

# Service Manual

## PRECISION

MODEL: PA6528D

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Model NO: PA6528D

Date:

Section: FM TUNER

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| Measuring Items                    | Condition | Unit | Normal | Limit   | Test Data |   |   |
|------------------------------------|-----------|------|--------|---------|-----------|---|---|
|                                    |           |      |        |         | 1         | 2 | 3 |
| Tuning Frequency Range             | Low End   | MHz  | 87.5   | +/-0.35 |           |   |   |
|                                    | High End  | MHz  | 108    | +/-0.5  |           |   |   |
| Max. Sensitivity                   | 90MHz     | dB   |        | 18      |           |   |   |
|                                    | 98MHz     | dB   |        | 18      |           |   |   |
|                                    | 106MHz    | dB   |        | 18      |           |   |   |
| -30dB Quieting S/N Sensitivity     | 90MHz     | dB   |        | 30      |           |   |   |
|                                    | 98MHz     | dB   |        | 30      |           |   |   |
|                                    | 106MHz    | dB   |        | 30      |           |   |   |
| max Output Power 75KHz Dev         | 98MHz     | W    | 30     | 25      |           |   |   |
| -6dB Audio Fidelity                | Low Freq  | Hz   |        |         |           |   |   |
|                                    | High Freq | KHz  |        |         |           |   |   |
| S/N Ratio with 1mV                 | 98MHz     | dB   | 40     | 30      |           |   |   |
| Auto Tuning Stop(Seek) Sensitivity | 90MHz     | dB   |        | 30      |           |   |   |
|                                    | 98MHz     | dB   |        | 30      |           |   |   |
|                                    | 106MHz    | dB   |        | 30      |           |   |   |

Test Conditions

Approved By:

1. Supply Voltage : AC 100/240V
2. Standard Output : 500 mW
3. Speaker impedance: 3 OHM

Model NO: PA6528D

Date:

Section: EQ

Page: 2 of 4

| Measuring Items | Condition | Unit | Normal | Limit    | Test Data |   |   |
|-----------------|-----------|------|--------|----------|-----------|---|---|
|                 |           |      |        |          | 1         | 2 | 3 |
| BASS            |           | dB   |        | $\geq 2$ |           |   |   |
| FLAT            |           | dB   |        |          |           |   |   |
| POP             |           | dB   |        |          |           |   |   |
| CLASSIC         |           | dB   |        |          |           |   |   |
| JAZZ            |           | dB   |        |          |           |   |   |
| ROCK            |           | dB   |        |          |           |   |   |
|                 |           |      |        |          |           |   |   |
|                 |           |      |        |          |           |   |   |

Section: USB

Page: 2 of 4

| Measuring Items            | Condition  | Unit | Normal | Limit     | Test Data |   |   |
|----------------------------|------------|------|--------|-----------|-----------|---|---|
|                            |            |      |        |           | 1         | 2 | 3 |
| Max Power O/P              | 1KHz (0dB) | W    | 30     | 25        |           |   |   |
|                            |            |      |        |           |           |   |   |
| S/N                        | 1KHz (0dB) | dB   | 40     | 30        |           |   |   |
|                            |            |      |        |           |           |   |   |
| Max Hum                    |            | mV   | 30     | 40        |           |   |   |
| Min Hum                    |            | mV   |        | $\leq 25$ |           |   |   |
|                            |            |      |        |           |           |   |   |
| 10% THD Output Power (0dB) | 1KHz       | W    |        |           |           |   |   |
|                            |            |      |        |           |           |   |   |
|                            |            |      |        |           |           |   |   |

Test Conditions

Approved By:

1. Supply Voltage : AC 100/240V
2. Standard Output : 500 Mw
3. Speaker impedance: 3 OHM

Model NO: PA6528D

Date:

Section: AUX/MIC 500mv input

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| Measuring Items            | Condition  | Unit | Normal | Limit | Test Data |   |   |
|----------------------------|------------|------|--------|-------|-----------|---|---|
|                            |            |      |        |       | 1         | 2 | 3 |
| Max Power O/P              | 1KHz (0dB) | W    | 30     | 25    |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
| S/N                        | 1KHz (0dB) | dB   | 40     | 30    |           |   |   |
|                            |            |      |        |       |           |   |   |
| Max Hum                    |            | mV   | 30     | 40    |           |   |   |
|                            |            |      |        |       |           |   |   |
| Min Hum                    |            | mV   |        | ≤25   |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
| 10% THD Output Power (0dB) | 1KHz       | W    |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |

Test Conditions

Approved By:

- 1. Supply Voltage : AC 100/240V
- 2. Standard Output : 500 Mw
- 3. Speaker impedance: 3 OHM

Model NO: PA6528D

Date:

Section: BLUETOOTH

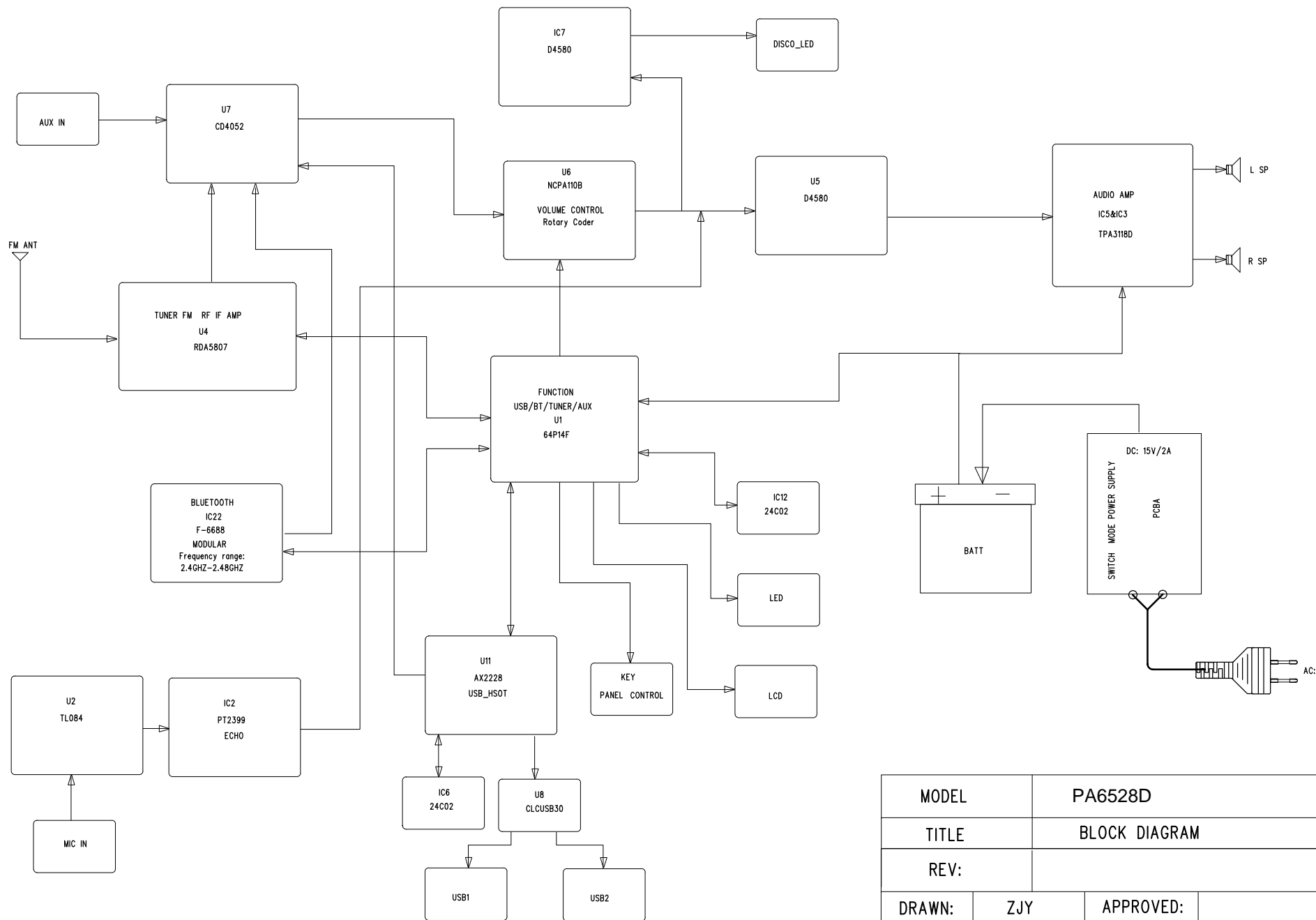
Page: 4 of 4

| Measuring Items            | Condition  | Unit | Normal | Limit | Test Data |   |   |
|----------------------------|------------|------|--------|-------|-----------|---|---|
|                            |            |      |        |       | 1         | 2 | 3 |
| Max Power O/P              | 1KHz (0dB) | W    | 30     | 25    |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
| S/N                        | 1KHz (0dB) | dB   | 40     | 30    |           |   |   |
|                            |            |      |        |       |           |   |   |
| Max Hum                    |            | mV   | 30     | 40    |           |   |   |
|                            |            |      |        |       |           |   |   |
| Min Hum                    |            | mV   |        | ≤25   |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
| 10% THD Output Power (0dB) | 1KHz       | W    |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
| Max o/p Dis                | 1KHz       | %    |        | ≤25   |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |
|                            |            |      |        |       |           |   |   |

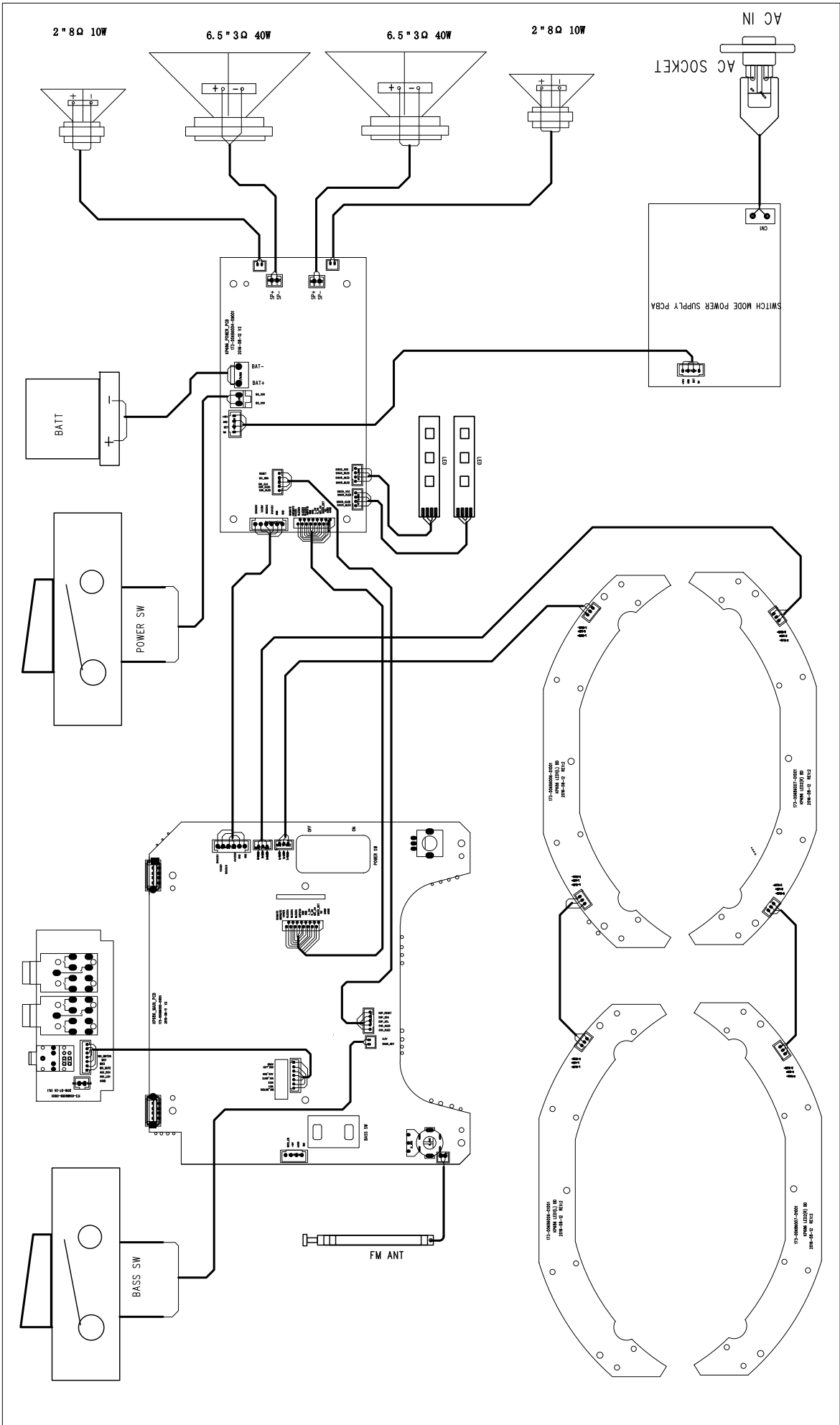
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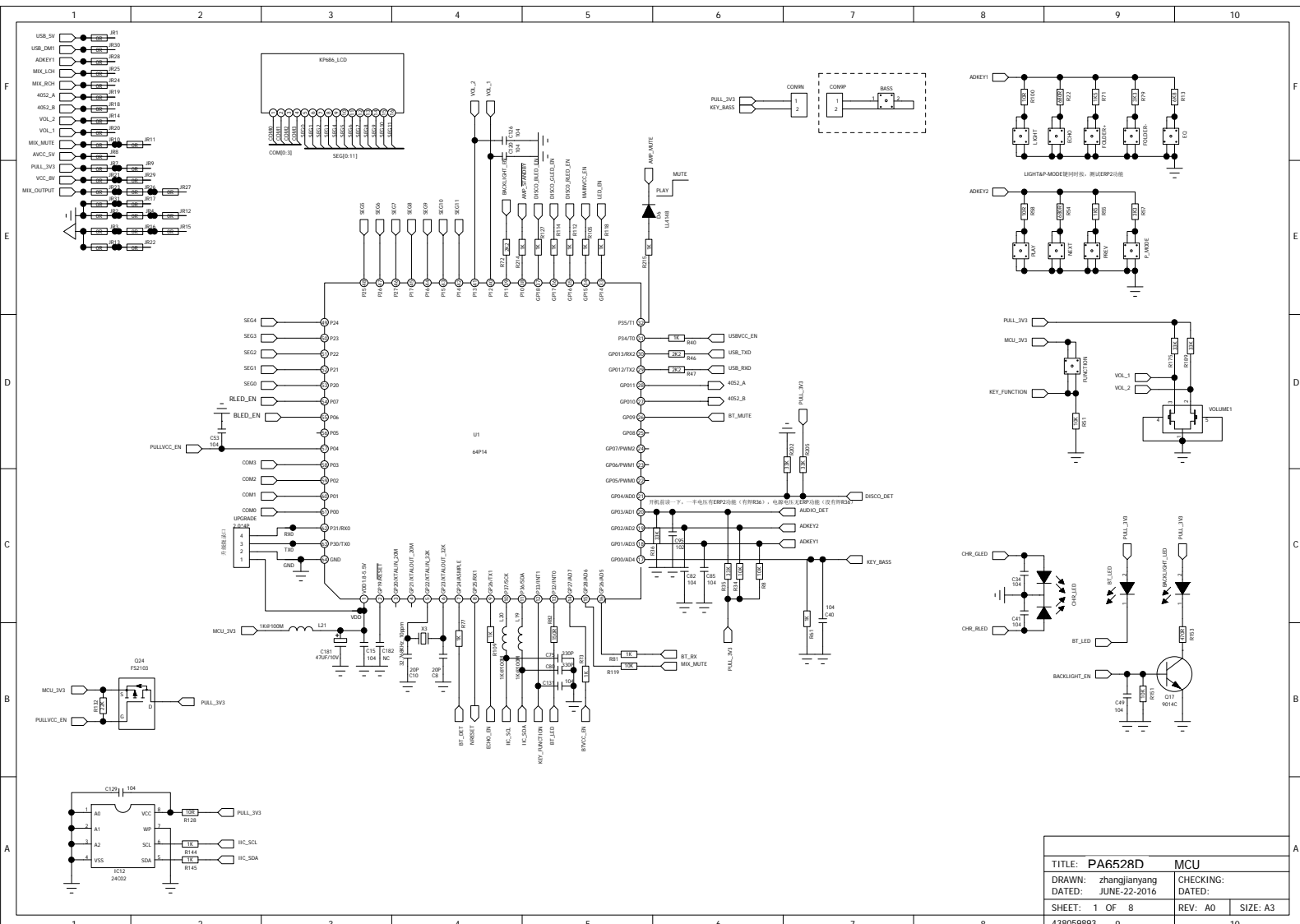
Approved By:

1. Supply Voltage : AC 100/240V
2. Standard Output : 500 Mw
3. Speaker impedance: 3 OHM



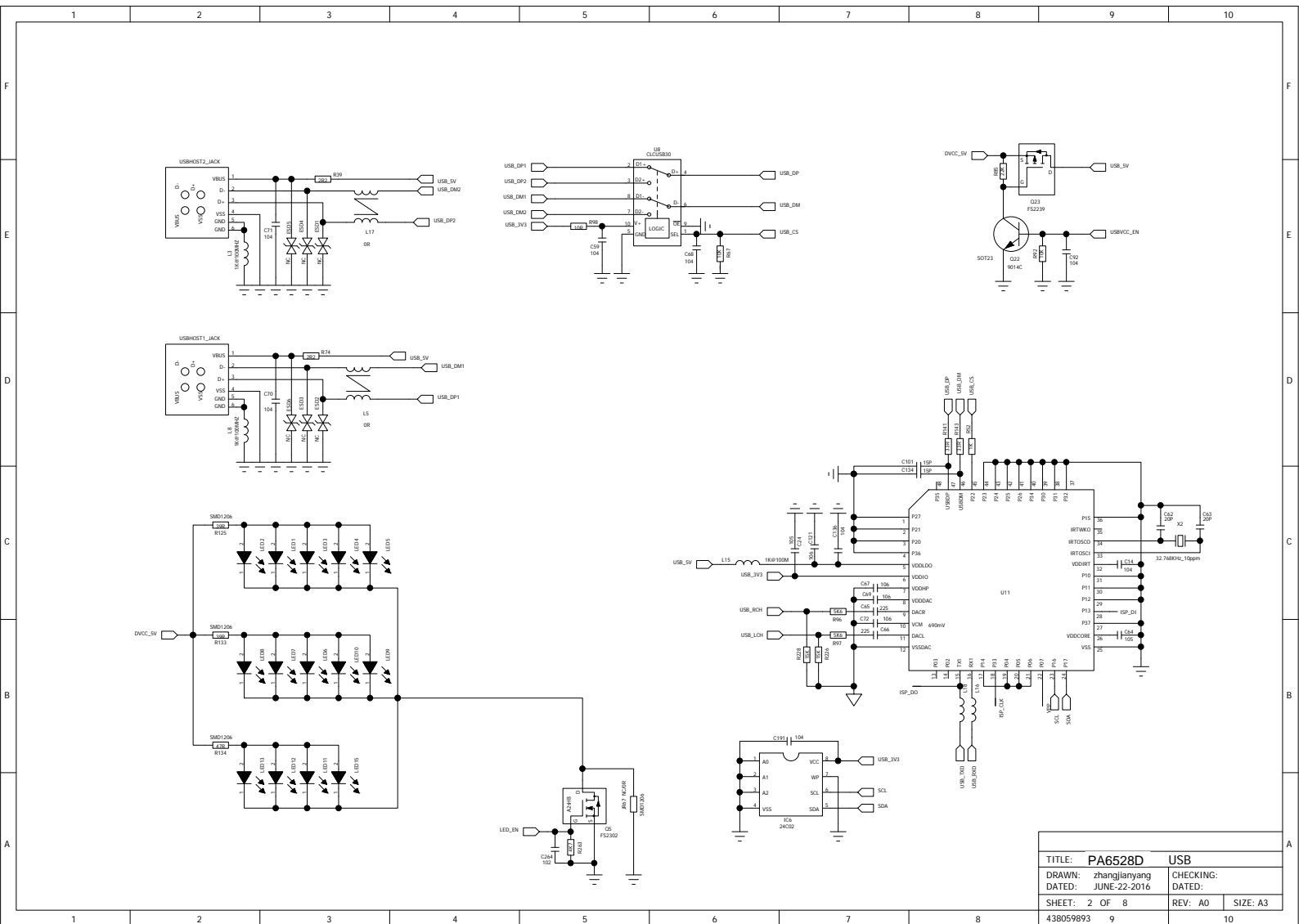
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|--------|------------|---------------|--|
| MODEL  |            | PA6528D       |  |
| TITLE  |            | BLOCK DIAGRAM |  |
| REV:   |            |               |  |
| DRAWN: | ZJY        | APPROVED:     |  |
| DATE   | 2016-08-29 | DATE          |  |





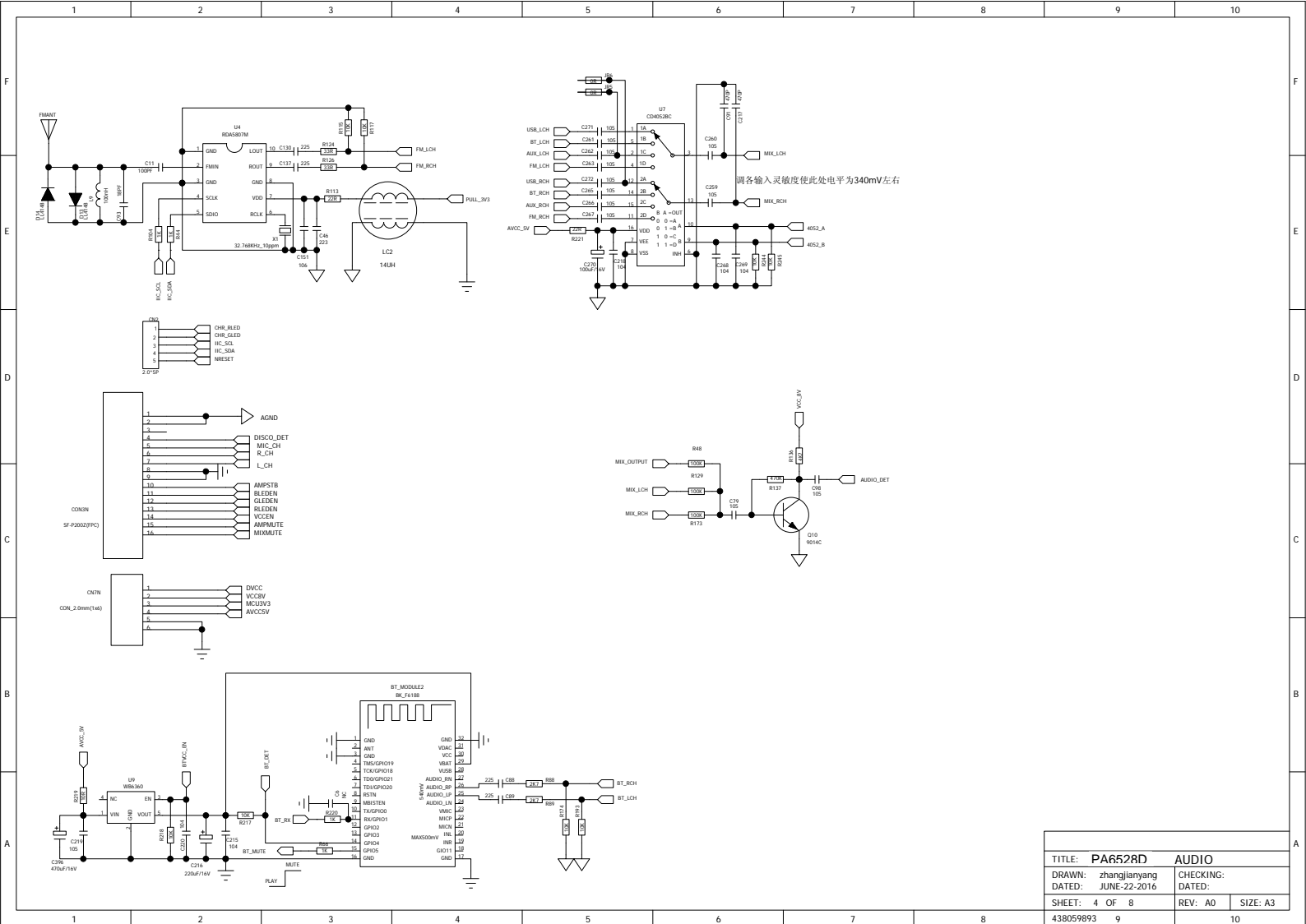
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|---------------------|--|-----------|--|
| TITLE: PA6528D      |  | MCU       |  |
| DRAWN: zhangjiayang |  | CHECKING: |  |
| DATED: JUNE-22-2016 |  | DATED:    |  |
| SHEET: 1 OF 8       |  | REV: A0   |  |
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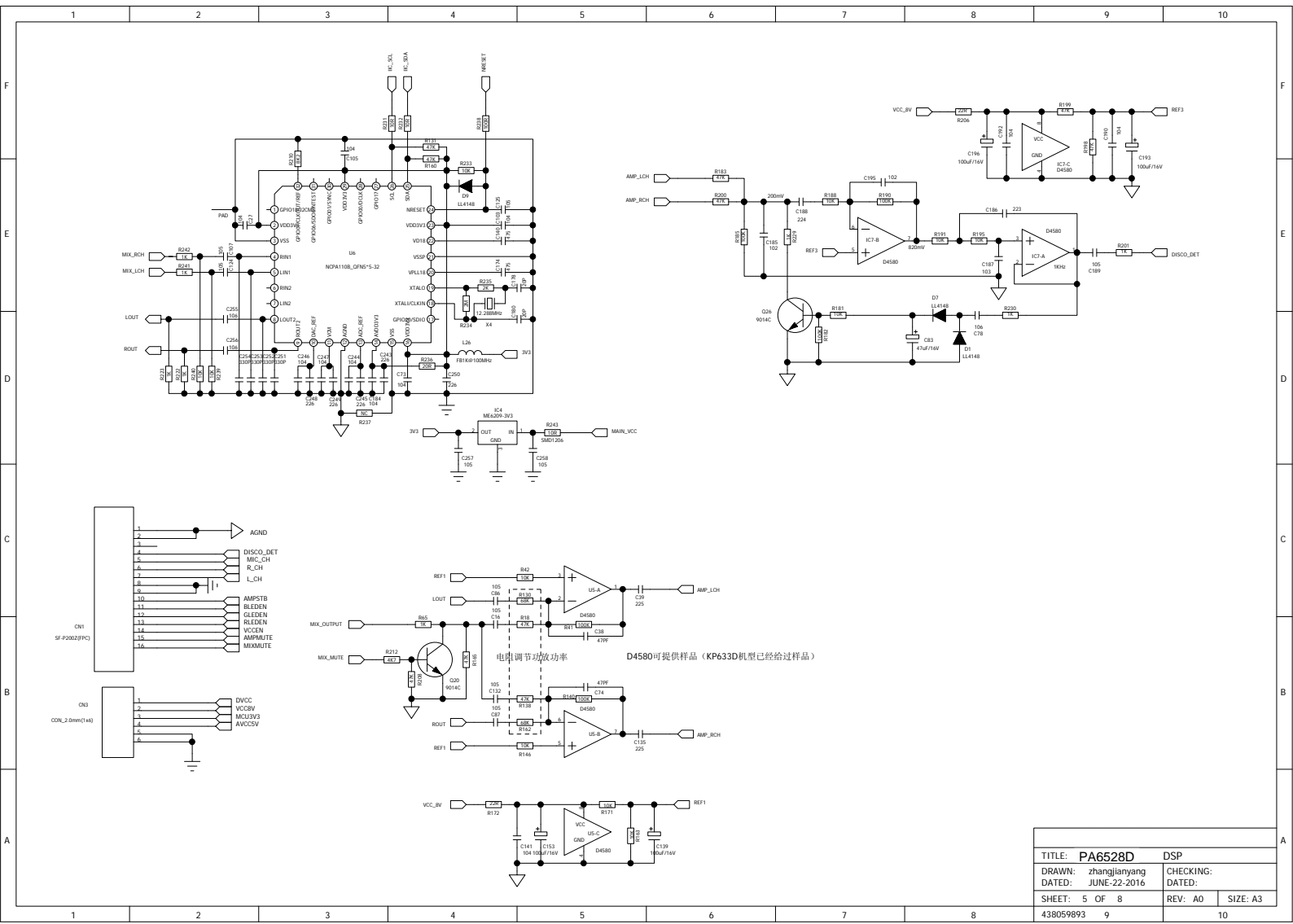


|                     |                  |
|---------------------|------------------|
| TITLE: PA6528D USB  |                  |
| DRAWN: zhangjiayang | CHECKING:        |
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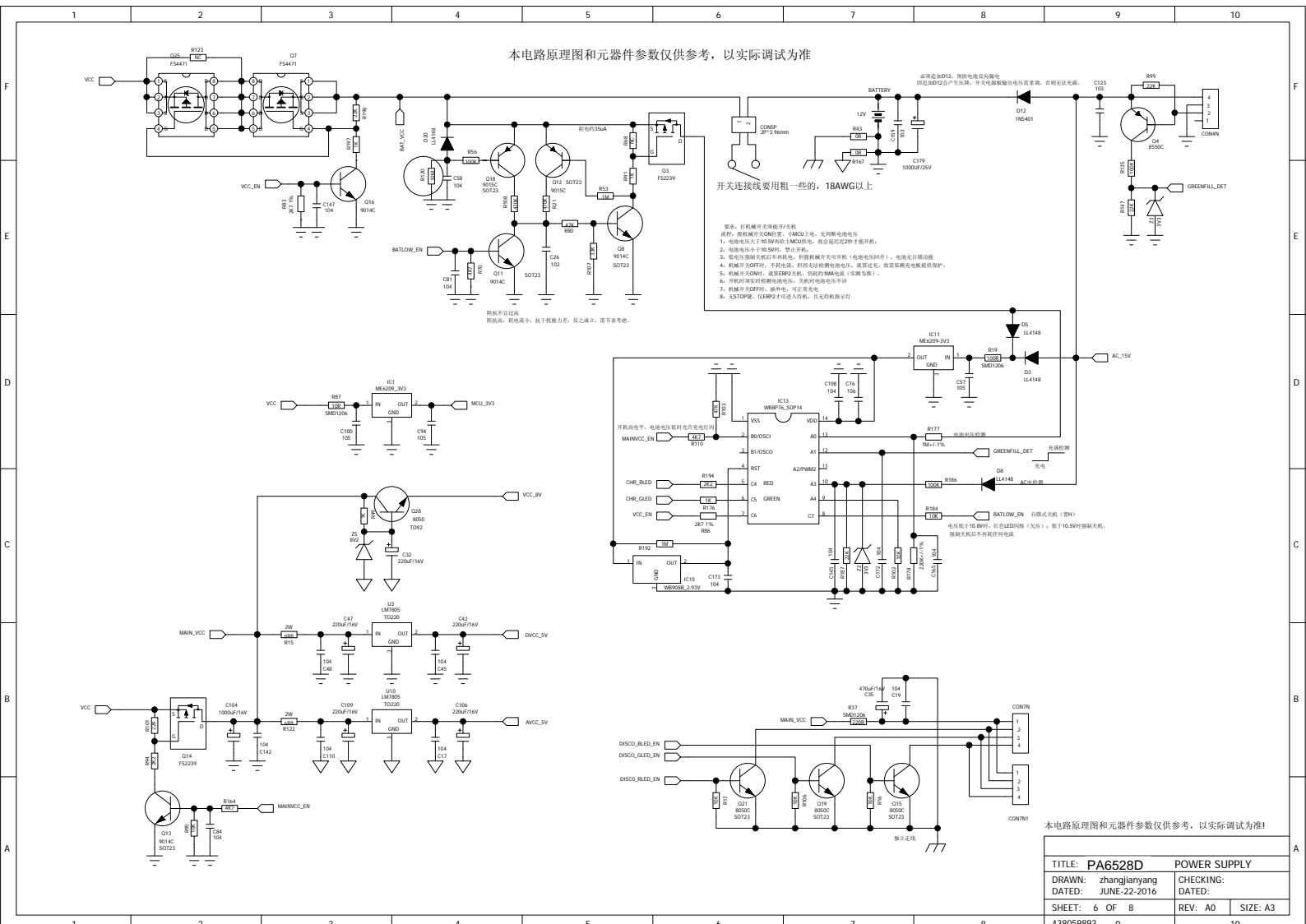




|                     |           |
|---------------------|-----------|
| TITLE: PA6528D      | AUDIO     |
| DRAWN: zhangjiayang | CHECKING: |
| DATED: JUNE-22-2016 | DATED:    |
| SHEET: 4 OF 8       | REV: A0   |
| 438059893           | SIZE: A3  |



|                     |         |           |    |
|---------------------|---------|-----------|----|
| TITLE: PA6528D      |         | DSP       |    |
| DRAWN: zhangjiayang |         | CHECKING: |    |
| DATED: JUNE-22-2016 |         | DATED:    |    |
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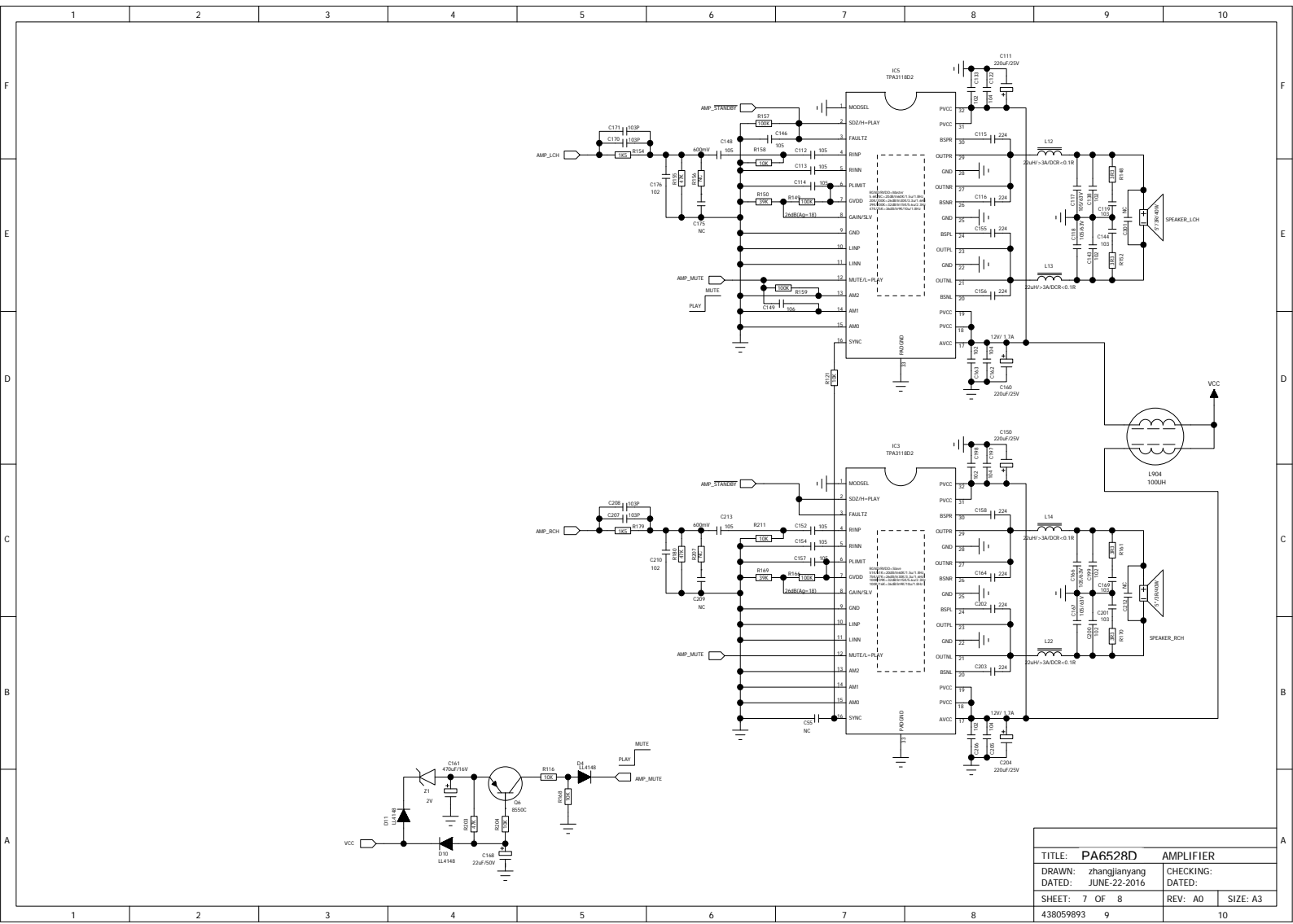


本电路原理图和元器件参数仅供参考，以实际调试为准

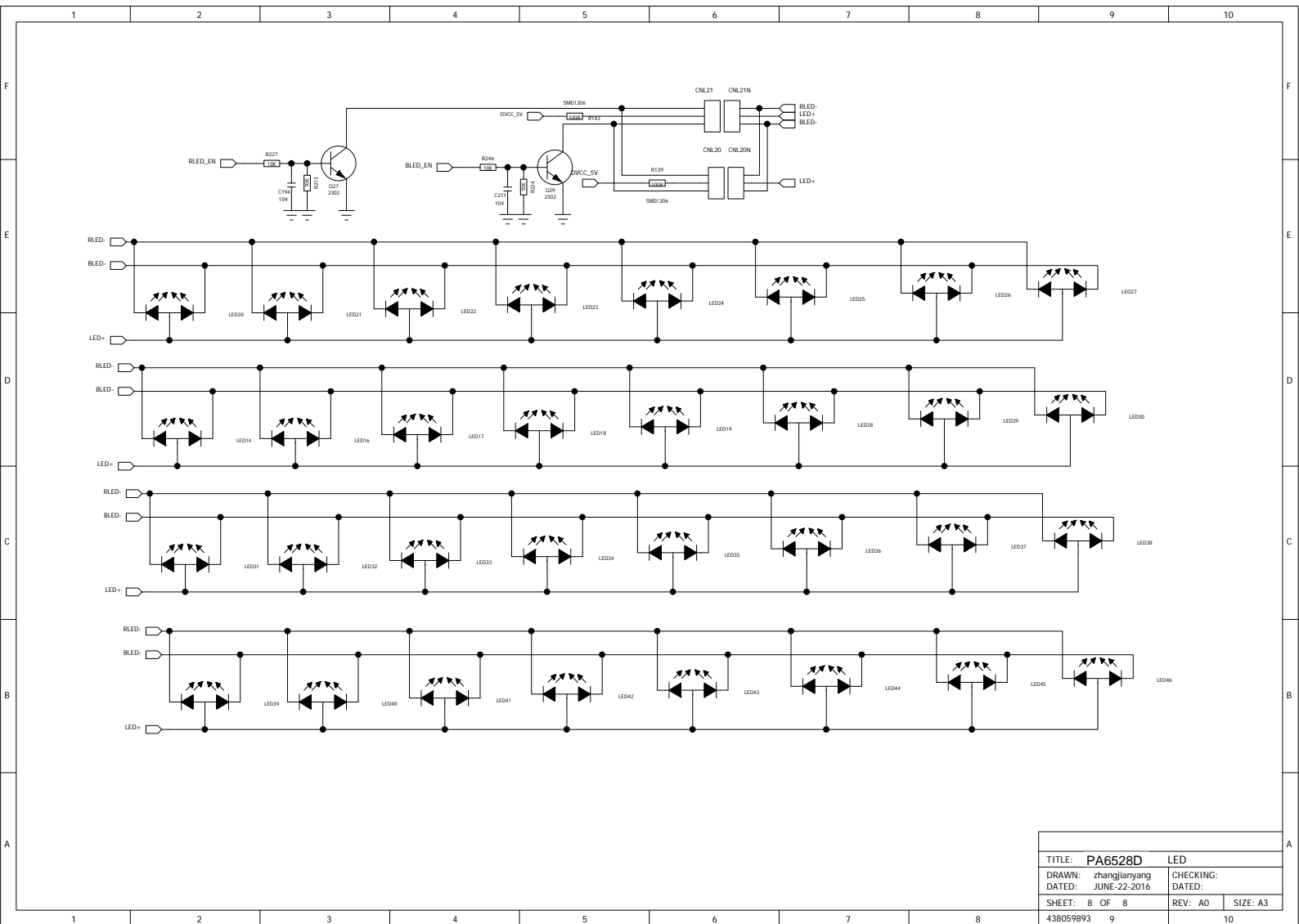
- 开关连接要用粗一些的，18AWG以上
1. 电池电压小于10.5V时，禁止开机。
  2. 电池电压大于10.5V时，禁止关机。
  3. 电池电压大于10.5V时，禁止开机。
  4. 机械开关OFF时，不能充电。充电电压限制在4.2V，防止过充。充电电压限制在4.2V。
  5. 机械开关ON时，或充电IC工作时，必须保持10mA电流（实际为0）。
  6. 充电电压限制在4.2V，充电电压限制在4.2V。
  7. 机械开关OFF时，禁止充电。禁止充电。
  8. ASSTOP时，仅ERP2才可进入充电。且无灯指示。

本电路原理图和元器件参数仅供参考，以实际调试为准!

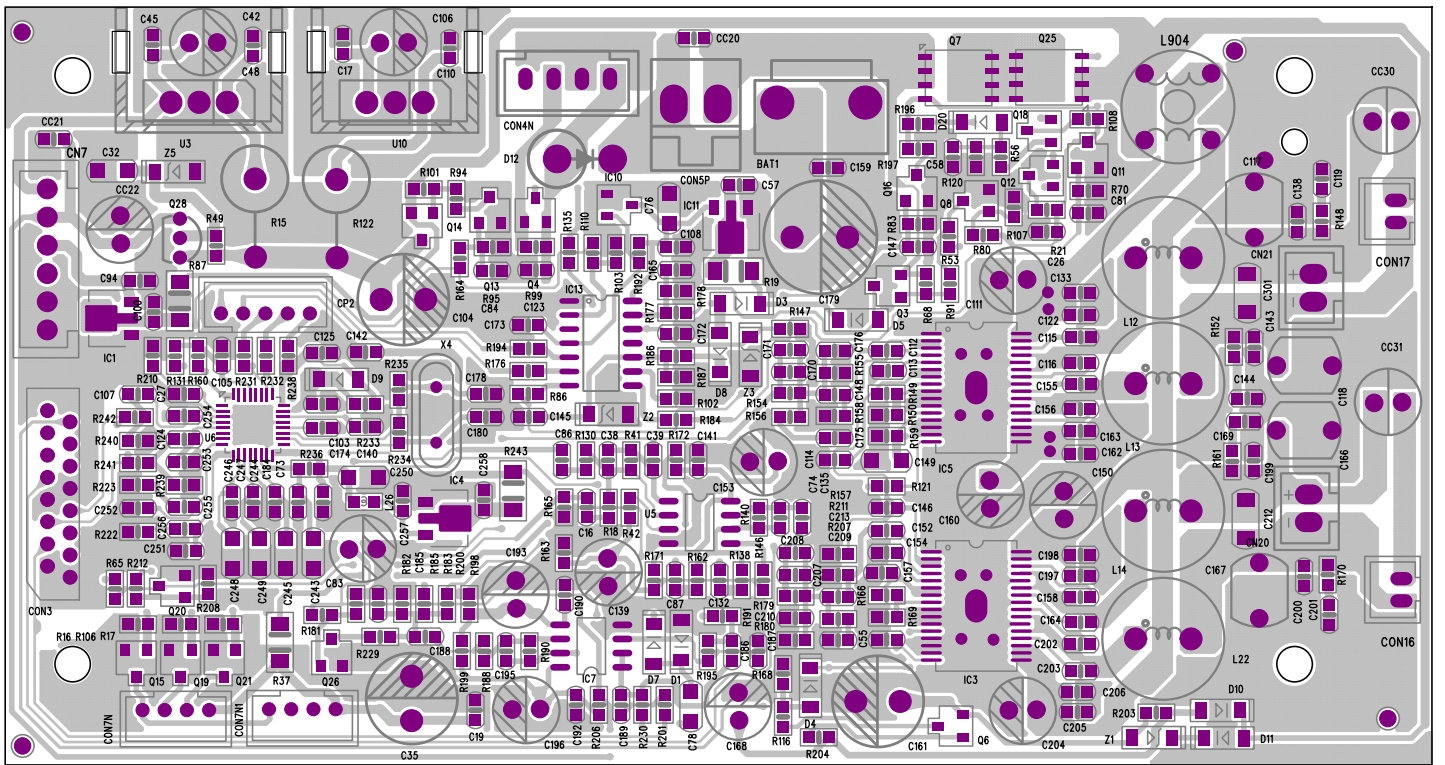
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|---------------------|---------|--------------|--|
| TITLE: PA6528D      |         | POWER SUPPLY |  |
| DRAWN: zhangjiayang |         | CHECKING:    |  |
| DATED: JUNE-22-2016 |         | DATED:       |  |
| SHEET: 6 OF 8       | REV: A0 | SIZE: A3     |  |
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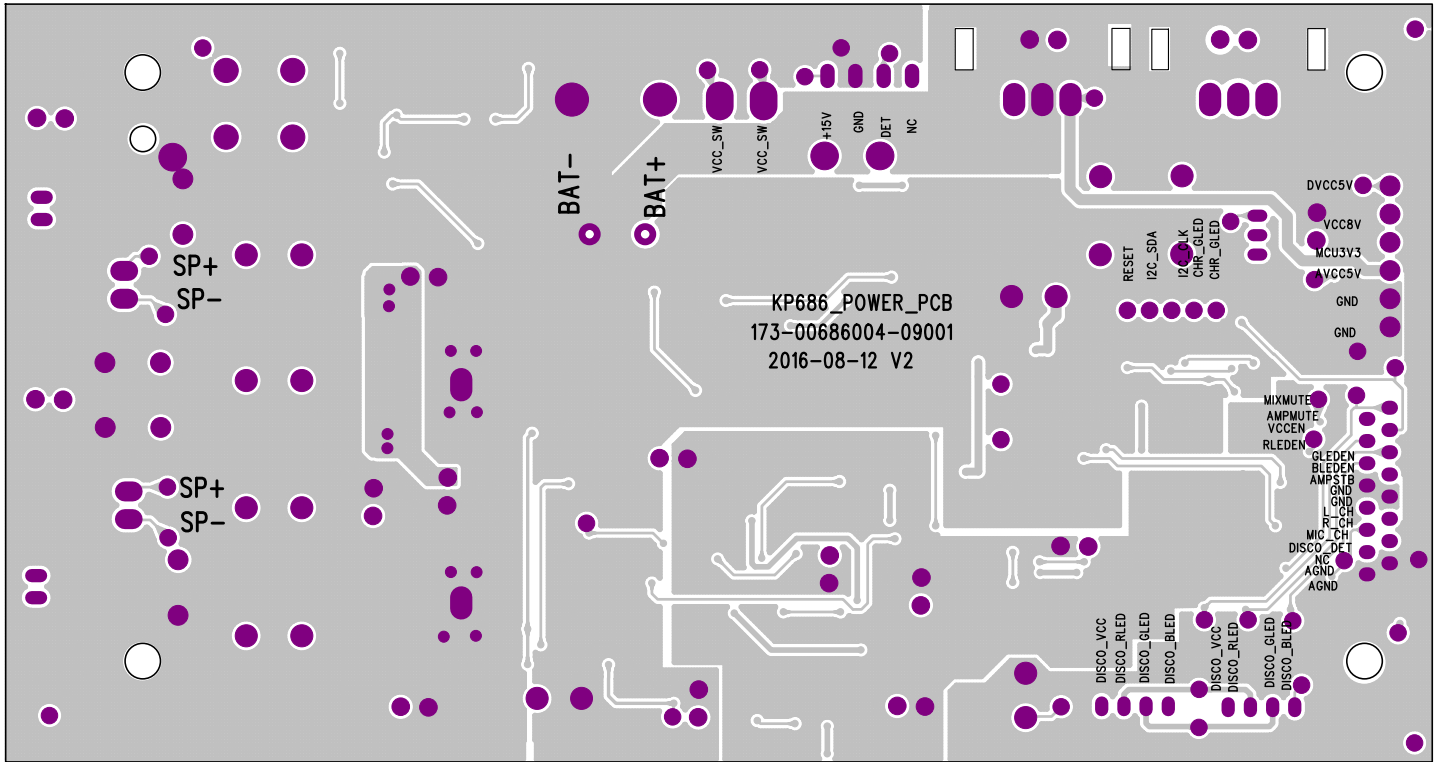
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| TITLE: PA6528D AMPLIFIER |           |
| DRAWN: zhangjiayang      | CHECKING: |
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| SHEET: 7 OF 8            | REV: A0   |
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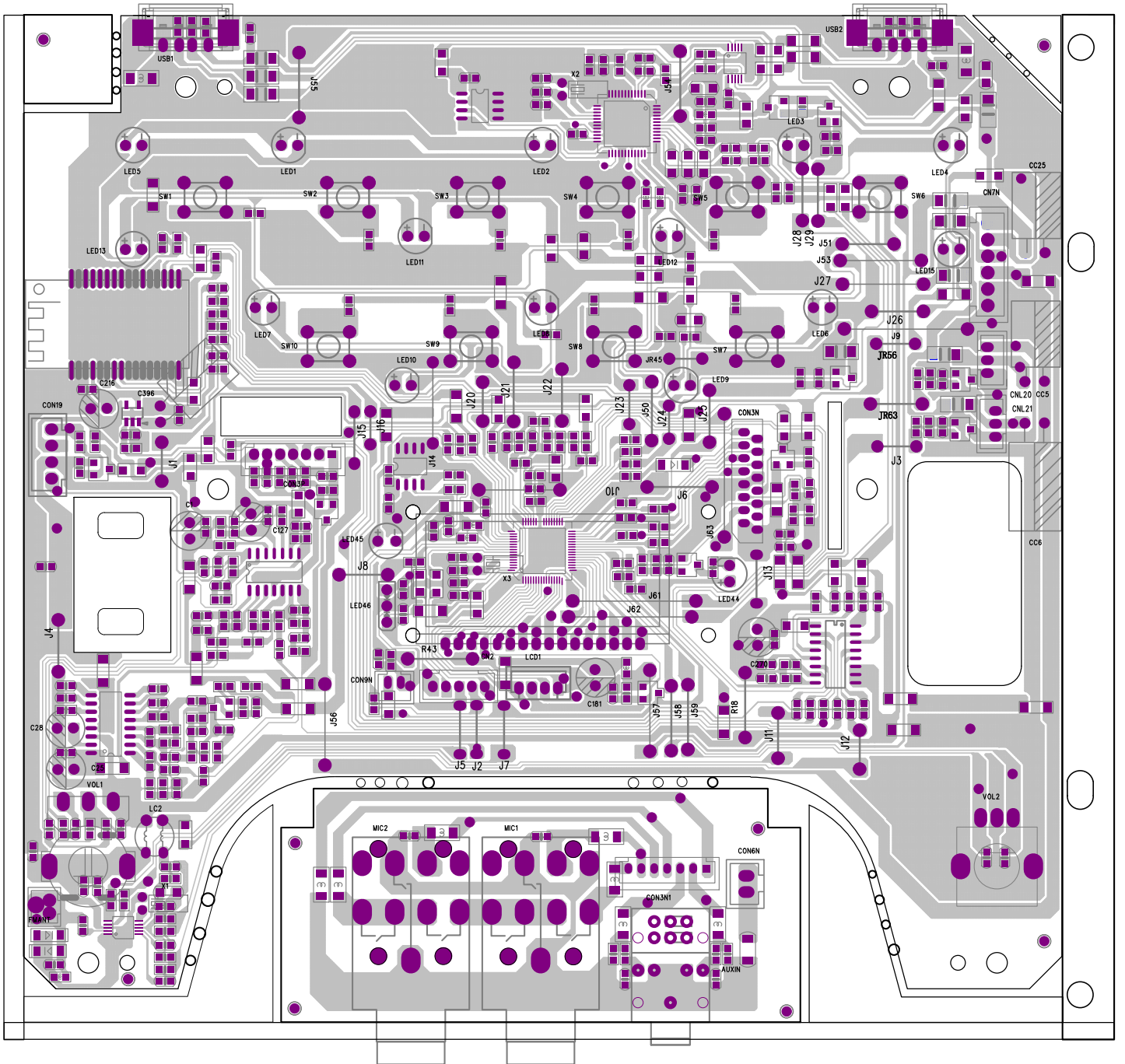


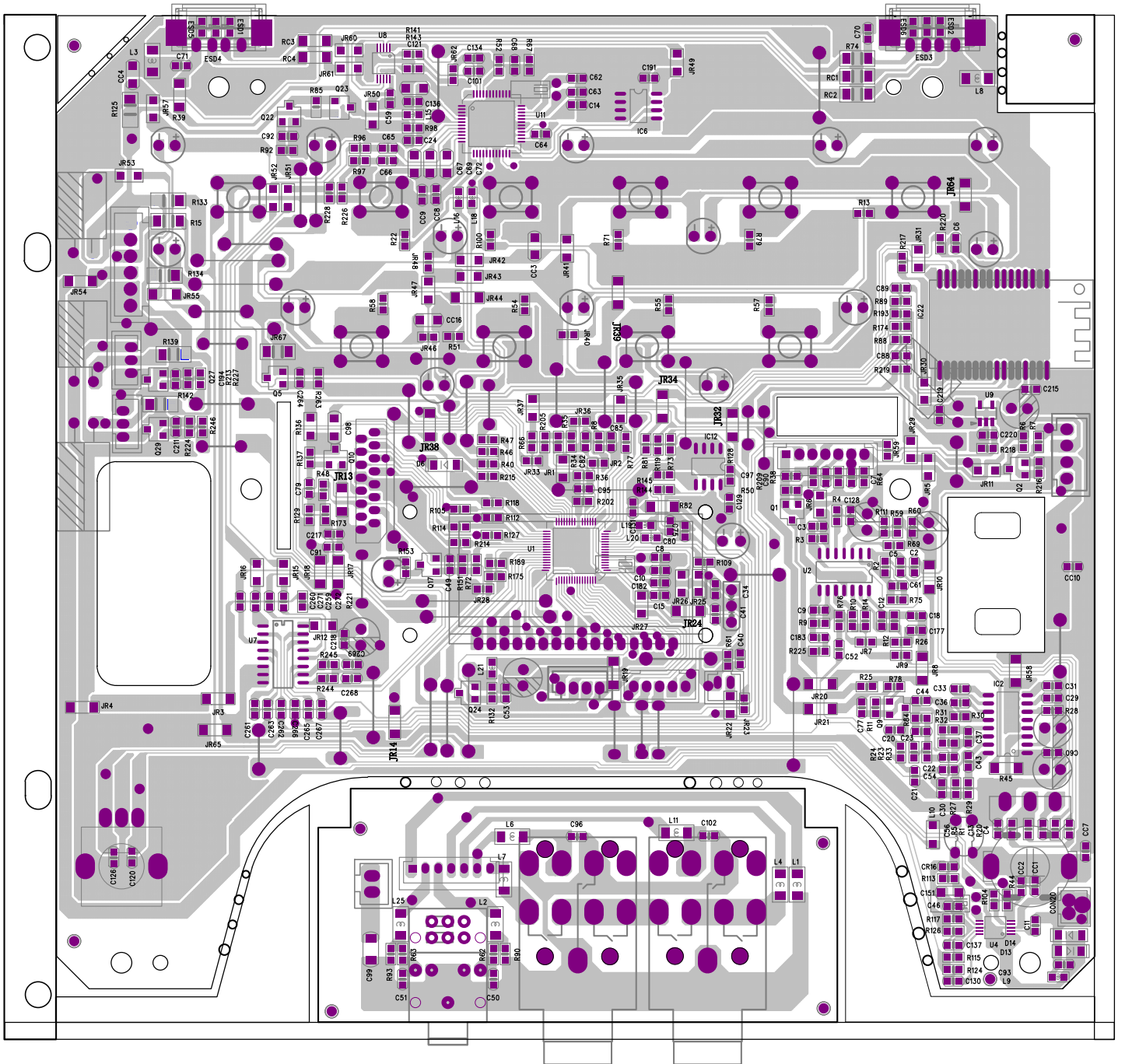
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| TITLE: PA6528D      |  | LED       |  |
| DRAWN: zhangjiayang |  | CHECKING: |  |
| DATED: JUNE-22-2016 |  | DATED:    |  |
| SHEET: 8 OF 8       |  | REV: A0   |  |
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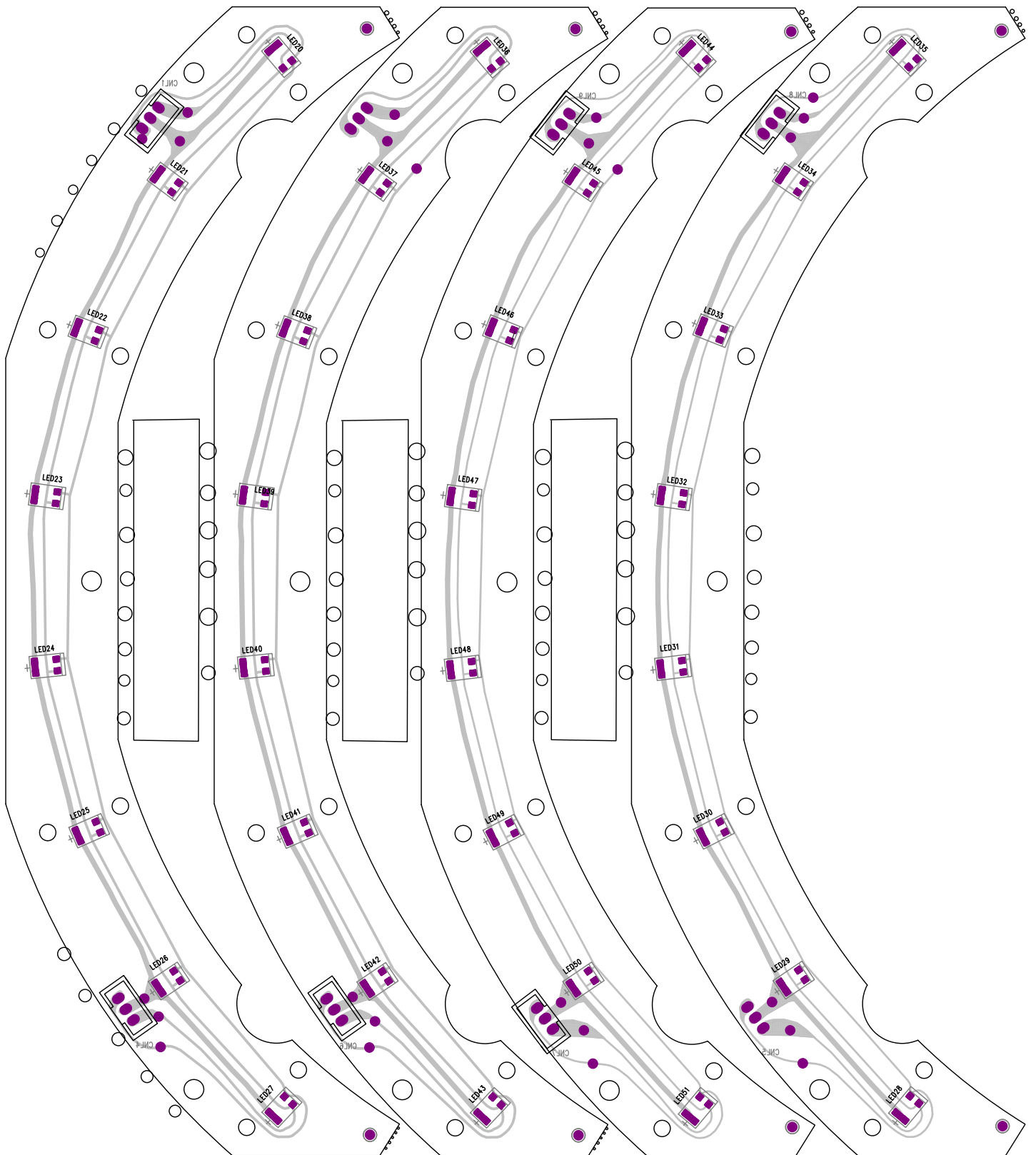












# MODEL:PA6528D DOUDLE EXPLODED VIEW PART LIST

| NO. | DESCRIPTION                           | QTY |
|-----|---------------------------------------|-----|
| 1   | FRONT CABINET DECORATION PARTS        | 1   |
| 2   | LIGHT PCBA-1                          | 2   |
| 3   | FLASHING LIGHT                        | 1   |
| 4   | HANDLE CAP                            | 1   |
| 5   | HANDLE                                | 1   |
| 6   | SCREW 3.0*10 PA                       | 4   |
| 7   | FRONT CABINET                         | 1   |
| 8   | SCREW 3.0*12 BA                       | 6   |
| 9   | REFLECTOR LAMP (LEFT)                 | 2   |
| 10  | REFLECTOR LAMP (RIGHT)                | 2   |
| 11  | LIGHT PCBA-2                          | 4   |
| 12  | SCREW 2.6*10 PWA                      | 12  |
| 13  | SCREW 3.0*12 BA                       | 8   |
| 14  | FULL FREQUENCY SPEAKEY                | 2   |
| 15  | TWEETER                               | 2   |
| 16  | SCREW 3.0*10 BA                       | 4   |
| 17  | SCREW 3.0*16 PWA                      | 4   |
| 18  | BATTERY TABLETTING                    | 1   |
| 19  | BATTERY                               | 1   |
| 20  | POWER-PCB                             | 1   |
| 21  | SCREW 3.0*10 PA                       | 4   |
| 22  | SCREW 3.0*10 PA                       | 4   |
| 23  | AMPLIFIER BOARD                       | 1   |
| 24  | AC SOCKET                             | 1   |
| 25  | AC SOCKET COVER                       | 1   |
| 26  | SCREW 3.0*12 PA                       | 2   |
| 27  | SCREW 3.0*10 BA                       | 4   |
| 28  | SPEAKER COVER                         | 2   |
| 29  | SCREW 3.0*10 PA                       | 6   |
| 30  | GUITAR_VOL                            | 2   |
| 31  | BASS SWITCH                           | 1   |
| 32  | DISPLAY LENS BRACKET                  | 1   |
| 33  | BACKLIGHT LENS                        | 1   |
| 34  | DISPLAY LENS                          | 1   |
| 35  | SCREW 3.0*12 PWA                      | 2   |
| 36  | TOP CABINET                           | 1   |
| 37  | FUNCTION KEY DECORATION PARTS         | 1   |
| 38  | FUNCTION KEY                          | 1   |
| 39  | MIC-PCB                               | 1   |
| 40  | SCREW 3.0*12 PWA $\varnothing$ 12.0MM | 2   |
| 41  | MAIN-PCB                              | 1   |
| 42  | POWER SWITCH                          | 1   |
| 43  | RUBBER FOOT                           | 4   |
| 44  | BACK CABINET                          | 1   |
| 45  | SCREW 3*18PA                          | 8   |
| 46  | SCREW 3.0*12 PA                       | 2   |
|     |                                       |     |
|     |                                       |     |
|     |                                       |     |
|     |                                       |     |
|     |                                       |     |
|     |                                       |     |
|     |                                       |     |
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|     |                                       |     |

