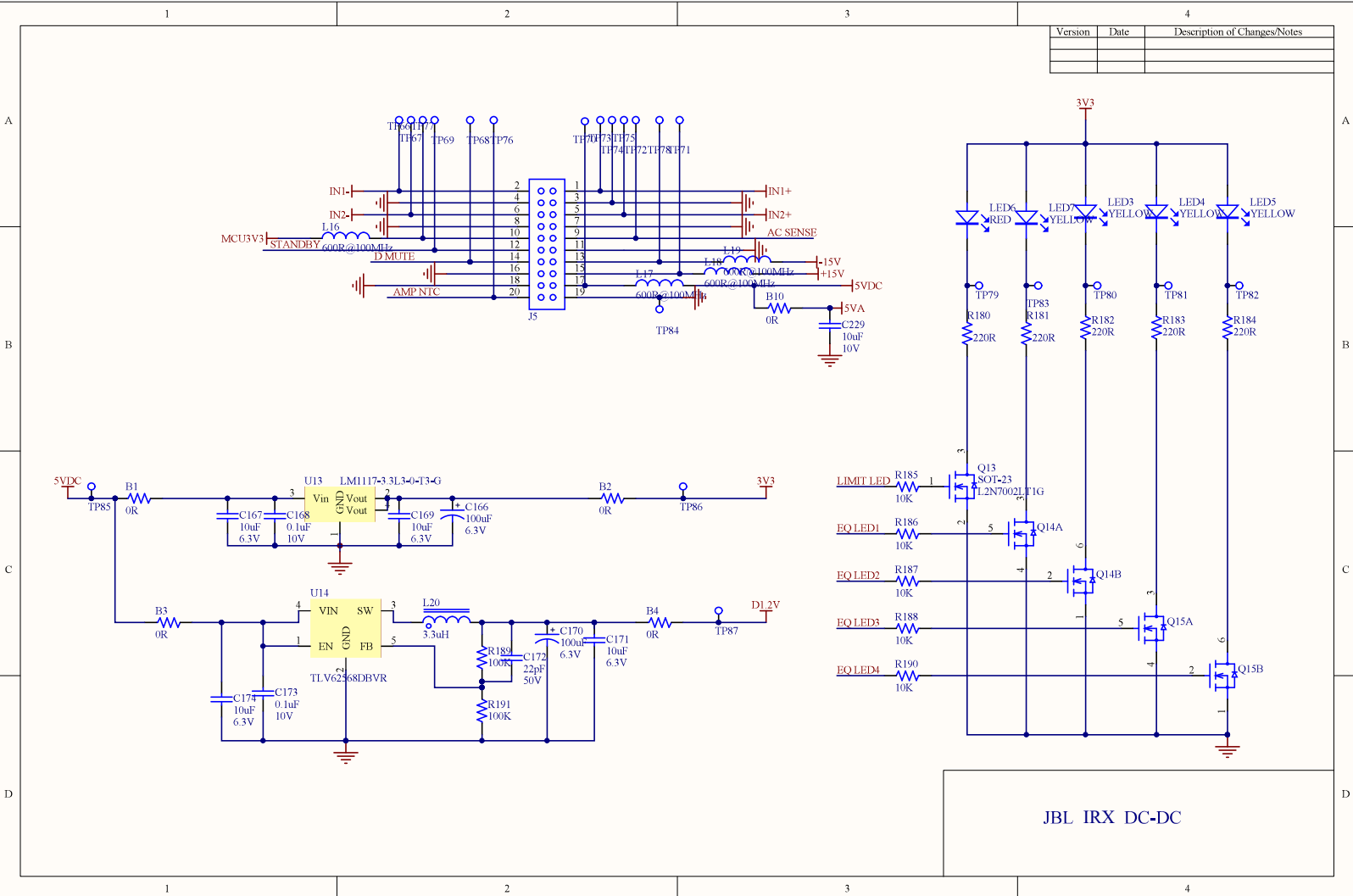




JBL IRX BT

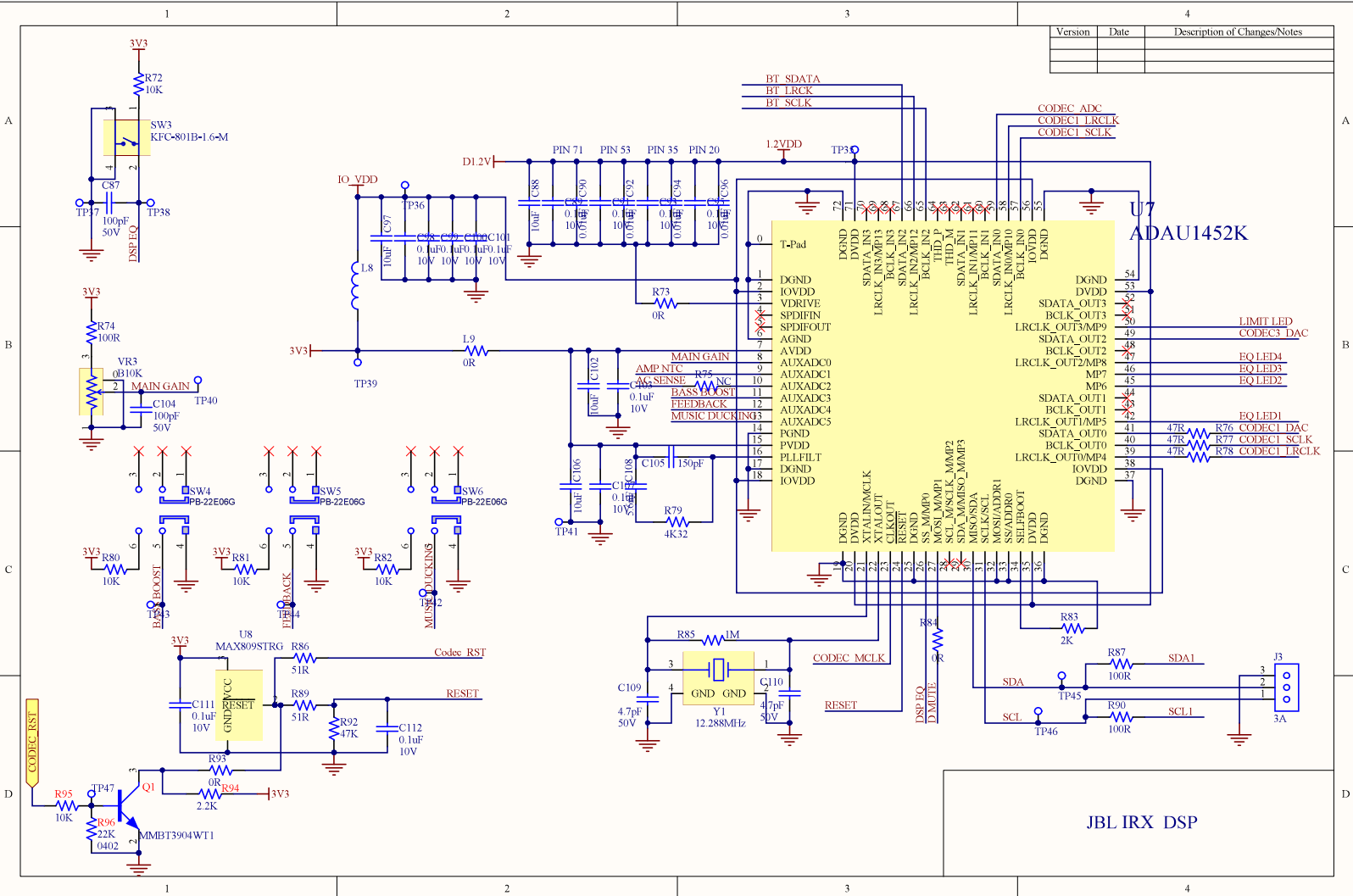


JBL IRX CODEC



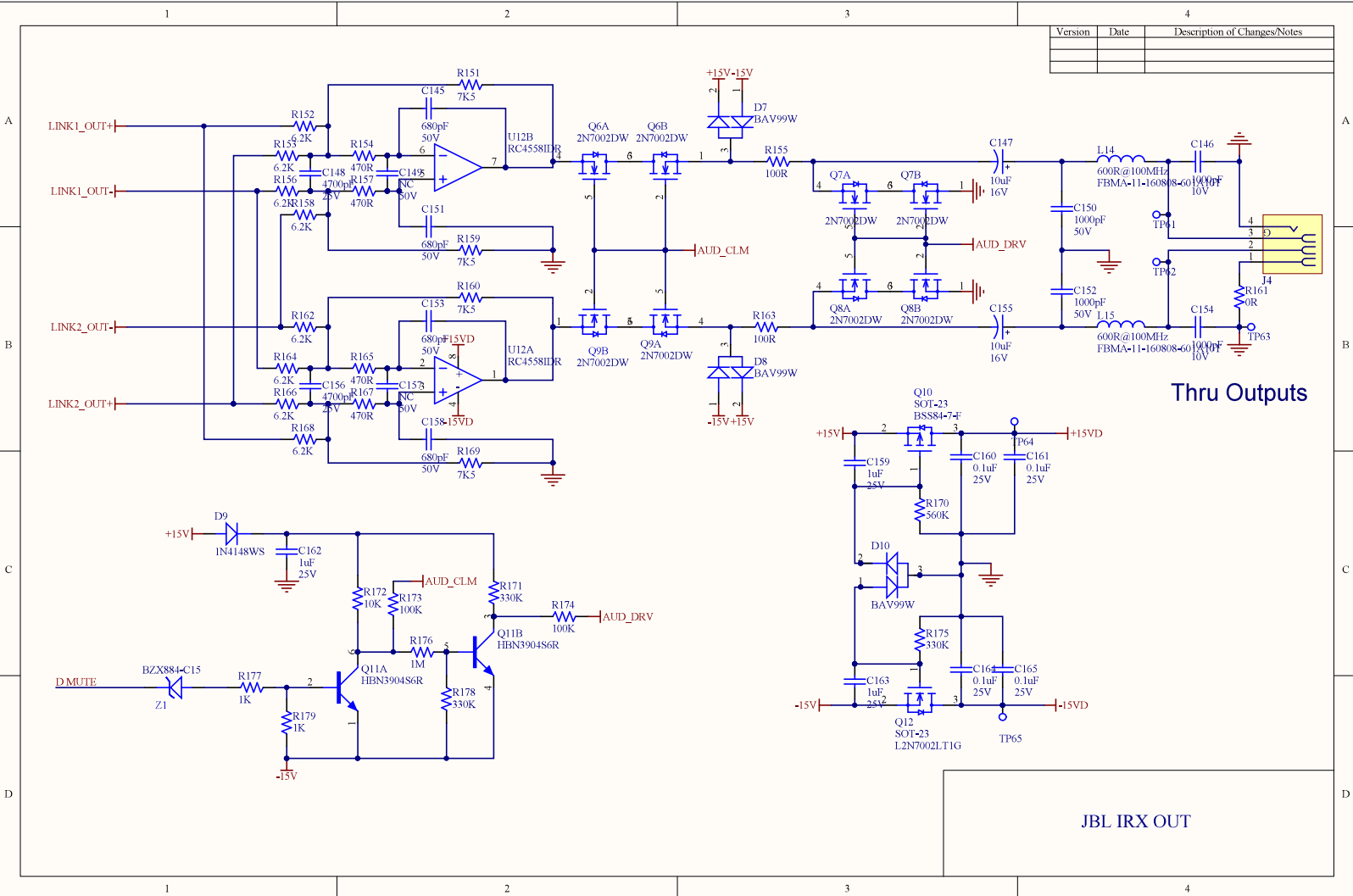
Version	Date	Description of Changes/Notes

JBL IRX DC-DC



Version	Date	Description of Changes/Notes

JBL IRX DSP





Bill of Materials(MAIN ASSY)			
Ref ID	Description	Qty	SKU
1	LOGO ABS PA -75 94HB BLACK K	1	
2	IRX108 GRILLE SPCC NA TUR COLOR K	1	
3	IRX108 PC SHEET ADHESIVE DS11 K	1	
4	SCREW T4.0XL171.3P BZN+CED + HT K	1	
6	WFB IN PAPER FE ST BT 40 K	1	
7	ENCLOSURE FRONT PP FORMOS 94HB BLACK K	1	
8	IRX IOB WADDING PET FR- W0025 20KG\M3 L30 K	2	
10	IRX 108 EVA 1 FOR HANDLE 38° ADHESIVE DS K	2	
11	IRX 108 HANDLE SIDE ASSY K	1	
12	ENCLOSURE REAR PP FORMOS 94HB BLACK K	1	
13	IRX IOBBT REAR PLATE EVA A 38° ADHESIVE K	2	
14	IRX 1088T REAR PLATE EVA B 38° ADHESIVE K	2	
15	EMC SHIELDING AL1050 NATUR COLOR K	1	
16	JBL IRX108 AMPLIFIER ASSY K,NA	1	IRX108BT_NA
	JBL IRX108 AMPLIFIER ASSY K,CN	1	IRX108BT_CN
	JBL IRX108 AMPLIFIER ASSY K,EK/AU	1	IRX108BT_EK IRX108BT_AU
17	SCREW T4XL14MM 14P DACRO K	12	
18	IRX IOBHANDLE TOP ASSY K	1	
21	IRX 108 EVA 2 FOR HANDLE 38° ADHESIVE OSK	2	
22	IRX 112BT TWEETER EVA 38° ADHESIVE K	1	
23	IRX 108 O RING RUBBER L500M\ROL K	3.07	
24	ANT ANTENN 495.4M 50 OHM 2.4 INPAO K 1000 EA 1	1	
25	25MM COMPRESSION TIFE PL FP 40 K	1	
26	IRX108 EVA 38° ADHESIVE OSK	1	
27	IRX 108 EVA FOR GRILLE 38° ADHESIVE DS11 K	2	
28	JRK-348A 320 +300MM 4PIN 3.96MM K	1	
29	IRX 1088T RUBBER FOOT B 40-50° ADHESIVE K	2	
30	IRX 1088T RUBBER FOOT A 40 - 50° ADHESIVE K	2	
5(19)	SCREW T5XL20M M 2.2P BLUE ZINC+CED K	26	
9(20)	WASHER OD12XID5.3XT1.0STEEL CED K	4	

Bill of Materials(REAR PLATE ASSY)			
Ref ID	Description	Qty	SKU
1	SCREW M3.0XL8 O.5P STEEL BLUE ZI K	15	
2	JBL IRX SMPS& ASSY K	1	
3	IRX 108BT LENS EVA A 38' ADHESIVE K	1	
4	BUTTON ON OFF ABS PA-75 94HB BLACK K	3	
05	BUTTON EQ ABS PA-75 94HB BLACK K	1	
06	BUTTON POWER BT ABS PA-75 94HB BLACK K	1	
07	LENS B PC-110 94HB TRANS K	1	
08	LENS A PC-110 94HB TRANS K	1	
09	PLATE REAR SECC NATUR COLOR K,NA	1	IRX108BT_NA
	PLATE REAR SECC NATUR COLOR K,CN	1	IRX108BT_CN
	PLATE REAR SECC NATUR COLOR K,EK/AU	1	IRX108BT_EK IRX108BT_AU
10	SCREW T3XL8MM 1.05P CED+HI K	6	
11	KNOB MASTER ABS PA-75 94HB BLACK K	1	
12	KNOB VOLUME ABS PA-75 94HB BLACK K	2	
13	HEATSINK B ALUMINUM NATUR COLOR K	1	
14	IRX108BT THERMAL PAD SILICONE H400 K	1	
15	2P JUMPER CABLE UL1672 #16 K	1	
16	NUT M3.0X0.5PXOD5.5XL2.3 NICKEL PLATE K	2	
17	NUT M3XOD6.3XL2.4 COLOR K	1	
18	JRK- 346A 60MM 1PIN K	1	
19	JBL IRX112 AMPLIFIER TEST ASSY K	1	
20	PLUG 250VA 10A NA LECI K	1	
21	IRX108BT INSULATOR SHEET H160-ISP05 GREY K	1	
22	HEATSINK A ALUMINUM NATOR COLOR K	1	
23	IRX112BT EQ BUTTON EVA 48' BALCK K	1	
24	IRX112BT BUTTON POWER EVA 48' BALCK K	1	
25	IRX108BT EVA 38' L97XW41.5XT0.5MM K	1	