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L3 Service Manual

1: Product Appearance

ZB500KL

- 1 -

1: Product Appearance

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2: Technical Specifications
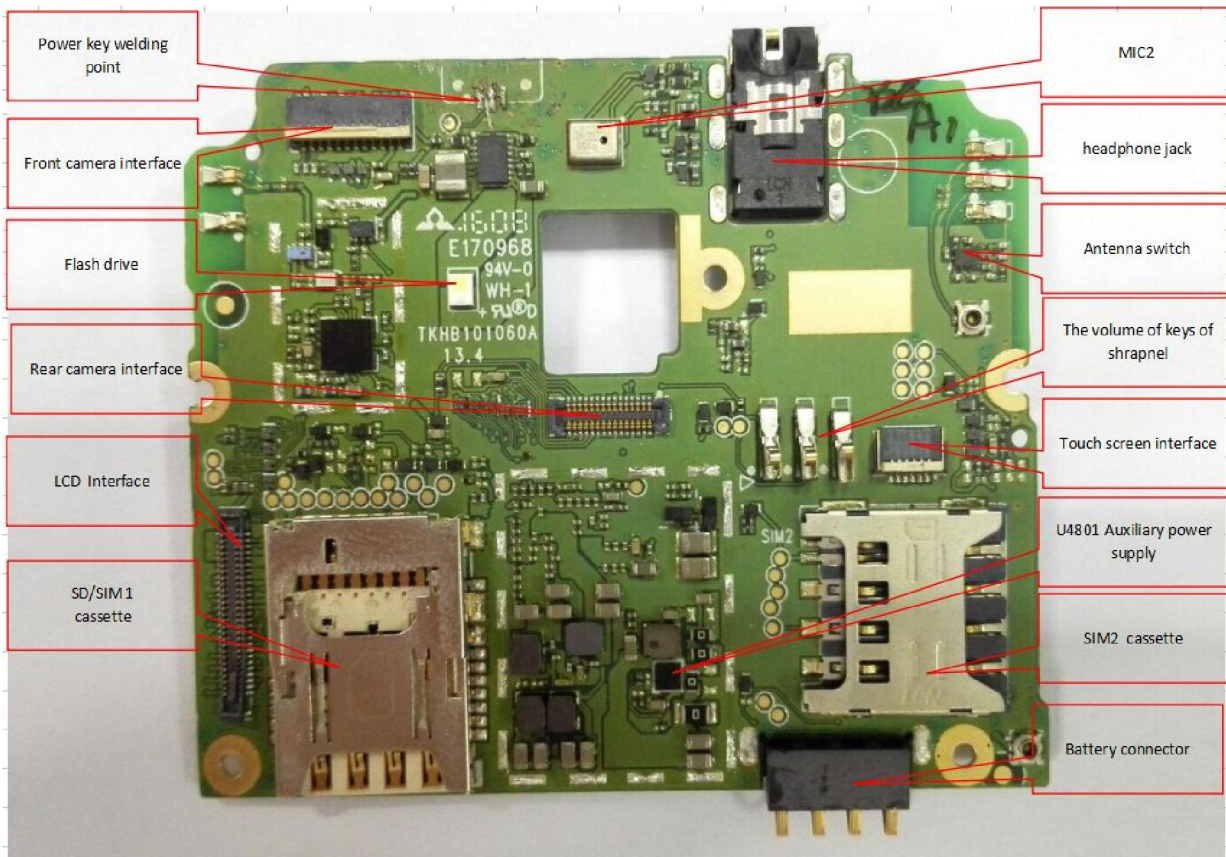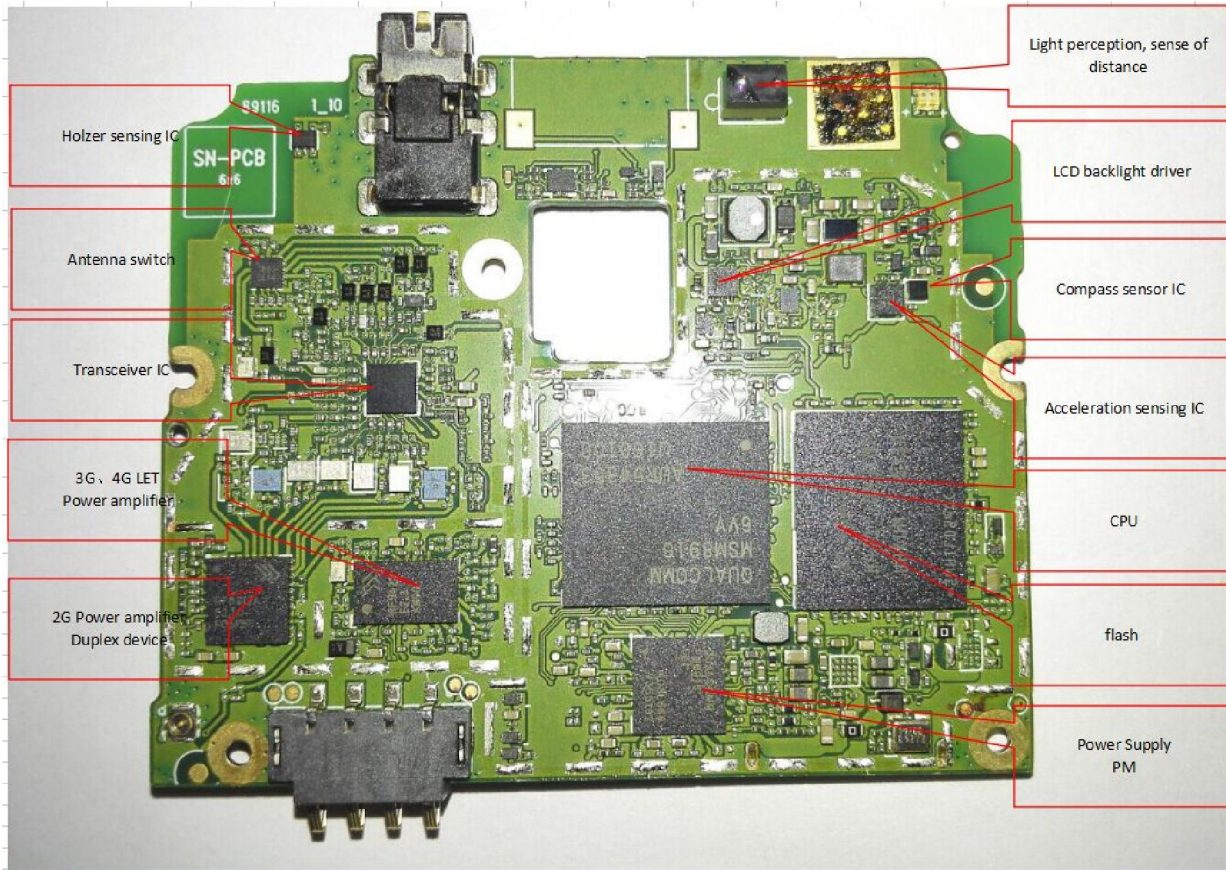
project	index
Cell phone type	Touch screen smart phone
Size (length * width * thickness)	141*70*11mm
Working frequency band	3 mode 15 frequency： GSM 850/900/1800/1900 WCDMA 1/2/5/8 (w/ div) FDD-LTE 1/2/3/5/7/8/20
External interface	Standard USB 3.5mm; Micro earphone interface
SIM Card interface	nano/SD two-in-one、Micro
Extended card maximum support capacity	128GB
USB	USB2.0 High Speed; 480Mbps
Battery	capacity：2600mAh
display	5 inch; HD (1280 x 720)
antenna	Built in antenna
camera	Post 13M AF +Flash + front 5MP FF
Sensors	The sense of distance, light, gravity, gyroscope, compass, Holzer sense of induction
Bluetooth	Bluetooth v4.0
WIFI	802.11 2.4G b/g/n
GPS	GPS/AGPS/Glonass/The Big Dipper
Power parameter	100V-240V, 50/60Hz, 1A
temperature	working temperature: 0° C ~ + 40° C Storage temperature: -40° C ~ +70° C
humidity	Working humidity 5% - 95%
Environmental protection requirements	● ROHS、REACH、No halogen

3: CAUTIONS

   I. Flashing & Servicing must be undertaken by qualified personnel only.
  II. Ensure all work is carried out at an anti-static workstation and that an anti-static wrist strap is worn.
 III. Use only approved Tools & components as specified in the parts list.
 IV. Ensure all components, modules, screws, and insulators are correctly re-fitted after servicing and alignment
  V. Ensure all cables and wires are repositioned correctly if Handset disassembled
 VI. Electrostatic discharge can easily damage the sensitive components of electronic products. Therefore, Service Centre must adhere the precautions which mentioned above.

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4: service Details

Holzer sensing IC

Antenna switch

Transceiver IC

3G、4G LET Power amplifier

2G Power amplifier Duplex device

Light perception, sense of distance

LCD backlight driver

Compass sensor IC

Acceleration sensing IC

CPU

flash

Power Supply PM

Power key welding point

Front camera interface

Flash drive

Rear camera interface

LCD Interface

SD/SIM 1 cassette

MIC2

headphone jack

Antenna switch

The volume of keys of shrapnel

Touch screen interface

U4801 Auxiliary power supply

SIM2 cassette

Battery connector

5: Maintenance Tools

	Name: Constant-temperature Hot Air Gun Purpose: Heat component.
	Name: Constant-temperature Hot Air Gun Purpose: Heat component.
	Name: Soldering Iron Purpose : Repair soldering
	Name: DC Power Supply Purpose: Supply voltage and current.
	Name: Soldering Station Purpose: Fix main board.
	Name: Pb-free Solder Wire Purpose: Join component.
	Name: Digital Multimeter Purpose: Service measure
	Name: Oscilloscope Purpose: Service measure

5: Maintenance Tools

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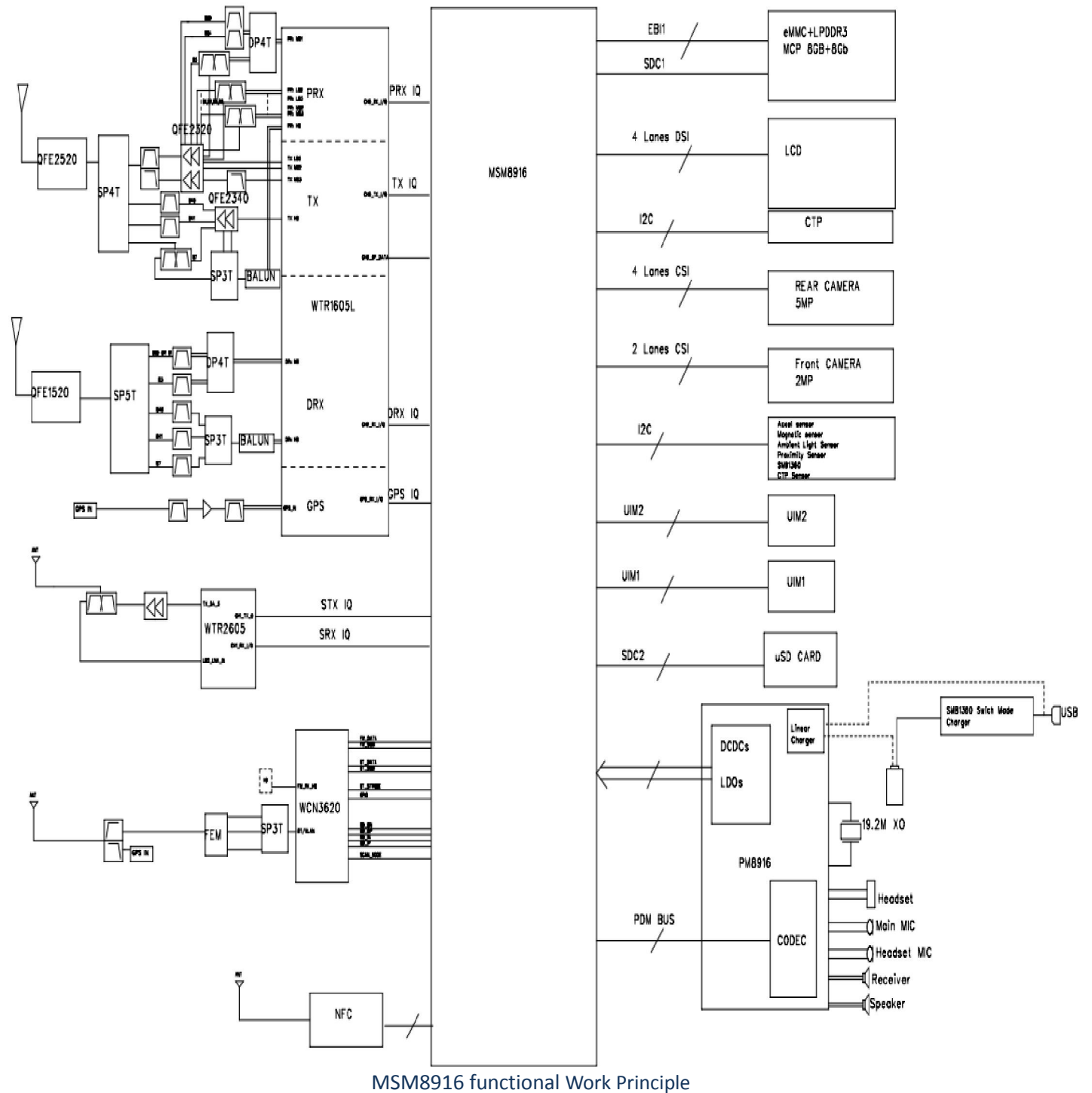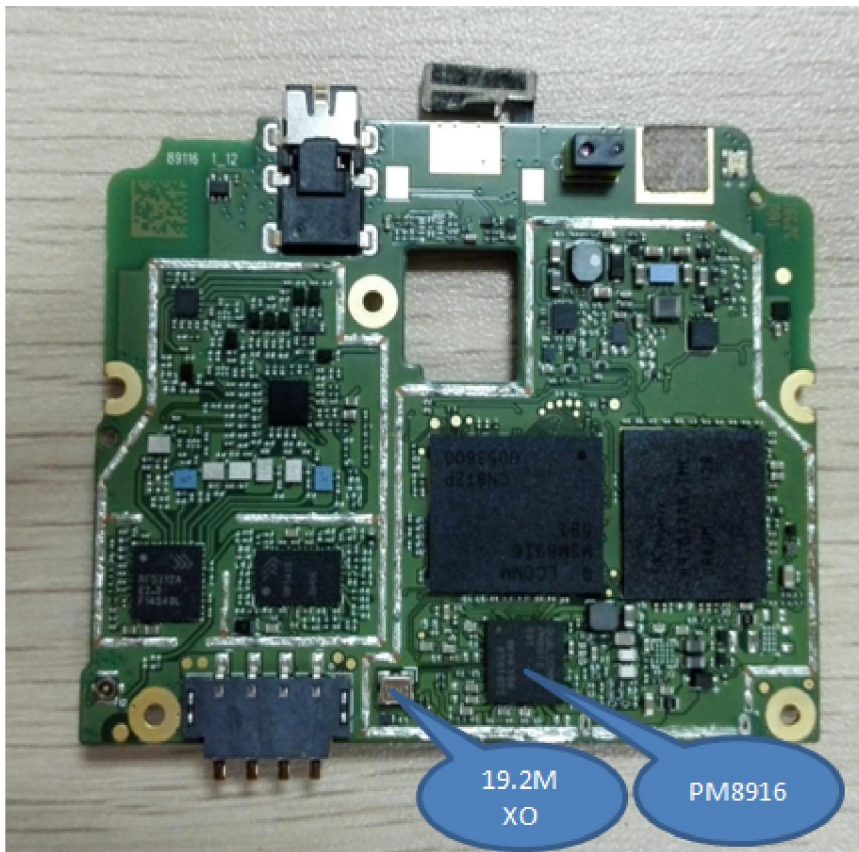|	
	Name: Tool kit Purpose : Assemble and Disassemble tool
	Name: Electronic Screw Driver Purpose : Assemble and Disassemble tool

6: Principle Instruction

System Module Work Principle

MSM8916 functional Work Principle

7:PM8916 Work Principle
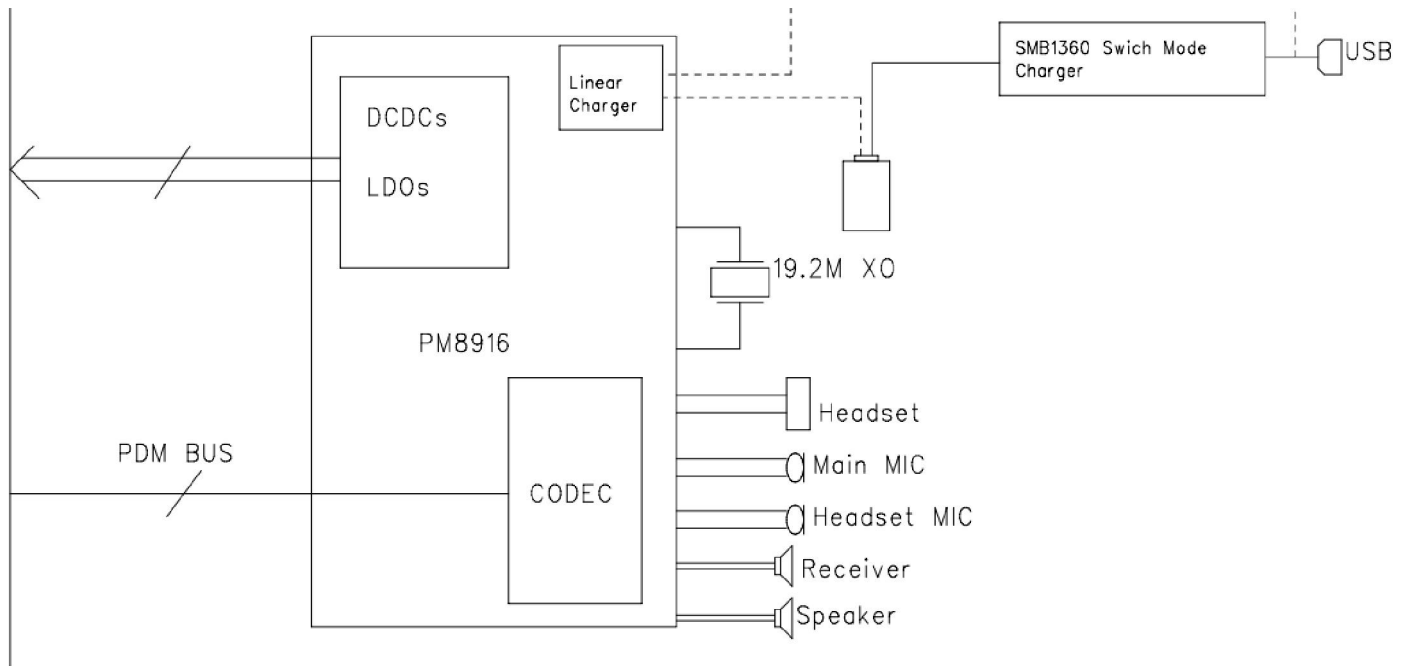
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PM8916 power supply

TYPE	PIN name	Net name	Default Voltage (V)	Range	Current(mA)
BUCK	S1	VREG_S1_1P15	1.15	**0.375–1.562**	2500
	S2	VREG_S2_1P15	1.15	**0.375–1.562**	3000
	S3	VREG_S3_1P3	1.3	**0.375–1.562**	1800
	S4	VREG_S4_2P1	2.1	**1.55–2.325**	1500
LDO	L1(NMOS)	VREG_L1_1P05	1.225	**0.375–1.525**	600
	L2(NMOS)	VREG_L2_1P2	1.15	**0.375–1.525**	1200
	L3(NMOS)	VREG_L3_3P075	1.2	**0.375–1.525**	1200
	L4(PMOS)	VREG_L4_1P8	2.05	**1.75–3.337**	300
	L5(PMOS)	VREG_L5_2P95	1.8	**1.75–3.337**	300
	L6(PMOS)	VREG_L6_2P95	1.8	**1.75–3.337**	300
	L7(PMOS)	VREG_L7_2P95	1.8	**1.75–3.337**	150
	L8(PMOS)	VREG_L8_3P0	2.9	**1.75–3.337**	600
	L9(PMOS)	VREG_L9_2P85	3.3	**1.75–3.337**	600
	L10(PMOS)	VREG_L10_3P0	2.7	**1.75–3.337**	150
	L11(PMOS)	VREG_L11_2P85	2.8	**1.75–3.337**	600
	L12(PMOS)	VREG_L12_1P5	2.8	**1.75–3.337**	150
	L13(PMOS)	\	3.075	**1.75–3.337**	50
	L14(PMOS)	VREG_L14_1P8	1.8	**1.75–3.337**	50
	L15(PMOS)	VREG_L15_UIM	1.8	**1.75–3.337**	50
	L16(PMOS)	VREG_L16_3P0	1.8	**1.75–3.337**	50
	L17(PMOS)	VREG_L17_UIM	2.85	**1.75–3.337**	600
	L18(PMOS)	VREG_L18_1P3	2.7	**1.75–3.337**	150
	VREF	\	0.615	\	\
	MPP1	\	1.25	\	\
Clock LDO	VREG_XO	VREG_L21_1P9	1.8	**1.38–2.22**	5
	VREG_RF_CLK	VDD_RF_SW	1.8	**1.38–2.22**	5

Other power supply

Name	Net name	Default Voltage (V)	Voltage	Current	Reset state	Sleep Mode
Battery	VPH_PWR	\	3.2~4.35V	2A	ON	ON
	VBATT	\	3.2~4.35V	2A	ON	ON
USB_IN	USB_VBUS_IN	\	4.5V~5.5V	\	OFF	OFF
MPP_1	VDD_PX_BIAS	\	1.8V	\	\	\
MPP_3	VREF_DAC	\	1.8V	\	\	\

Power on folw chart
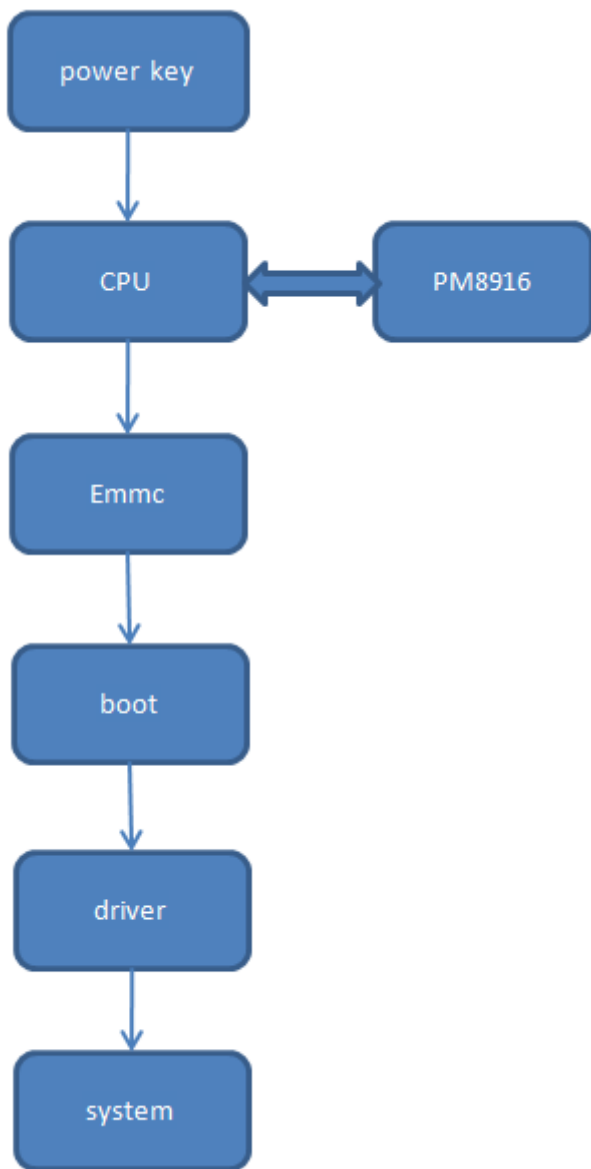
Power on fail instruction

Check the start up current, if the current between 80MA---200MA is forced to upgrade. If the current is more than 500MA,measure the VBAT voltage weather is normal.then arrcording it to find out the abnormal components.

Power on squence

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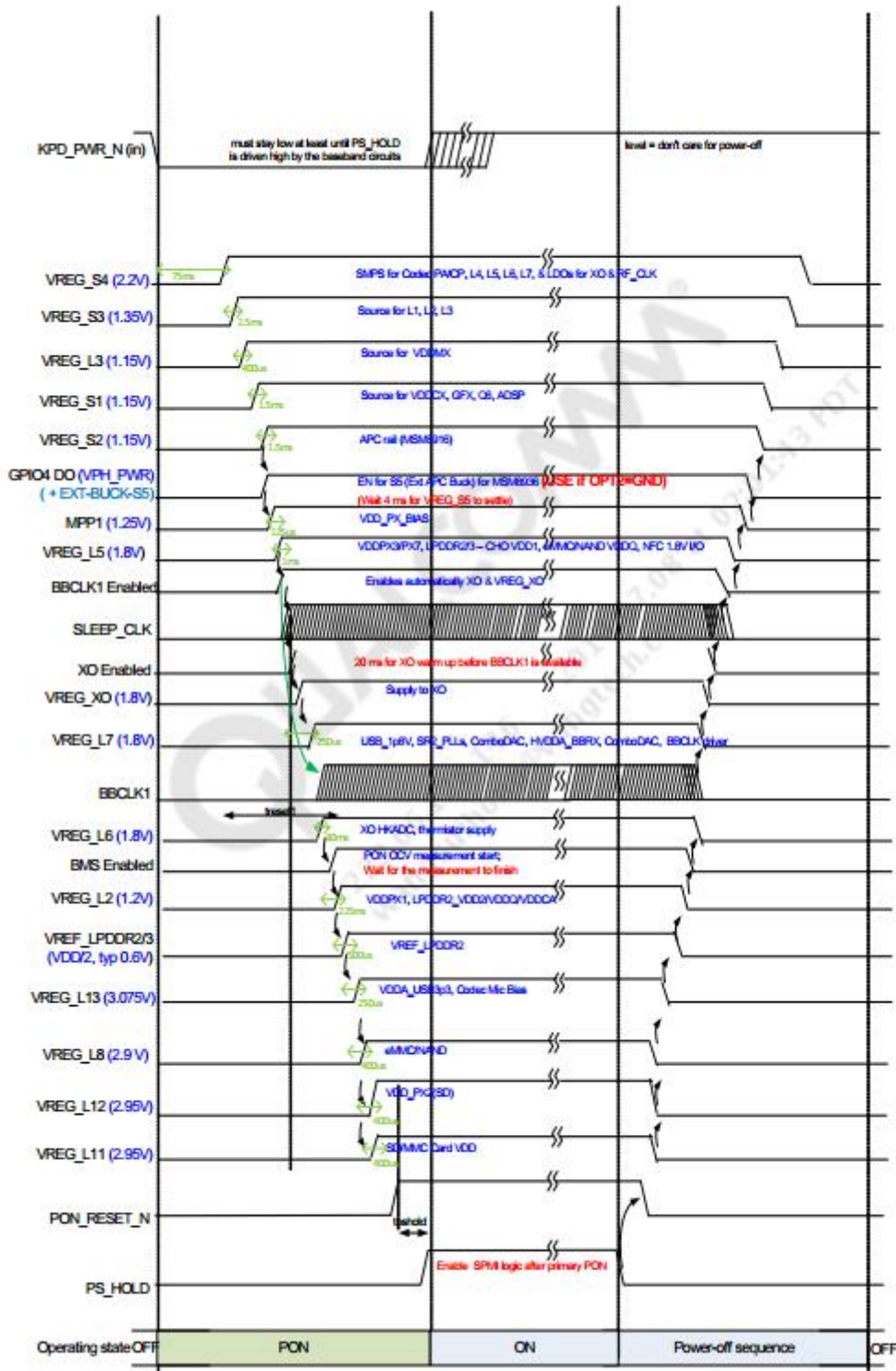
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PM8916 know issue list

#	Issue	Functional area	ES
			P = 0
			RR = 01
1	Input voltage limit does not meet design specification	Charger	X
2	Battery/VDD voltage does not meet design specification	Charger	X
3	Charge current programmable steps are unequal	Charger	X
4	Charging does not automatically restart until battery voltage falls to 92% of VDD_MAX	Charger	X
5	When VBAT drops below UVLO during fast charging, charger module continues fast charging instead of switching to trickle charging	Charger	X
6	TX_GTR_THRES feature not implemented	TX_GTR_TH RES	X
7	Output Current Protection (OCP) feature unavailable in SMPS S2	SMPS	X
8	LDOs L1, L4, L5, L6 and L7 not meeting accuracy specification	LDO	X
9	Certain parts of PM8916 have large BMS PON OCV error	BMS	X
10	PMIC does not power on with charger insertion when VBAT < VBAT_WEAK	Charger	X
11	Fast ramp of VBAT from below VBAT_TRKL to above VBAT_WEAK in less than 2.7 s does not cause PON with charger attached	Charger	
12	Headphone noise during impedance detection	Audio	X
13	Speaker output gain error	Audio	X
14	Headphone output gain error	Audio	X
15	MIC2_IN distortion at high input signal level	Audio	X
16	PM8916 RF_CLK noise when operated in conjunction with SMPS S3 causes GPS NBIQ specification failure	SMPS	X
17	Incorrect PON sequence causes unintentional random QFPROM fuse blow in MSM8916	PON	X

8:Does not power on

Schematic Diagram
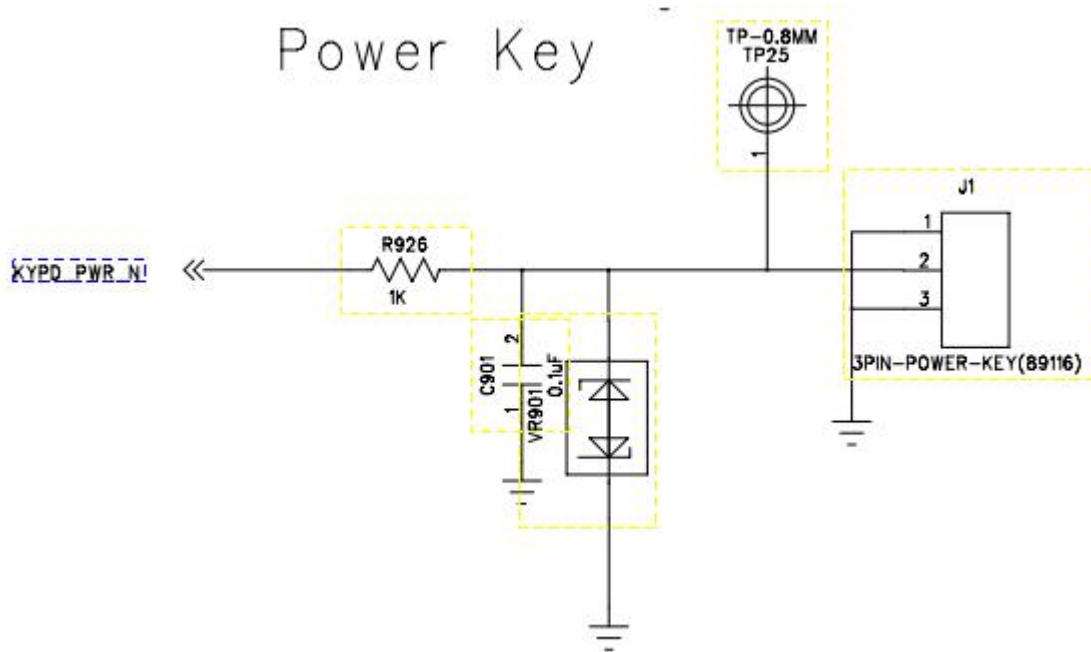
Circuit analysis:

Phone is switched on in the process as shown above: boot keys is pressed, PWRKEY detect low latency 30ms, CPU power management in the area to open the brightest LDO baseband circuits, delay 200ms after power management chip the reset signal reset output baseband, baseband chip boot into the software boot process has finished booting.

Repair flow:

```
                    Power on failed, and use outside
                    power supply to PCBA, and observe
                       the change of the current.

   ┌──────────────────────┬──────────────────────┬──────────────────────┐

 If the value of current is on the   The current is normal, and its    If the value of current is on the high
    low side, about 10mA.              value is about 20mA.              side, about several hundred mA.

                                                                    
   Check if the 26MHz              Check some voltage whether      Check all of components which are
   crystal is work.                they are normal, for example,   correlative with VBAT, and change
                                   VBAT,VA_PMU                     those broken components
         │N                             │Y          ──N──►                    │N
                                                                    
   Change the 26MHz crystal or solder    Check the CPU whether they    Y    Change the CPU or solder it again.
   it again.                             are soldered empty or broken. ──►
         │N                                    │N
                                                                    
   Solder the CPU, if the handset is   Download software            N    According to the download failed,
   not normal still, change the CPU.   again, check whether the  ──►     repair the handset when it can't
                          │Y           handset is normal.               download software.
                                             │Y

                                          The end.
```

9.Display issue/No display

Schematic Diagram

Backlight LED Driver

Main FCP connect J2
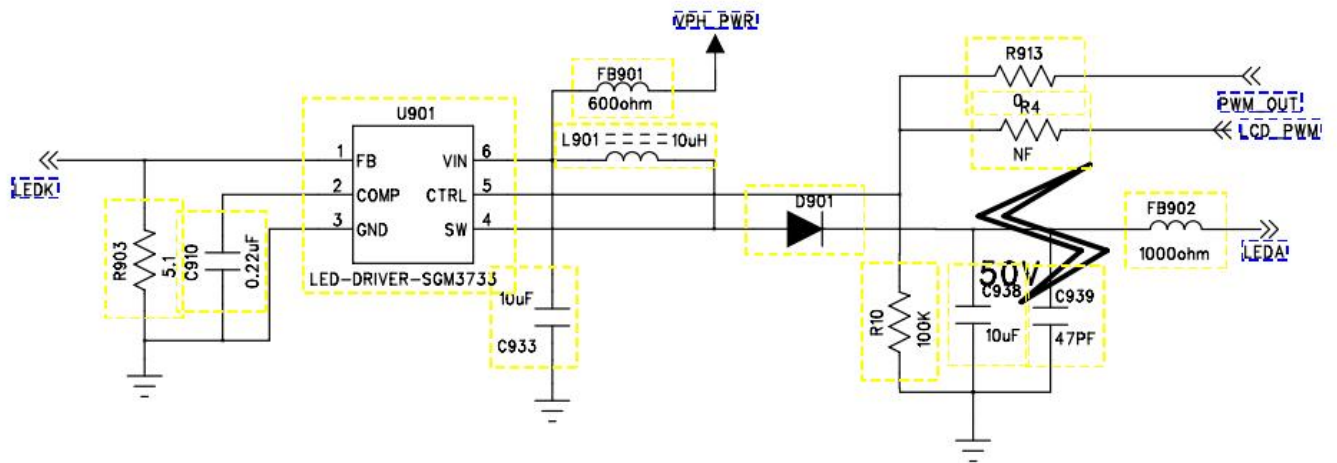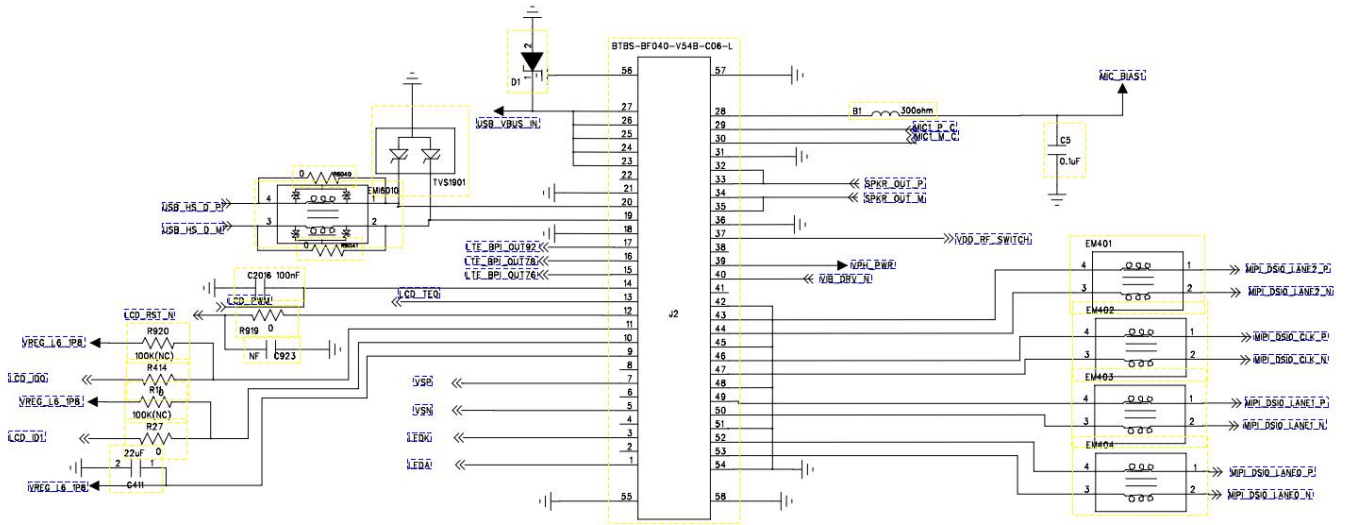
backlight LED driver IC
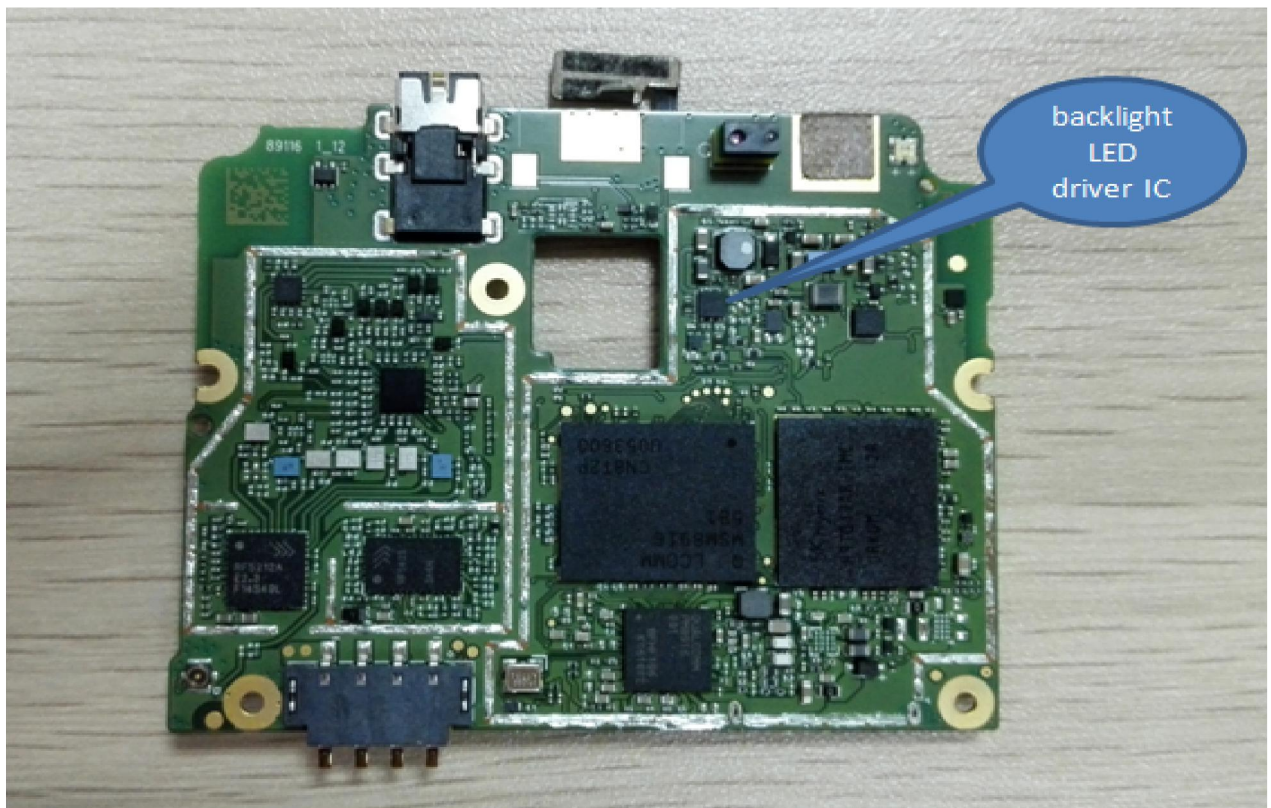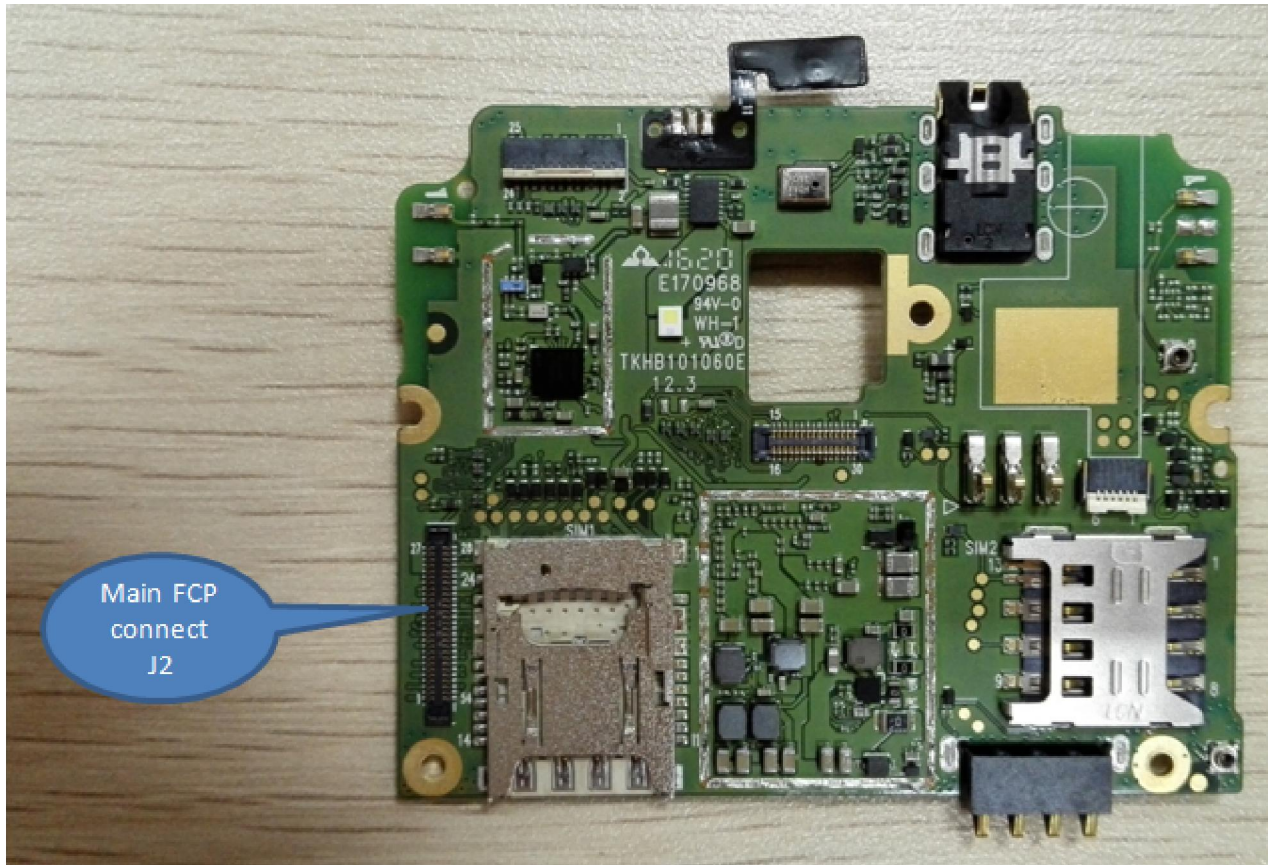
LCD blank screen and backlight broken：

Repair process: boot and test U901 output VLED_P whether it is high, the signal for LCD backlighting lamp anode, LCD normal lit VLED_P is high, and check LCD welding is good; inspection VBOOST whether there is voltage (VBAT on this signal is received), Check if LCD_BL_EN is high.

➢ **Circuit Analysis:**

The display of ZB500KL used 4.5 inch LCD. Its data interface include MIPIport and signal controlled lines , The digital port of LCD is driven by BBIC MSM8916, and its power supplied by VIO 2.8V of PMU IC, and its driven circuit of backlight is supplied by the four commonanode and backlight cycles of U901.

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LCD backlight issue repair flow:

```
┌──────────────────┐
│  LCD no backlight │
└──────────────────┘
          │
          ▼
    ╱────────────╲                      ╱────────────╲                  ┌──────────────┐
   ╱ check backlight ╲                 ╱  check X301   ╲                 │  Re winding or │
  ╱  voltage weather  ╲──────────────▶╱ control voltage ╲──────────────▶│   change J2    │
   ╲    is normal     ╱                ╲  weather is    ╱                └──────────────┘
    ╲────────────╱                      ╲   normal     ╱
          │                              ╲────────────╱
          │                                    │
          ▼                                    ▼
    ╱────────────╲                      ╱────────────╲
   ╱              ╲                     ╱  Re welding or ╲
  ╱  change new LCD ╲────────────────▶╱   change PMU    ╲
   ╲              ╱                     ╲              ╱
    ╲────────────╱                       ╲────────────╱
          │
          ▼
┌──────────────────┐
│  LCD no backlight │
└──────────────────┘
```
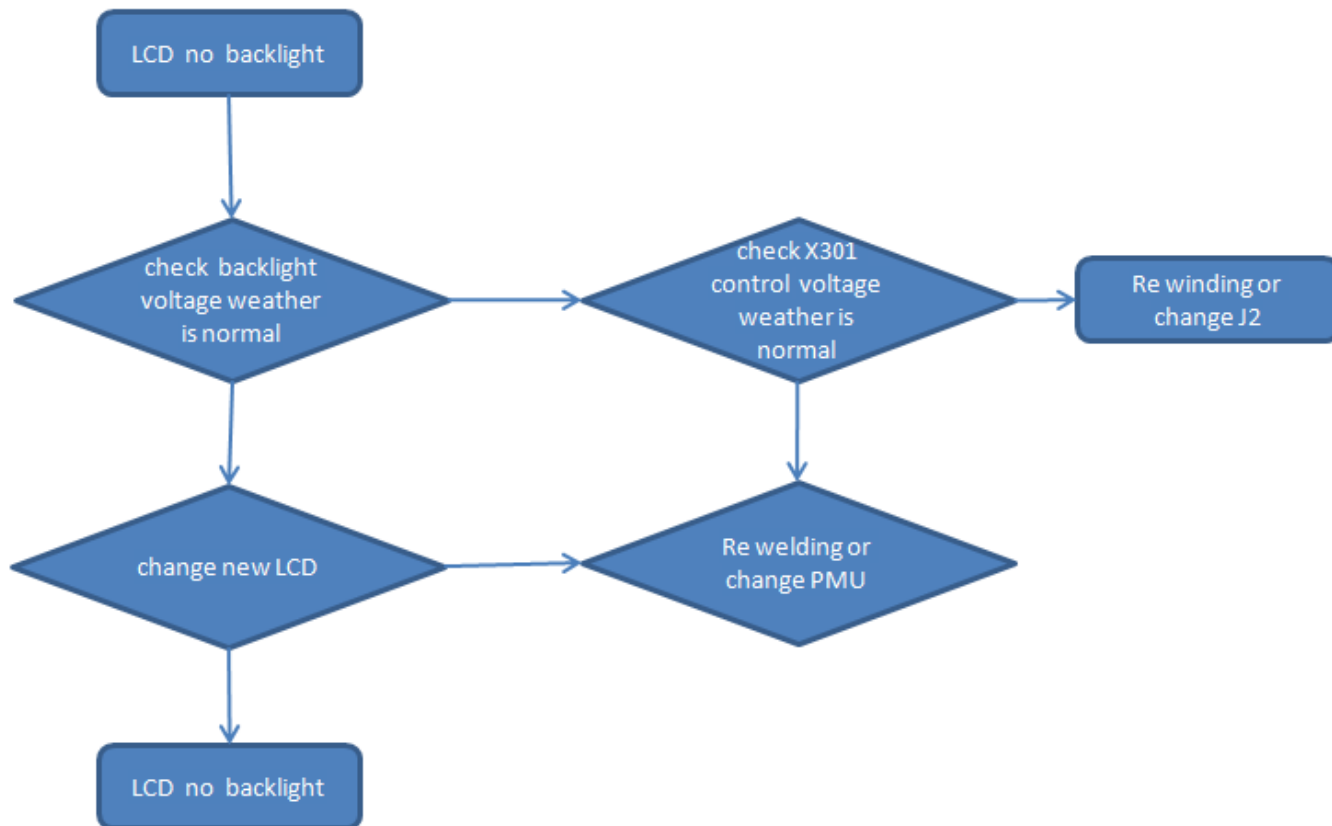
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LCD display issue repair flow ：

LCD display issue.

Y

Check the soldering status of LCD FPC weather is normal. →N→ Solder LCD FPC again.

Y

Check LCD working voltage(VIO_PMU) weather is normal. →N→ Solder PMU again.

Y

Solder again or change CPU.

Y

The end.

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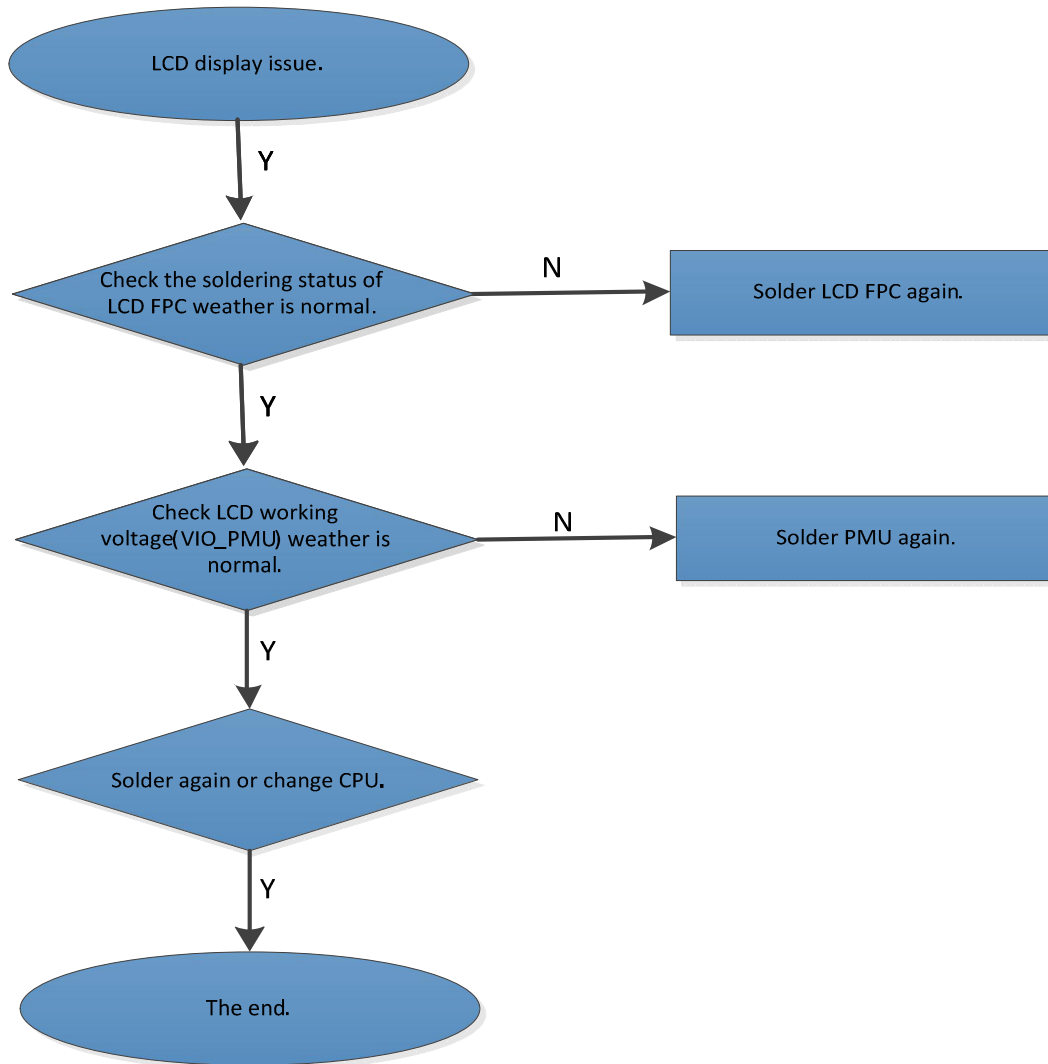
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10:Touch panel

Schematic Diagram

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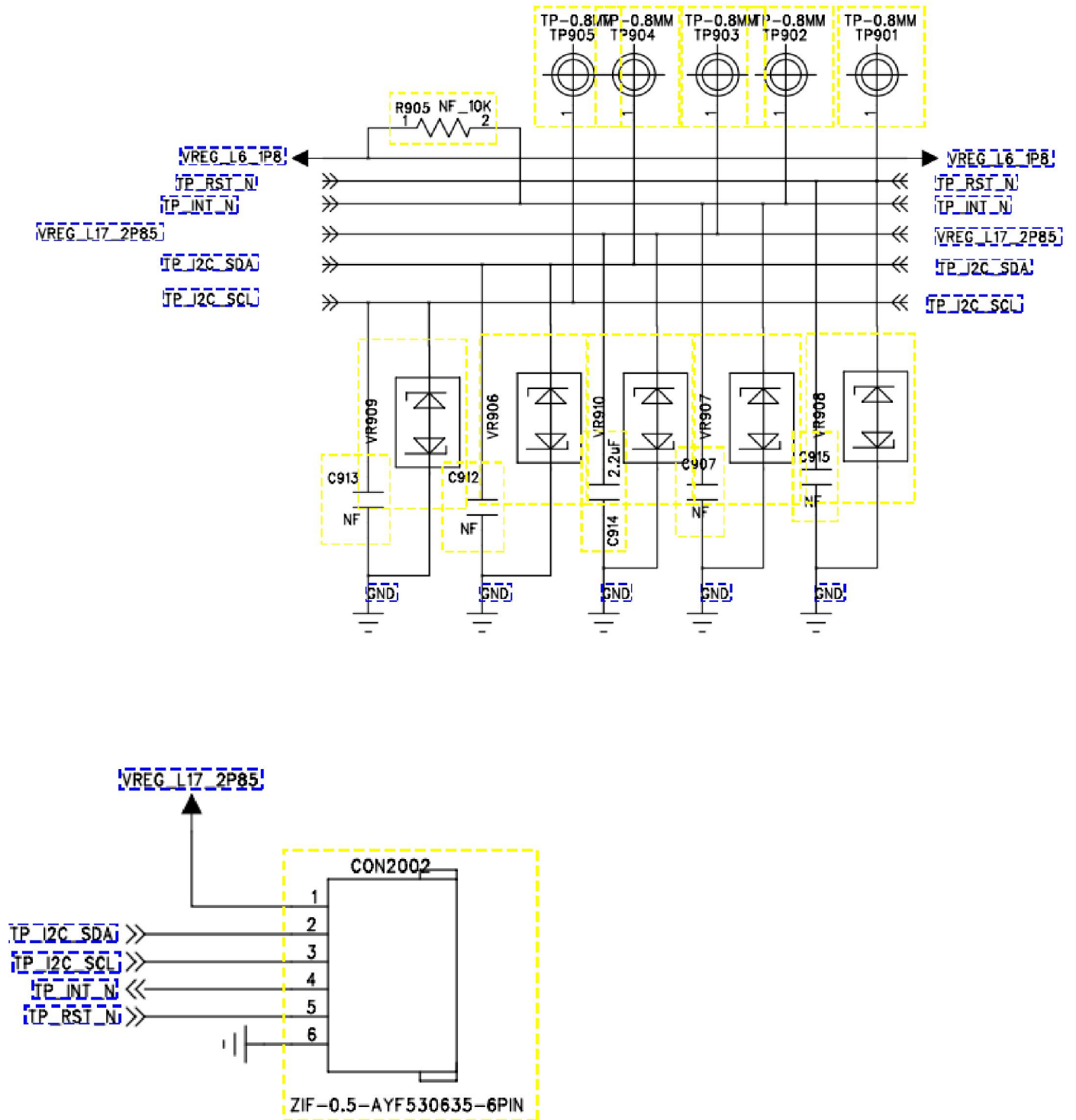
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TP Issue repair flow:

```
                        ┌─────────────┐
                        │   TP issue  │
                        └──────┬──────┘
                               │ Y
                               ▼
                        ◇─────────────◇
         Check TP CON solder And default.        ──N──►  ┌──────────────────────┐
                        ◇─────────────◇                  │ Solder again or change│
                               │ Y                       │ CON2002               │
                               ▼                         └──────────────────────┘
  ┌──────────────┐    ◇──────────────────◇
  │Assembly new TP.│◄─N─ Change new TP distinguish problem inside PCBA.
  └──────┬───────┘    ◇──────────────────◇
                               │ Y
                               ▼
                        ◇──────────────────◇
         Check TP voltage(VIO18_PMU) value   ──N──►  ┌────────────────────┐
                        ◇──────────────────◇          │Solder again or change│
                               │ Y                     │ PMU.                 │
                               ▼                       └────────────────────┘
                        ◇──────────────────◇
         Check TP work signal.                ──N──►  ┌────────────────────┐
                        ◇──────────────────◇          │Solder again or change│
                               │ Y                     │ CPU.                 │
                               ▼                       └────────────────────┘
                        ┌─────────────┐
                        │   The end.  │
                        └─────────────┘
```

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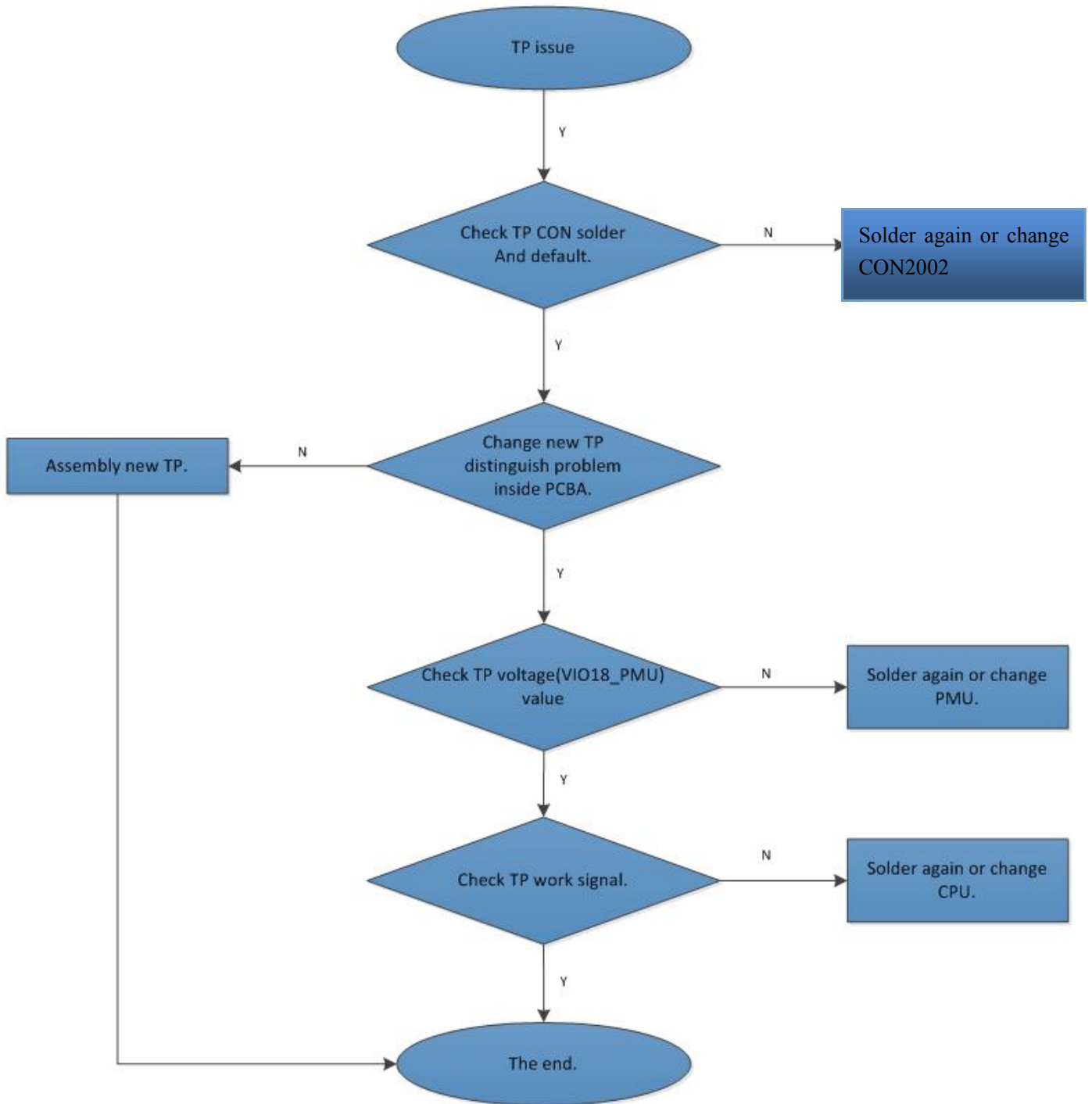
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11:Charging

Schematic Diagram

Can't charge repair flow:

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```
┌─────────────────┐
│   can't charge  │
└─────────────────┘
         │
         ▼
   ╱─────────────╲                    ╱─────────────╲
  ╱  measure the  ╲                  ╱  re winding or ╲
 ╱   con1601 all pin╲───────────────▶╲  change con1601 ╱
  ╲  weather is ok ╱                  ╲               ╱
   ╲─────────────╱                     ╲─────────────╱
         │
         ▼
   ╱─────────────╲                    ╱─────────────╲
  ╱ ...nect charg  ╲                 ╱  re winding or ╲
 ╱  measure the     ╲───────────────▶╲  change PM8916  ╱
 ╲  con1601 all pin ╱                 ╲               ╱
  ╲ voltage weather╱                   ╲─────────────╱
   ╲   is ok     ╱
         │
         ▼
┌─────────────────┐
│      end        │
└─────────────────┘
```

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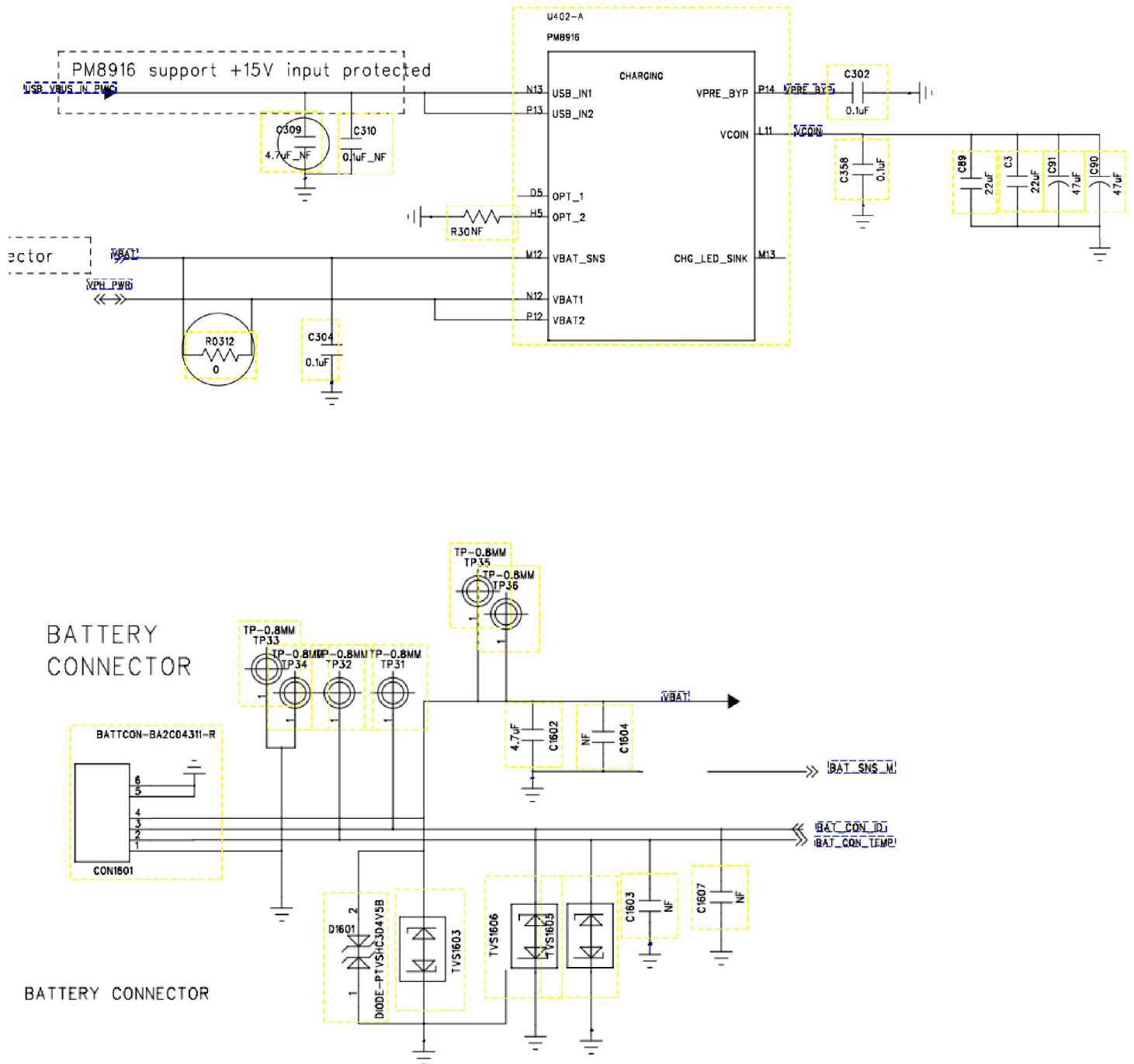
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12:Camera

Schematic Diagram

Main Camera
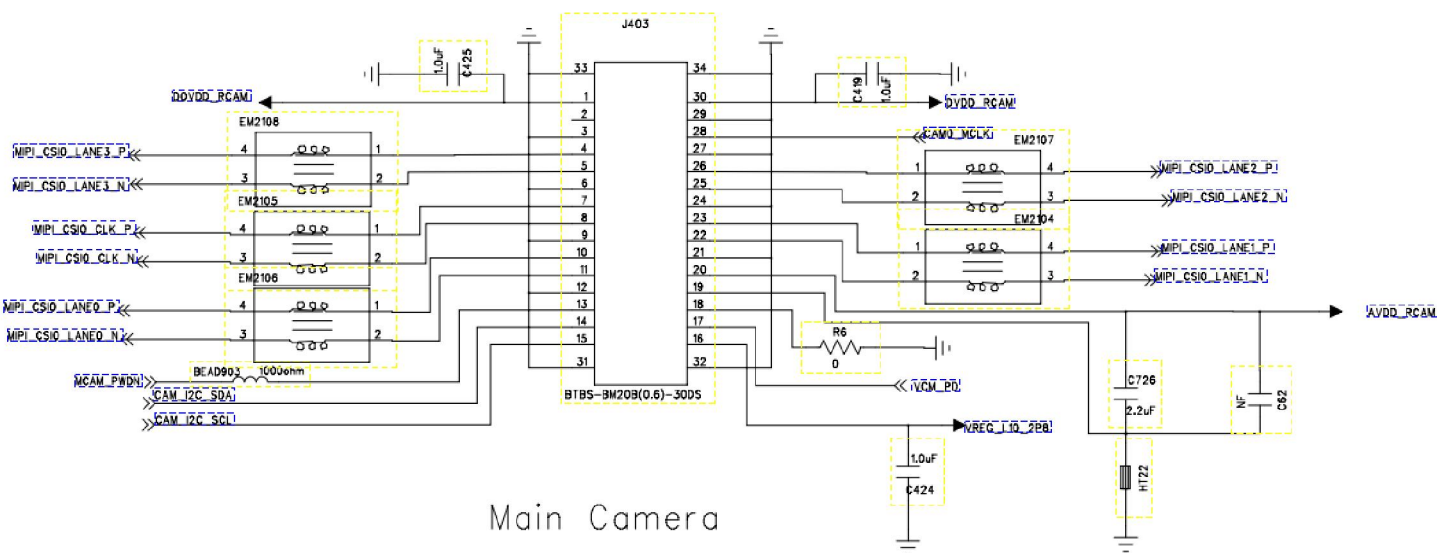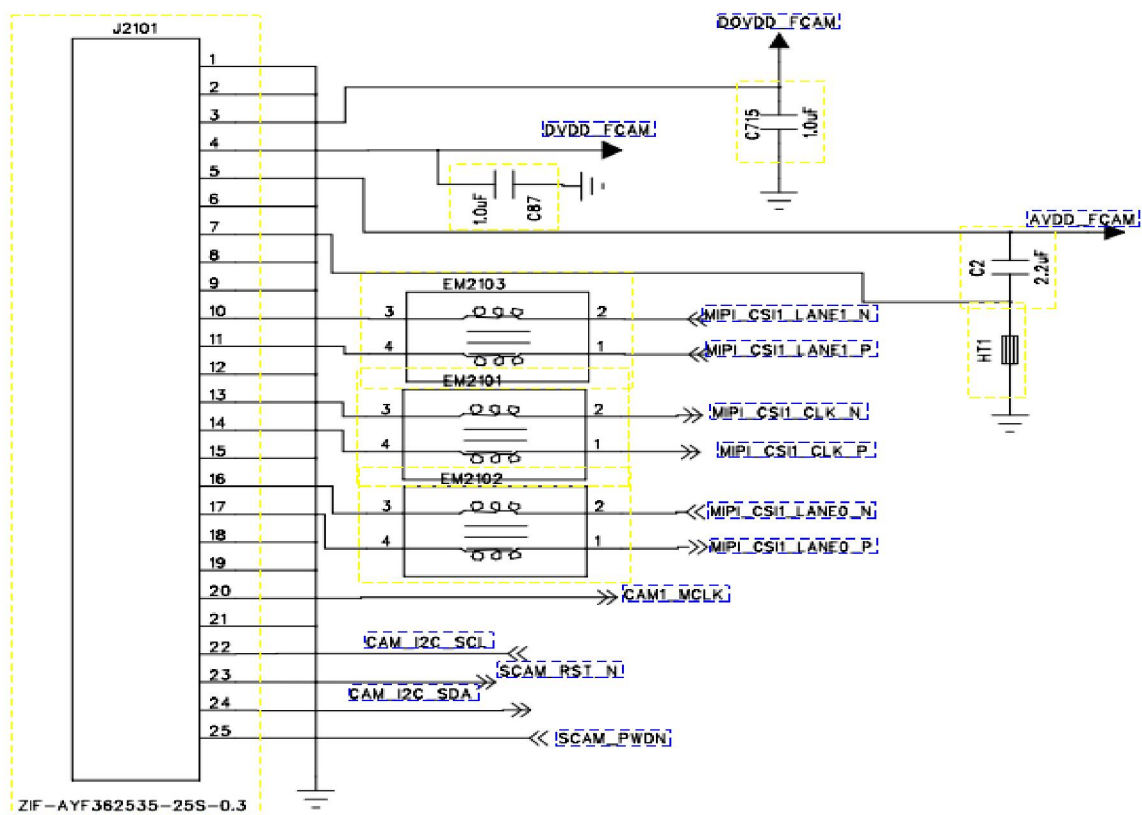
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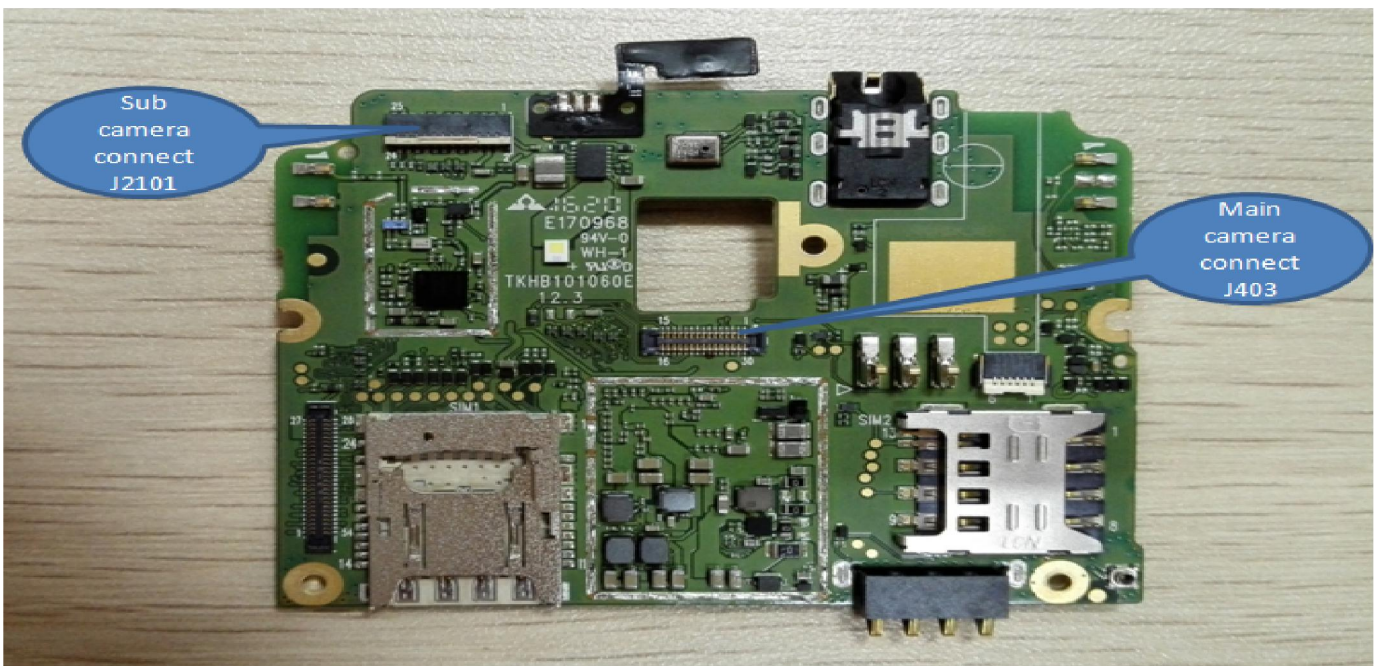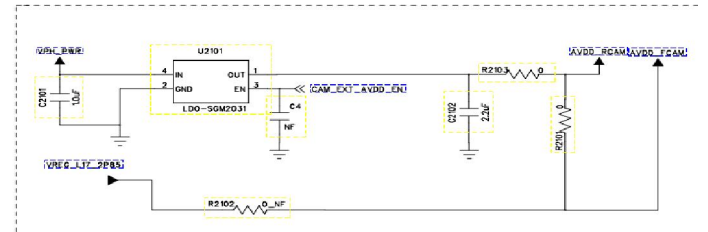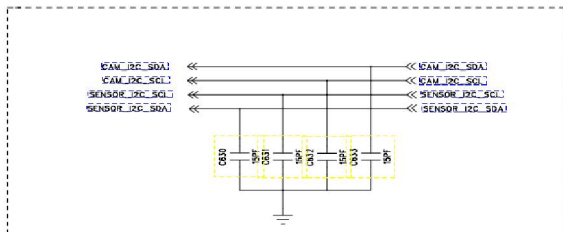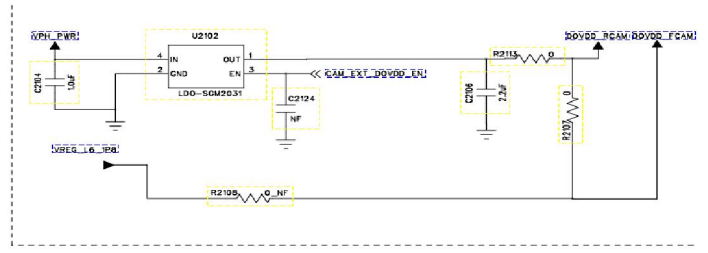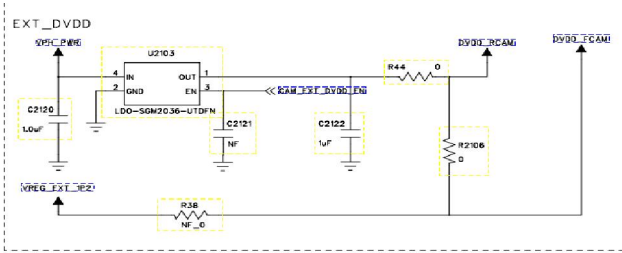
Failure analysis is as follows:

After the replacement camera, a camera to eliminate ontology failure problem; Check the connector J1401/J1402 welding problem again.

So camera function could not be opened:

1. Check the power supply voltage 'VDDCAMMOT', 'VDDCAMCORE', 'VDDCAMIO', is normal, such as abnormal change - PMU - 2.

2. Review the control signal of cameras' CMMCLK ', 'REAR_CAM_ID0', 'CCIR_RET', voltage and the circuit is normal.

All the examination without exception are to add welding/change the CPU.

So camera image display abnormal:

Check camera and transmission of data between the CPU signaling pathways conduction, whether there are abnormal check pathway on the EMI0903-0901 welding device and the performance is normal, if there is no exception to welding the CPU.

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Camera issue repair flow:

```
   ┌─────────────────────────┐
   │ Camera function trouble  │
   │   or screen blurred.     │
   └─────────────────────────┘
             │ Y
             ▼
   ┌─────────────────────────┐        N    ┌──────────────────────┐
   │ Check the soldering      │──────────▶ │  Solder cameraagain. │
   │ status of camera connector│            └──────────────────────┘
   │ weather is normal.       │
   └─────────────────────────┘
             │ Y
             ▼
   ┌─────────────────────────┐        N    ┌──────────────────────────────┐
   │ Change a new camera      │──────────▶ │ Solder again or change these │
   │ weather Become well.     │            │ CPU and components of        │
   └─────────────────────────┘            │ camera display.              │
             │ Y                           └──────────────────────────────┘
             ▼
   ┌─────────────────────────┐
   │        The end.         │
   └─────────────────────────┘
```

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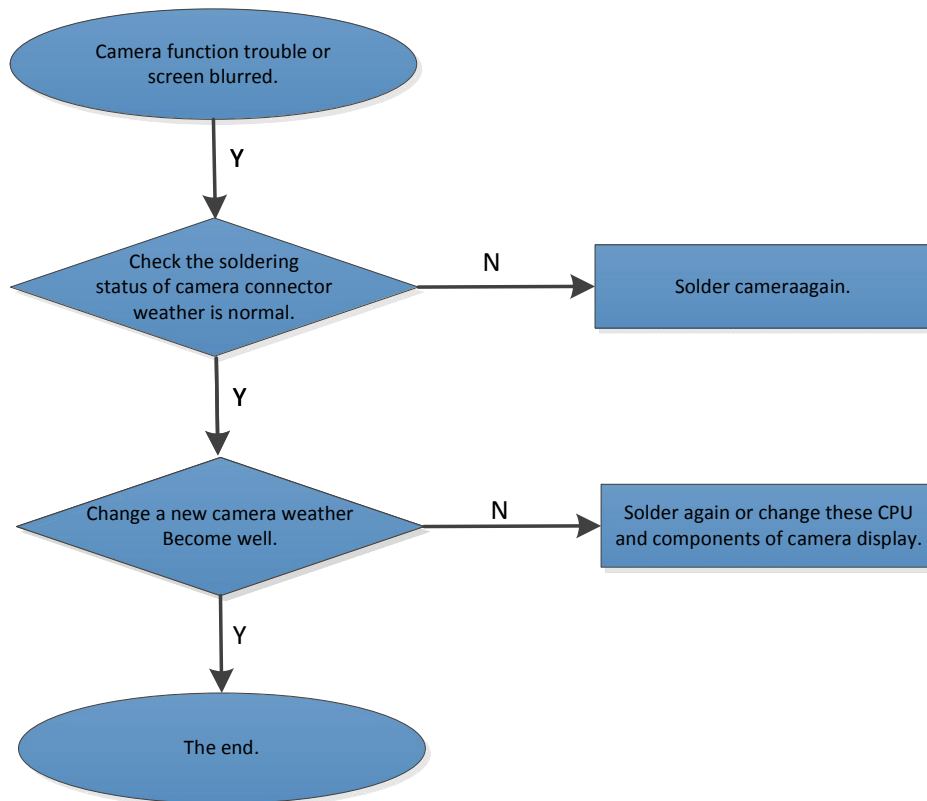
13:Headset issue

Schematic Diagram
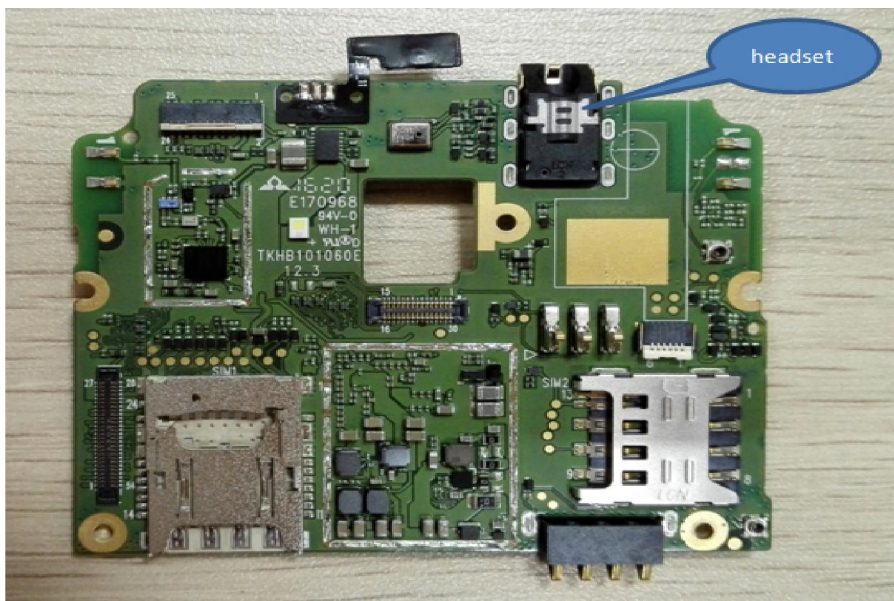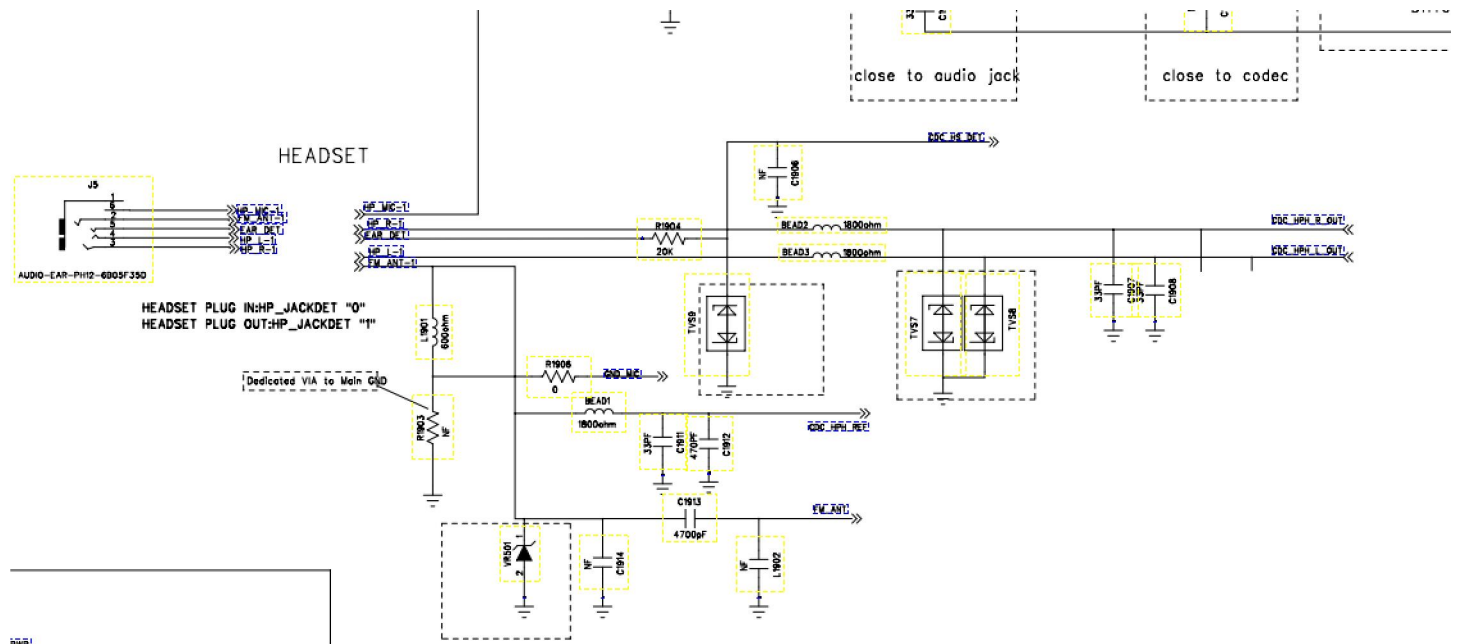
General analysis process is as follows:

1. The measurement of the receiver are the resistance between the two pins for 28 Ω, such as abnormal test again after replacing a receiver, to rule out the failure of the phone itself.

2. Test the receiver input signals' EARP ', 'EARN' voltage is normal, such as abnormal first check welding line on the device and the performance is normal, especially electrostatic protection tube D3103 (can disconnect first to determine whether the signal attenuation).

If the above are no obvious problems, check the CPU or to replace it.

Voice issue repair flow:

Voice issue

Check voice signal from PMU weather is normal.

N → Solder again or change PMU.

Y

Check the speaker solder and performance issue.

N → Solder again or change CPU.

Y

Solder again or change earphone.

The end.

14:Vibrator

Schematic Diagram

MOTO

General analysis process is as follows:

1. Check if motor is negative resistance between 33 Ω, such as abnormal need to be replaced; Check the motor of the welding is reliable.

2. Check whether the motor working voltage 'VIBR_PMU' normal loaded into the small plate 'VIB_CTRL' this point, the motor whether the cathode and the mainboard of ground conduction;

If the above are no obvious problems, check - PMU - 2, or to replace it.

Vibrato issue repair flow:

15:WiFi/BT/GPS

WiFi&BT&GPS Schematic diagram
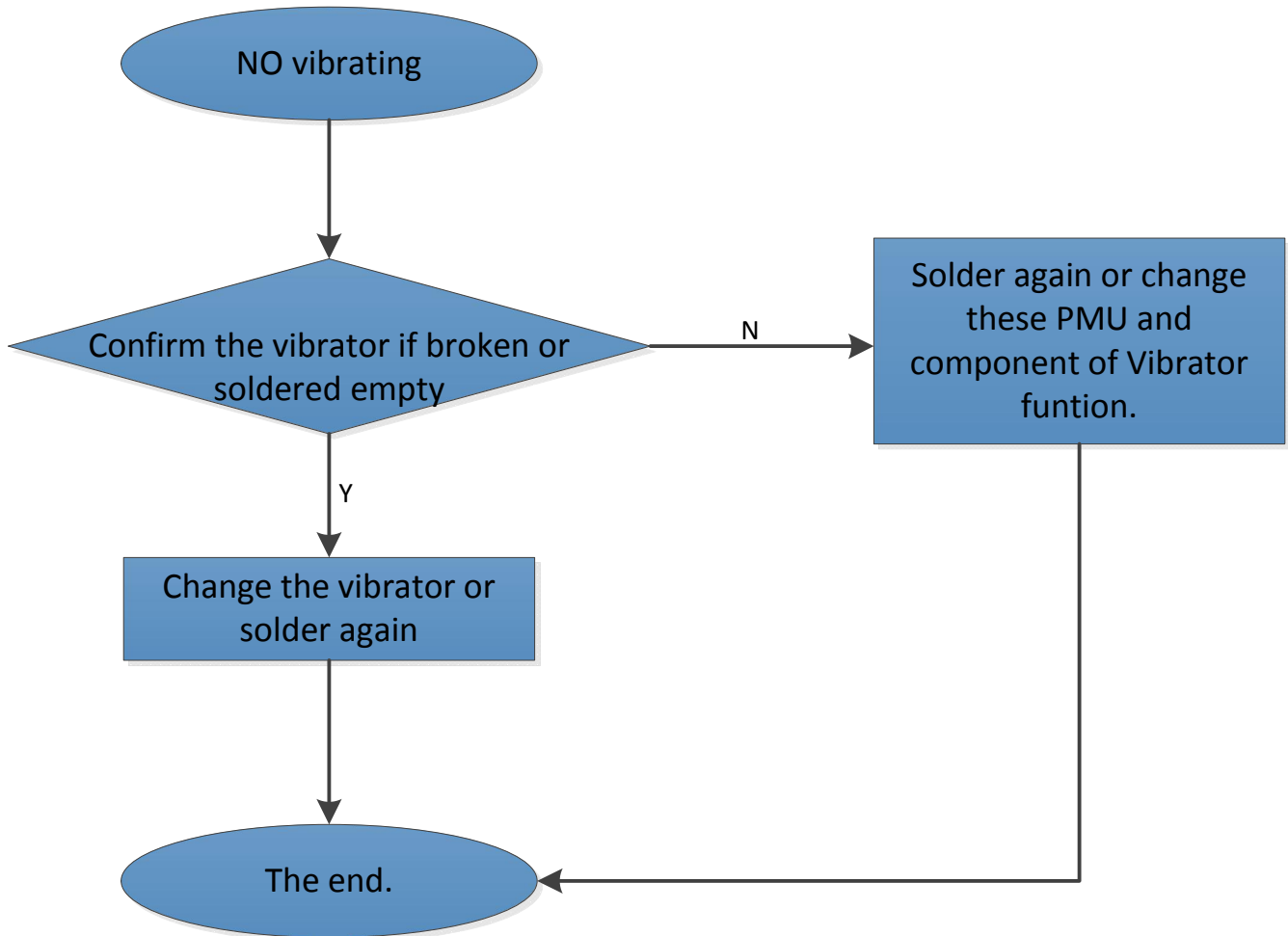
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Wifi&BT&GPS Issue repair flow:
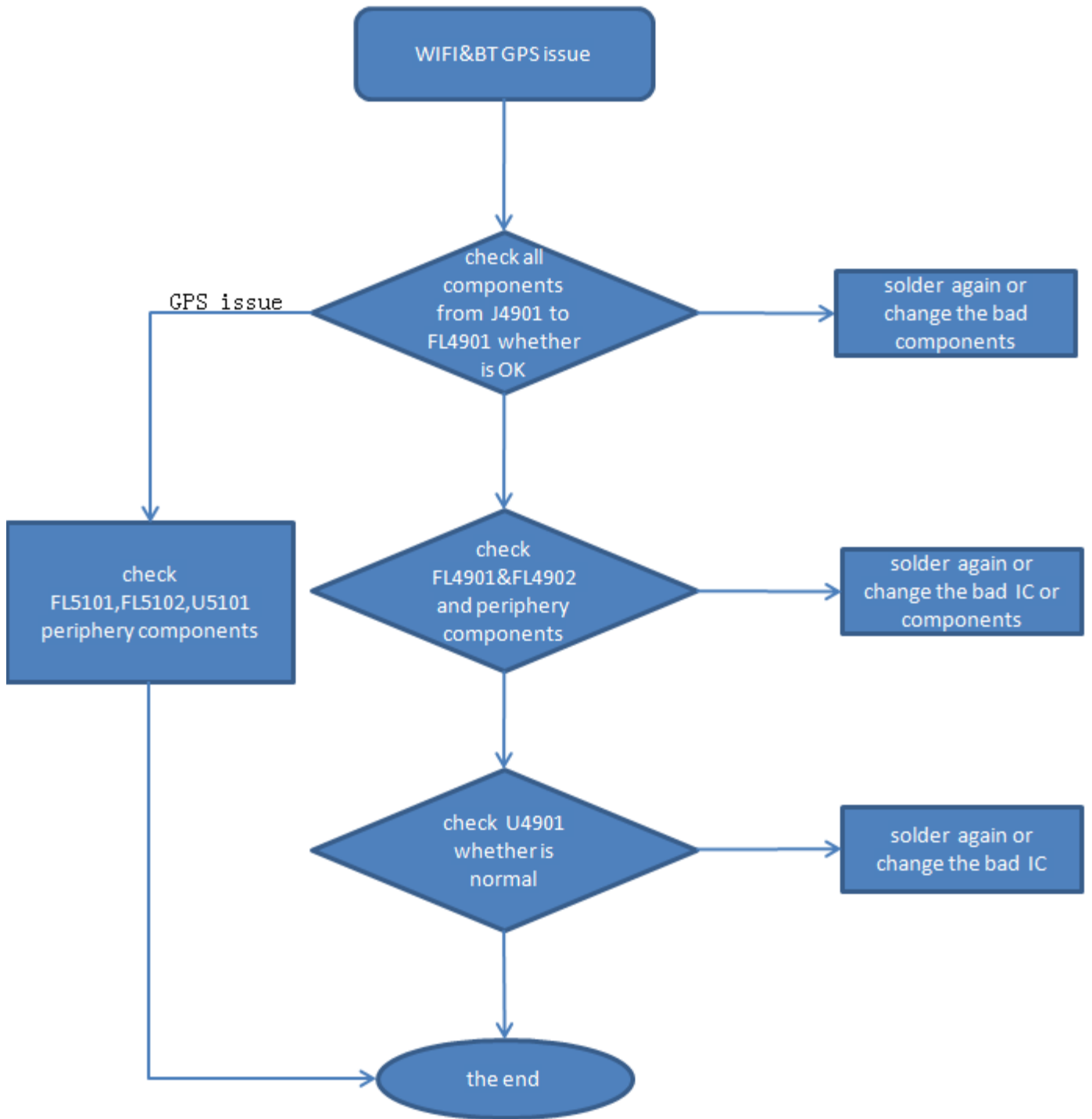
16: Receiver
  Schematic Diagram

Receive Issue repair flow:

```
        ┌─────────────────┐
        │  Receive issue  │
        └─────────────────┘
                 │
                 ▼
     ◇ Check voice signal from ──N──▶ ┌──────────────────┐
       PMU weather is normal. ◇       │ Solder again or  │
                 │                     │  change  PMU.    │
                 Y                     └──────────────────┘
                 ▼
   ◇ Check the speaker solder and ──N──▶ ┌──────────────────┐
        performance issue. ◇              │ Solder again or  │
                 │                        │  change  CPU.    │
                 Y                        └──────────────────┘
                 ▼
        ┌─────────────────┐
        │ Solder again or │
        │ change  Receive.│
        └─────────────────┘
                 │
                 ▼
        ┌─────────────────┐
        │    The end.     │
        └─────────────────┘
```

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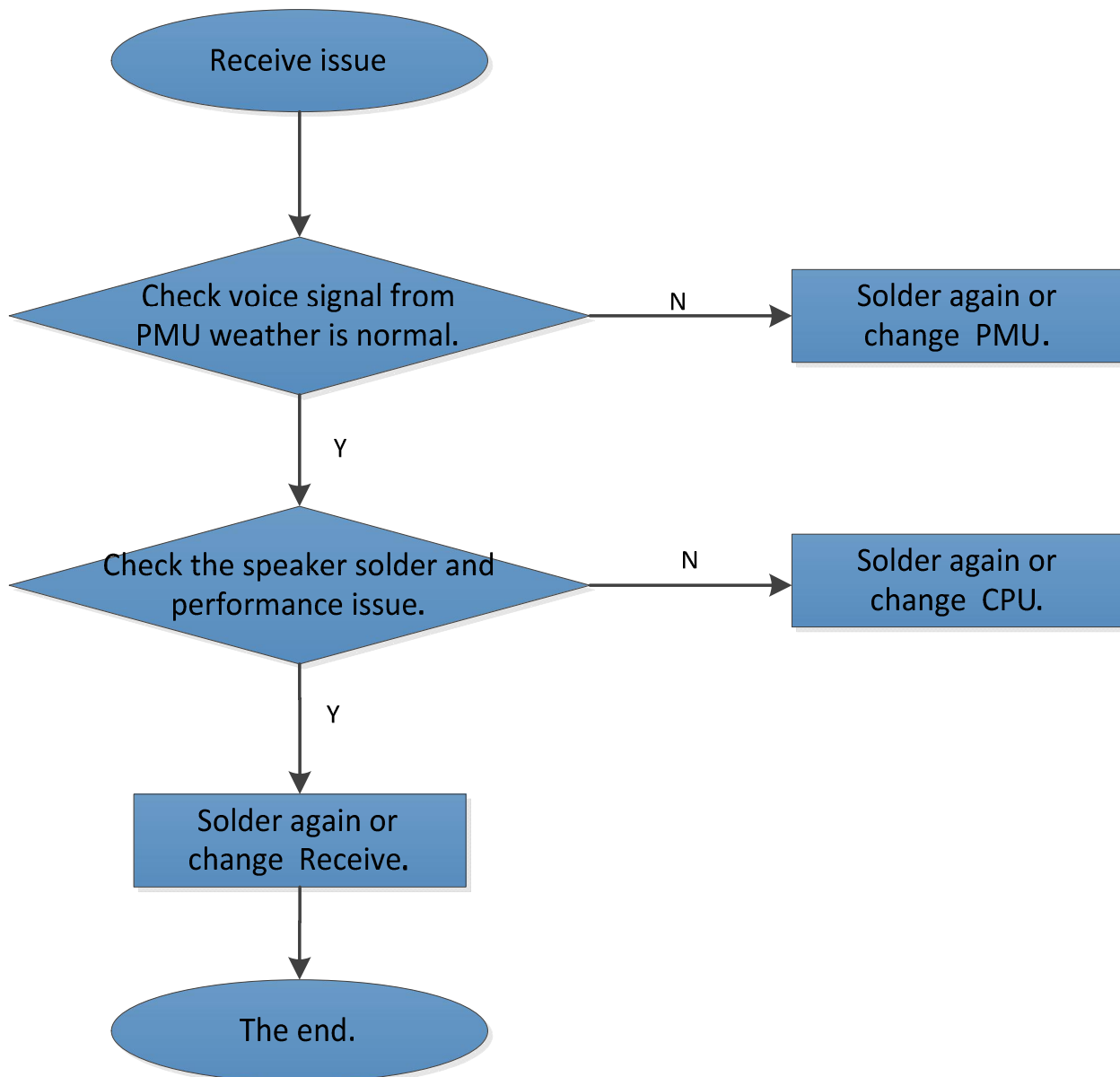
L3 Service Manual

17: Speaker

Schematic Diagram

SPKR_P ≪ ——— L3 ⌇ 180ohm ——— ≫ SPKR_OUT_P

SPKR_M ≪ ——— L2 ⌇ 180ohm ——— ≫ SPKR_OUT_M

SPKR_OUT_M ≫

SPKR_OUT_P ≫

SPKR_OUT_M
SPKR_OUT_P

C917 100PF

C932 C931
33PF 33PF
GND

TVS901 TVS902

SPKR_OUT_P

SPKR_OUT_M

C3
100PF

C1 C2
33PF 33PF

VR1 VR2

B1
100NH

B2
100NH

À ®È

AU_SPK1P 1 J6

AU_SPK1N 1 J7
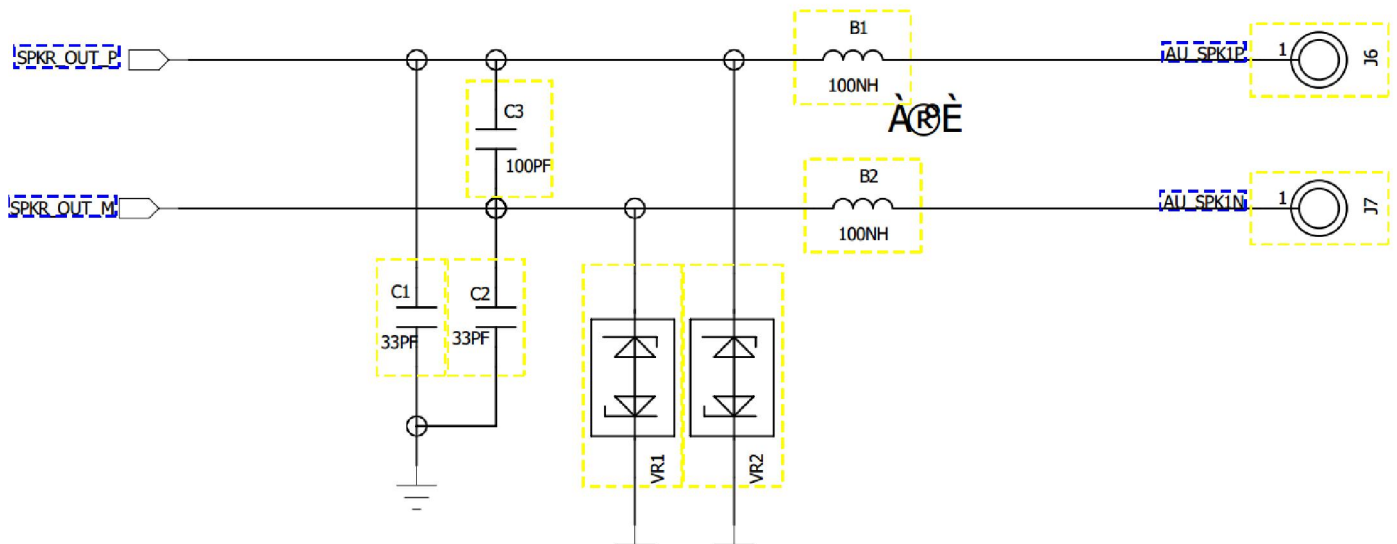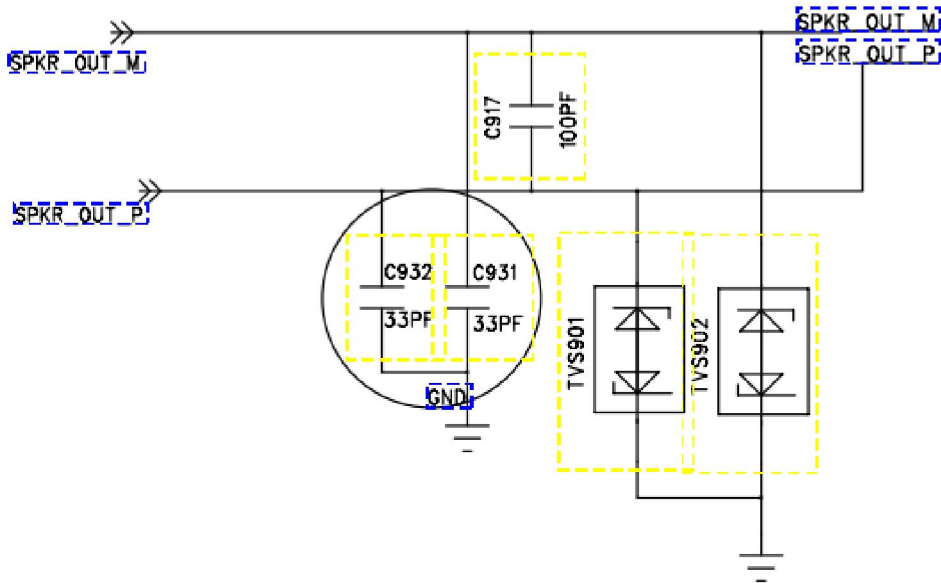
Speaker Issue repair flow:

```
                    ┌──────────────────┐
                    │ Speaker abnormal │
                    └──────────────────┘
                             │
                             ▼
            ◇ Check the                      ◇ Clean or
              main cable         ───────▶      replace
              connector is                     connector
              OK                               plug
                   │
                   ▼
            ◇ Check audio                    ◇ Add or
              power                ──────▶     replace
              amplifier and                   materials
              peripheral
              circuit
                   │
                   ▼
            ◇ Measuring                      ◇ Measurement
              horn power         ───────▶      of the power
              supply pin                       supply pin to
              voltage is                       the J2(Pin
              normal or not                    33,34)
                   │                           pathway
                   ▼                             │
            ◇ Re welding or                      ▼
              replacing                     ◇ PCB failure
              power supply
              IC
                   │
                   ▼
            ┌──────────┐
            │   End    │
            └──────────┘
```

18: Mic

Schematic Diagram

Main mic Issue repair flow

```
         ┌──────────────────┐
         │   MIC abnormal   │
         └──────────────────┘
                  │
                  ▼
        Check
        whether the                          Replace MIC
        MIC rubber       ──────────────►      rubber sleeve
        sleeve has a
        hole
                  │
                  ▼
        Check
        whether the       Heavy welding
        MIC               or
        peripheral   ──────────────►  replacement
        components                     of defective
        are normal                    components
                  │
                  ▼
        Cross                         Replace bad
        validation MIC ──────────────► MIC
                  │
                  ▼
        Measurement                   Measurement
        of MIC power                  of the power
        supply pin    ──────────────► supply pin to
        voltage                       the MIC
        normal or not                 pathway
                  │                         │
                  ▼                         ▼
        Re welding or
        replacing
        power supply                  PCB bad
        IC
                  │
                  ▼
         ┌──────────────────┐
         │       End        │
         └──────────────────┘
```

Sub mic Issue repair flow

```
                    ┌─────────────────┐
                    │  MIC abnormal   │
                    └────────┬────────┘
                             │
        Check               ▼
        whether the      ╱─────────╲              ╱─────────────╲
        MIC rubber      ╱           ╲ ────────▶  ╱ Replace MIC   ╲
        sleeve has a    ╲           ╱            ╲ rubber sleeve  ╱
        hole             ╲─────────╱              ╲─────────────╱
                             │
        Check               ▼                    Heavy welding
        whether the      ╱─────────╲              or
        MIC             ╱           ╲ ────────▶  ╱ replacement    ╲
        peripheral      ╲           ╱            ╲ of defective   ╱
        components       ╲─────────╱              components
        are normal          │
                            ▼
        Cross            ╱─────────╲              ╱─────────────╲
        validation MIC  ╱           ╲ ────────▶  ╱ Replace bad   ╲
                        ╲           ╱            ╲ MIC            ╱
                         ╲─────────╱              ╲─────────────╱
                            │
        Measurement         ▼                    Measurement
        of MIC power     ╱─────────╲              of the power
        supply pin      ╱           ╲ ────────▶  ╱ supply pin to  ╲
        voltage         ╲           ╱            ╲ the MIC        ╱
        normal or not    ╲─────────╱              pathway
                            │                         │
                            ▼                         ▼
        Re welding or    ╱─────────╲              ╱─────────────╲
        replacing       ╱           ╲            ╱  PCB bad      ╲
        power supply    ╲           ╱            ╲               ╱
        IC               ╲─────────╱              ╲─────────────╱
                            │
                            ▼
                    ┌─────────────────┐
                    │      End        │
                    └─────────────────┘
```

19：SIM card issue

Schematic Diagram

SIM1 and SIM2 power supply and signal is separated, when the SIM holder does not recognize the SIM card can check the relevant circuit. Fault, not card analysis process is as follows:

1. The first SIM booth of welding and examine whether the pin height consistent.
2. Review the working voltage of SIM card 'VDDSIM' is normal.
3. Check the SIM card control signals' SIM_SCLK ', 'SIM_DA', lines is normal.
4. No problem with the above checks, the CPU is replaced.

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SIM card Issue repair flow:

```
        ┌─────────────────────────┐
        │  Can't identify SIM card. │
        └─────────────────────────┘
                    │
                    ▼
┌────────────────────────────┐    Y    ┌────────────────────────────┐
│ Check SIM connector each touch │ ──────▶ │ Change or solder again     │
│ pin whether solders empty or has │       │ the SIM connector.         │
│ elastic                        │         └────────────────────────────┘
└────────────────────────────┘
                    │ N
                    ▼
┌────────────────────────────┐    N    ┌────────────────────────────┐
│ Check each channel of      │ ──────▶ │ Change or solder again     │
│ signal weather is normal.  │         │ the SIM connector.         │
└────────────────────────────┘         └────────────────────────────┘
                    │ Y
                    ▼
┌────────────────────────────┐    N    ┌────────────────────────────┐
│ Check VSIM working         │ ──────▶ │ Solder again or change     │
│ voltage of SIM whether     │         │ the PMU.                   │
│ they are normal.           │         └────────────────────────────┘
└────────────────────────────┘
                    │ Y
                    ▼
┌────────────────────────────┐    Y    ┌────────────────────────────┐
│ Check the outside components │ ────▶ │ Solder the empty or bad    │
│ SIM connector whether exist │        │ components.                │
│ soldering empty or short circuit │   └────────────────────────────┘
└────────────────────────────┘
                    │ N
                    ▼
        ┌─────────────────────────┐
        │       The end.          │
        └─────────────────────────┘
```

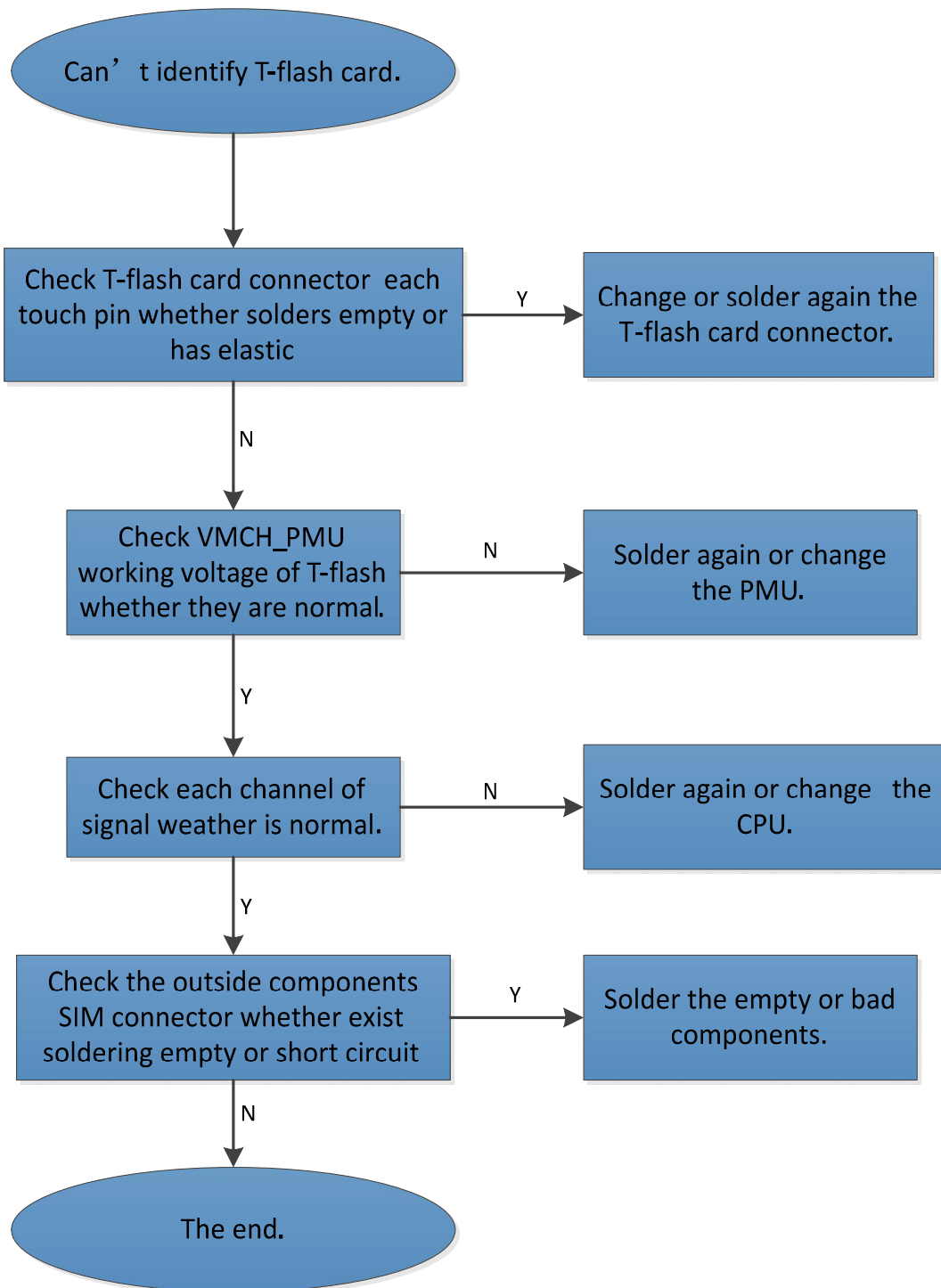## 20:SD card issue

Schematic Diagram

T card analysis process is as follows:

   1. Check if the working voltage of T card 'VDDSD0' normal and abnormal check line device on the welding is normal, then change - PMU - 2.

   2. Review the T card control signals' SDO_DAT0-3 ', 'SDO_CMD' and 'SDO_CLK' on a line welding device is normal.

   3. No problem with the above checks, the CPU is replaced.
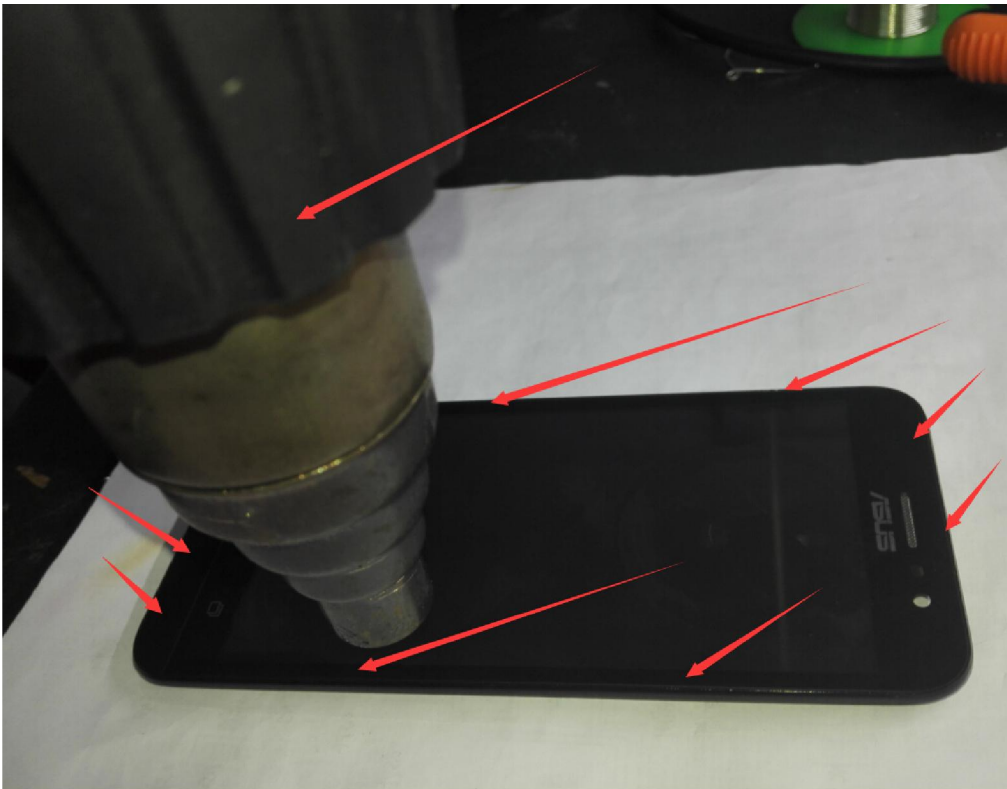
SD card Issue repair flow:

```
          Can't identify T-flash card.
                    │
                    ▼
┌─────────────────────────────┐        Y     ┌─────────────────────────┐
│ Check T-flash card connector │ ───────────> │ Change or solder again the│
│ touch pin whether solders    │              │ T-flash card connector.  │
│ empty or has elastic         │              └─────────────────────────┘
└─────────────────────────────┘
                    │ N
                    ▼
┌─────────────────────────────┐        N     ┌─────────────────────────┐
│ Check VMCH_PMU working       │ ───────────> │ Solder again or change   │
│ voltage of T-flash whether   │              │ the PMU.                 │
│ they are normal.             │              └─────────────────────────┘
└─────────────────────────────┘
                    │ Y
                    ▼
┌─────────────────────────────┐        N     ┌─────────────────────────┐
│ Check each channel of        │ ───────────> │ Solder again or change   │
│ signal weather is normal.    │              │ the CPU.                 │
└─────────────────────────────┘              └─────────────────────────┘
                    │ Y
                    ▼
┌─────────────────────────────┐        Y     ┌─────────────────────────┐
│ Check the outside components │ ───────────> │ Solder the empty or bad  │
│ SIM connector whether exist  │              │ components.              │
│ soldering empty or short     │              └─────────────────────────┘
│ circuit                      │
└─────────────────────────────┘
                    │ N
                    ▼
              The end.
```

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21:demolition TP step

1. Prepare gun heating stations or large network, the temperature setting of 100 degrees. The display on the heating stage is heated (100 ° Winds gale execution set aligned second gear display four weeks heating) When the display is heated to about 75-80 degrees, remove the display screen using a suction device with suction of TP Pull. Let the screen frame double-sided adhesive slowly opened,

2. You can also use a small blade to pry loose TP four weeks, when the double-sided TP username viscosity becomes TP hours can be removed , And then tear open the back of the motherboard's FPC , Hands from the keys to slowly put TP up.

TP heated aligned four weeks.

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