

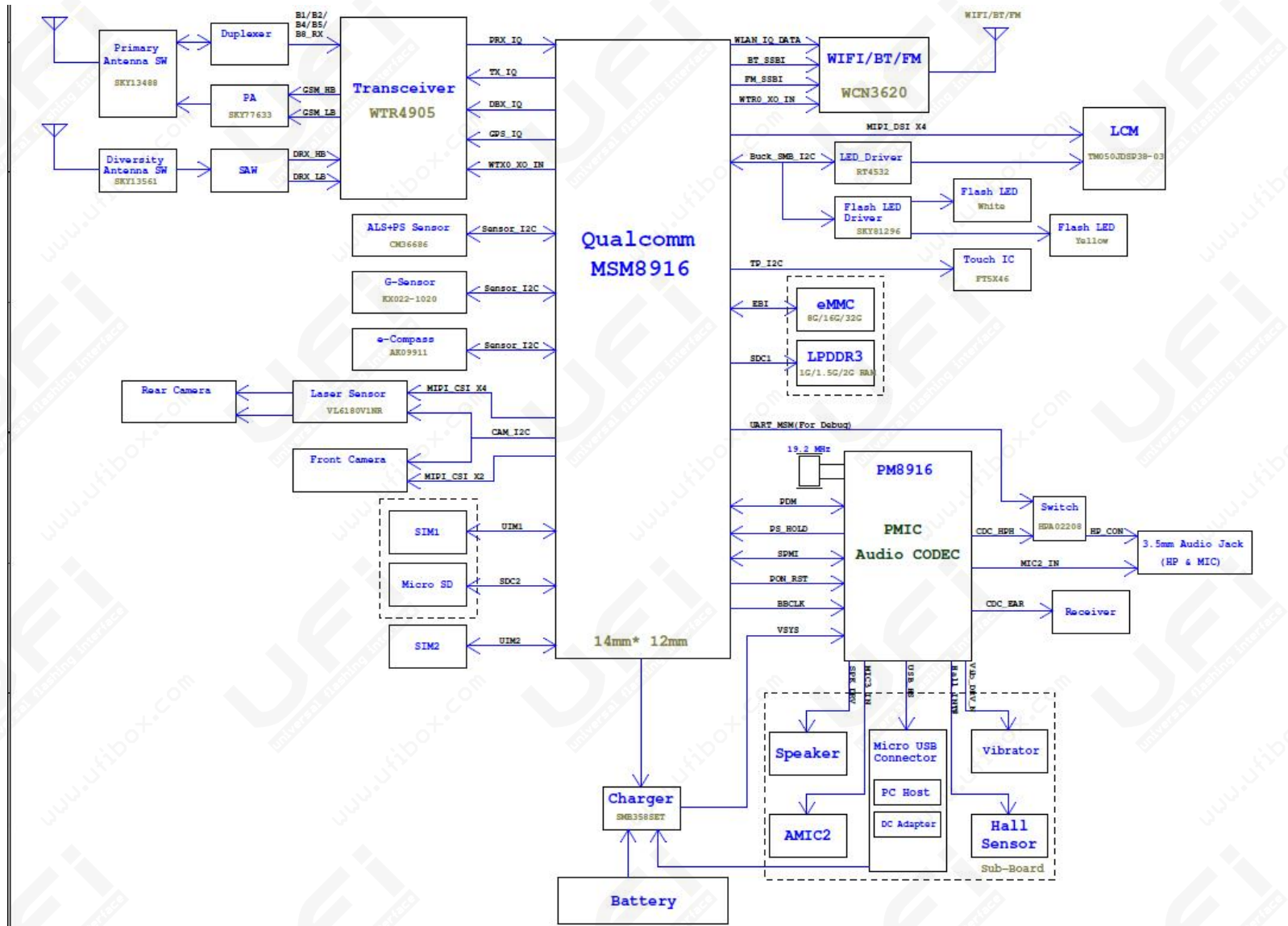
ZE550KL

Introduction & Training

2015/6/8

ZE550KL Outline

- **System Block Diagram**
- Component and PCB Board Introduction
- Power On Sequence
- Equipment Requirement
- Trouble Shooting Guide



ZE550KL Outline

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Outline Introduction (TOP)

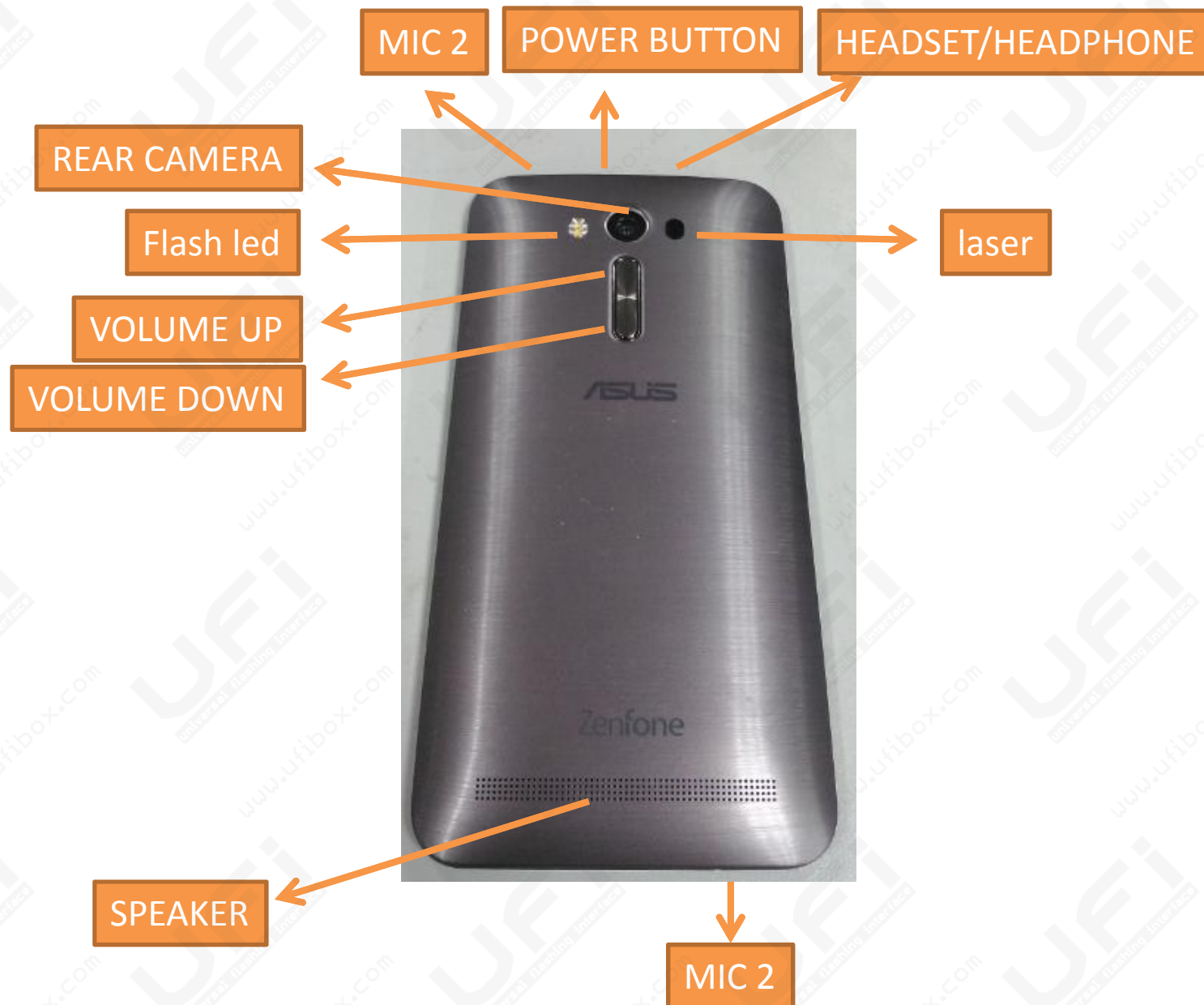
Proximity/ALPS Sensor

FRONT CAMERA

Reciever



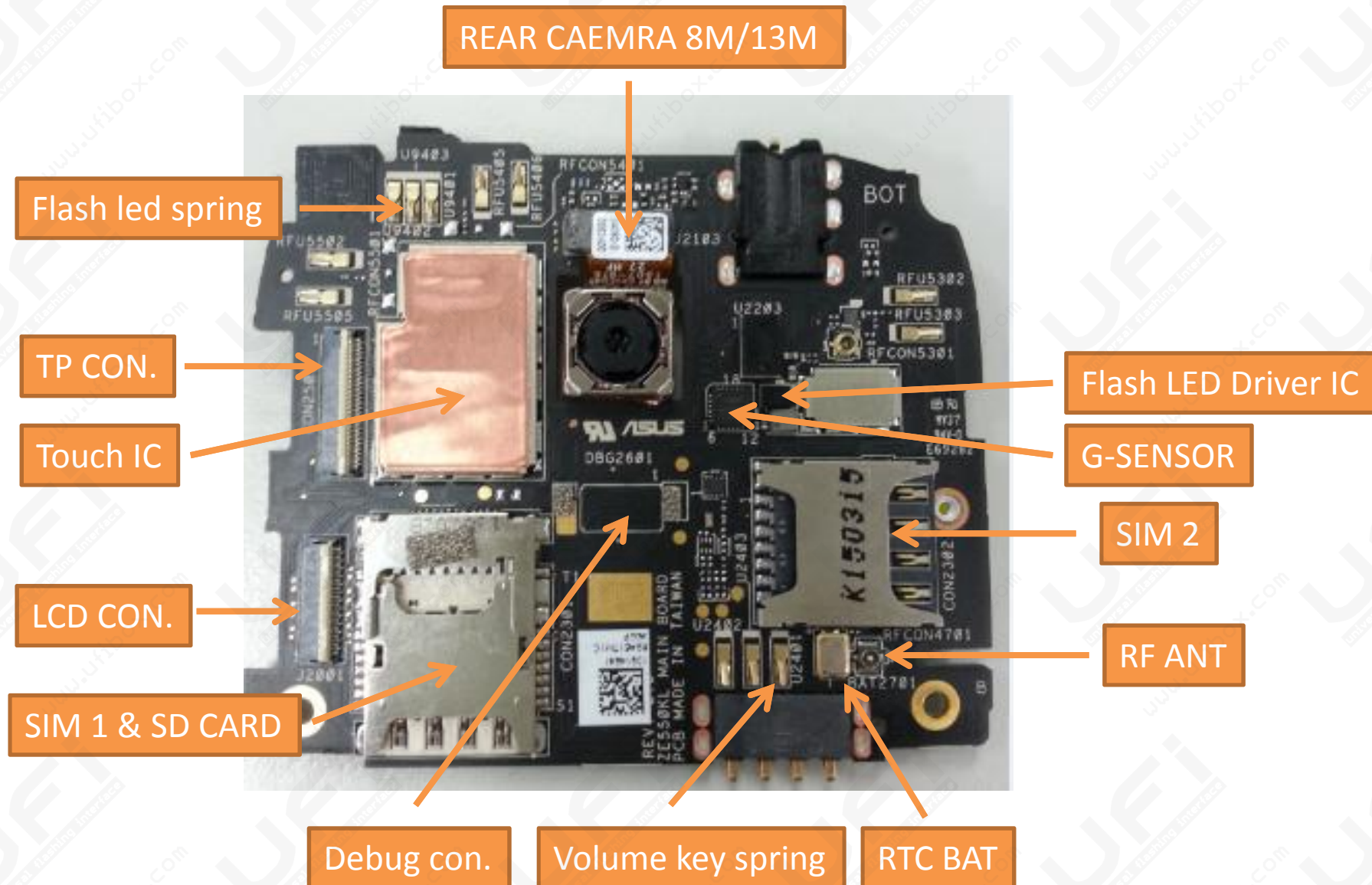
Outline Introduction (BOT)



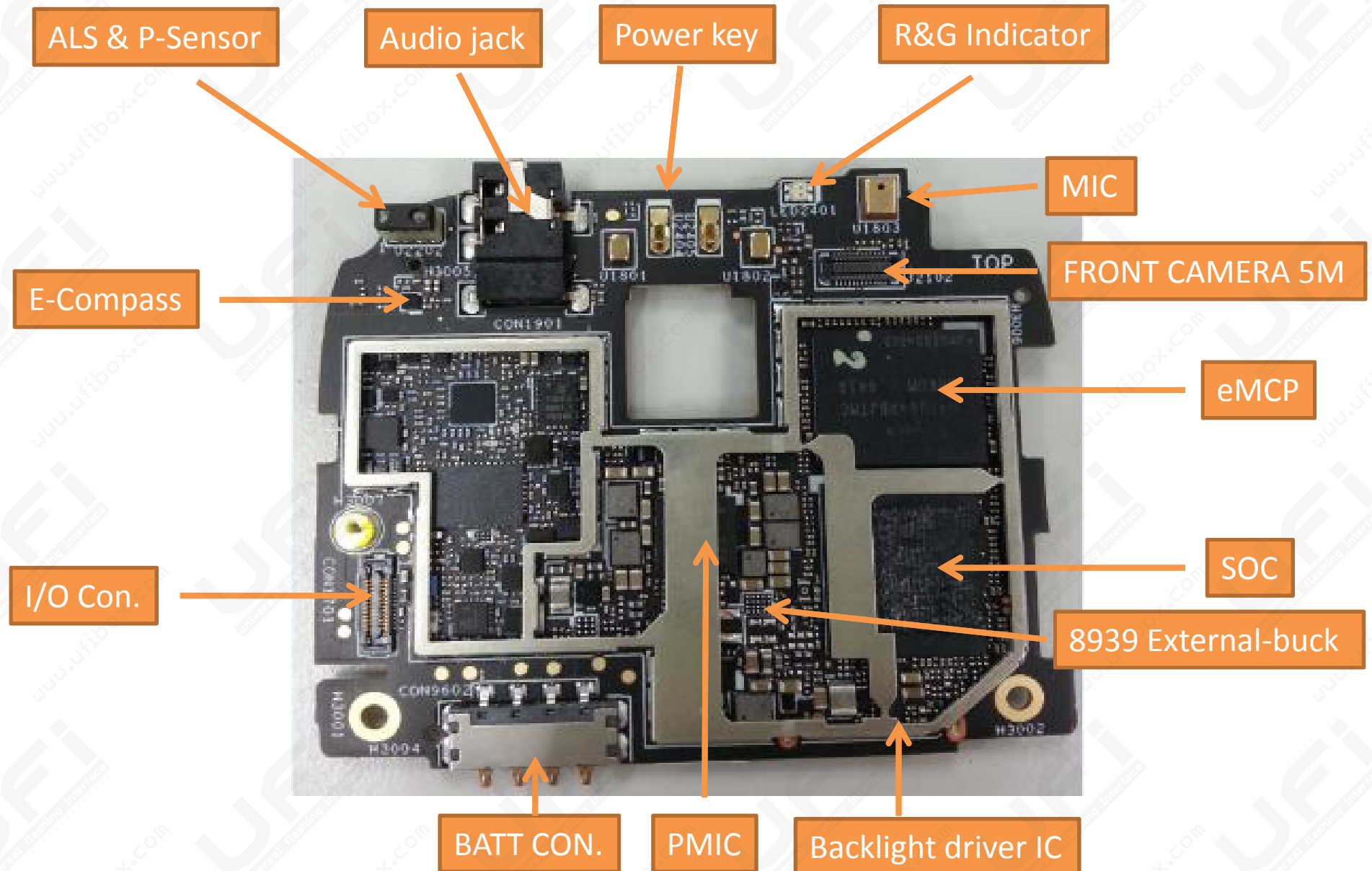
Outline Introduction (Take off the Back Cover)



PCB Board Introduction (BOTTOM)



PCB Board Introduction (TOP)



ZE550KL Outline

- System Block Diagram
- Component and PCB Board Introduction
- **Power On Sequence**
- Trouble Shooting Guide
- Debug Skill

POWER ON SEQUENCE

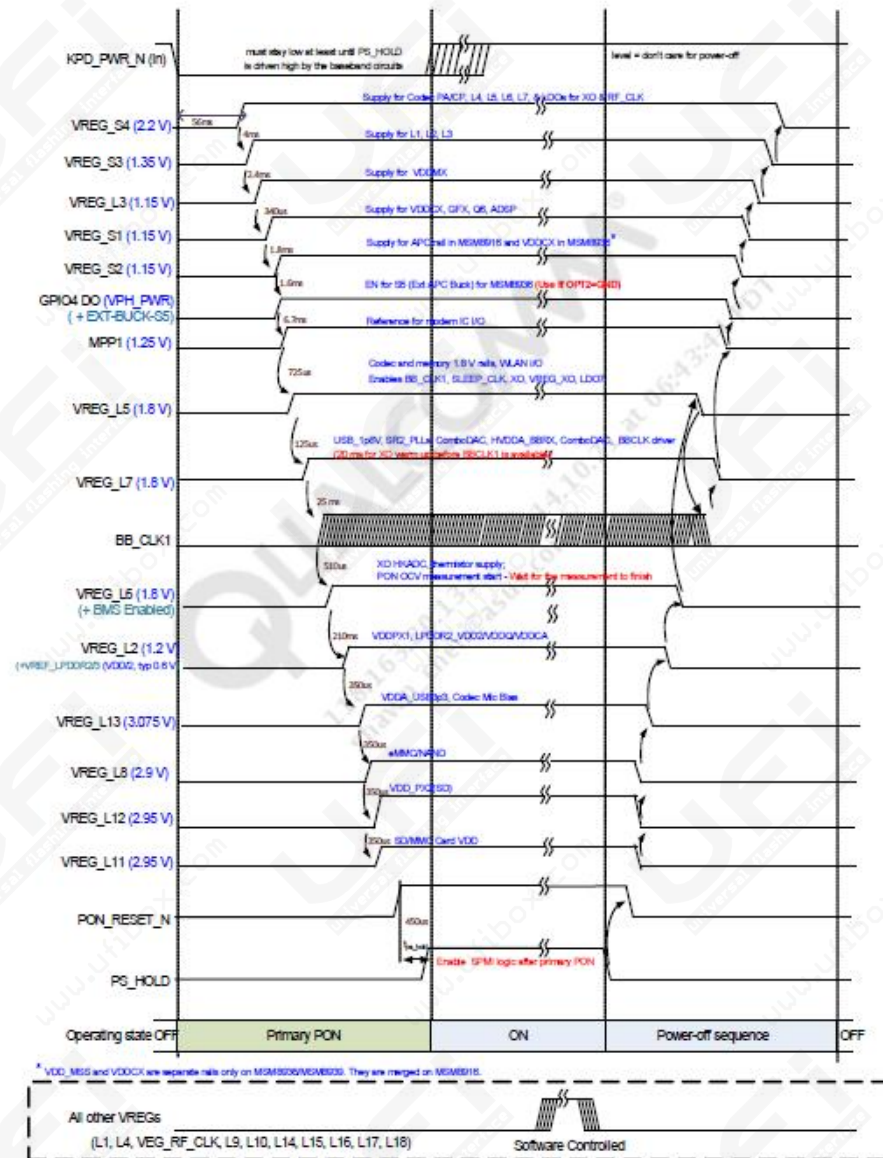


Figure 3-8 Poweron sequence

ZE550KL Outline

- System Block Diagram
- Component and PCB Board Introduction
- Power On Sequence
- **Trouble Shooting Guide**
- Debug Skill

Trouble Shooting Guide

1. 无法开机
2. 黑屏—可开机
3. Camera异常
4. p-sensor异常
5. E-compass异常
6. SD卡异常
7. Sim卡异常
8. TP 异常

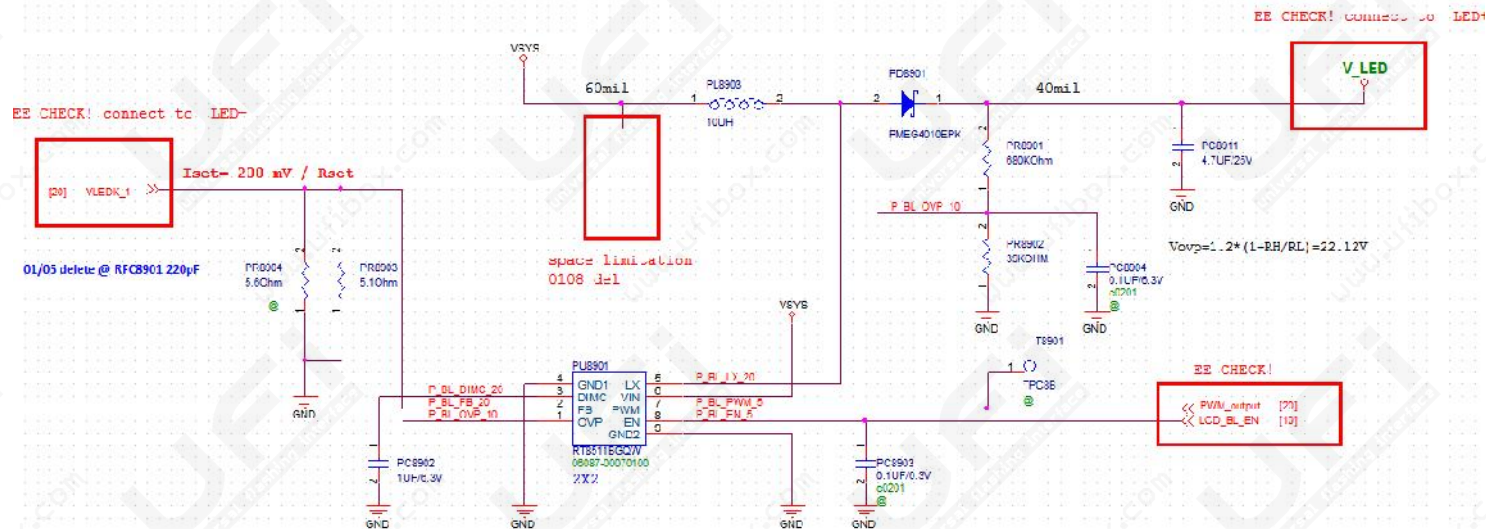
Trouble Shooting Guide

无法开机

- 接上NB，打开装置管理员，确认是否有抓到device；
- 量测 buck power是否起电（ S1,S2,S3,S4 ）
 - （1） buck power不起电，检查PMIC IC，以及周边零件制程；
 - （2） buck power起电，量测PS_hold信号，看是否上电并稳定高电平不掉；
- 若ps_hold上电，尝试烧录image,无法烧录则需检查eMCP是否有Mount完整
- 若ps_hold不上电，按照开机时序，用万用表量测各路power rail对地阻抗是否正常；
- 若接近0 ohm ,确认以上Power是否发生对地short或者是有零件打反；

黑屏—可开机

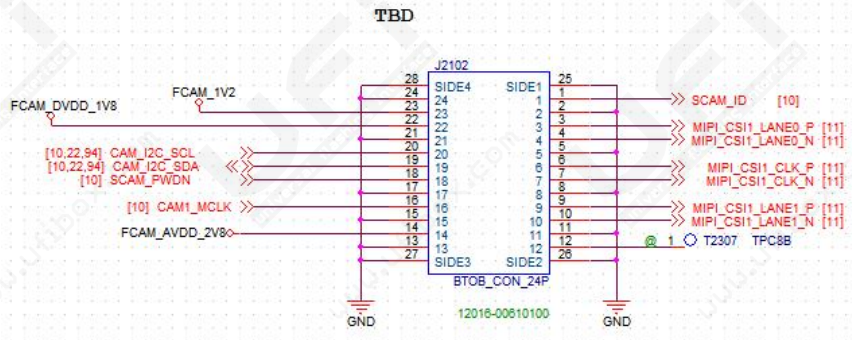
- 接上NB，打开装置管理员，确认有抓到device;
- 交换panel验证
- 若黑屏有背光，检查LCM mipi，reset信号;
- 若黑屏无背光; 确认PU8901极性正确;
- 确认V_LED电压是否正常, Boot 後> 5V;
- 确认PWM_OUT信号是否有输出;
- 确认LCD_BL_EN是否为high;



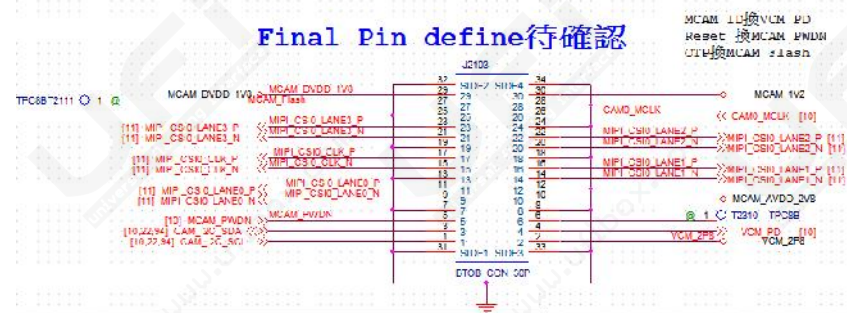
CAMERA异常

- 目检camere FPC;
- 交换camera module验证;
- 确认FCAM_DVDD_1V8, FCAM_AVDD_2V8,FCAM_1V2皆有电;
- 若FCAM_1V2没电, 确认CAU2102;

5M Secondary Camera



13M Main Camera



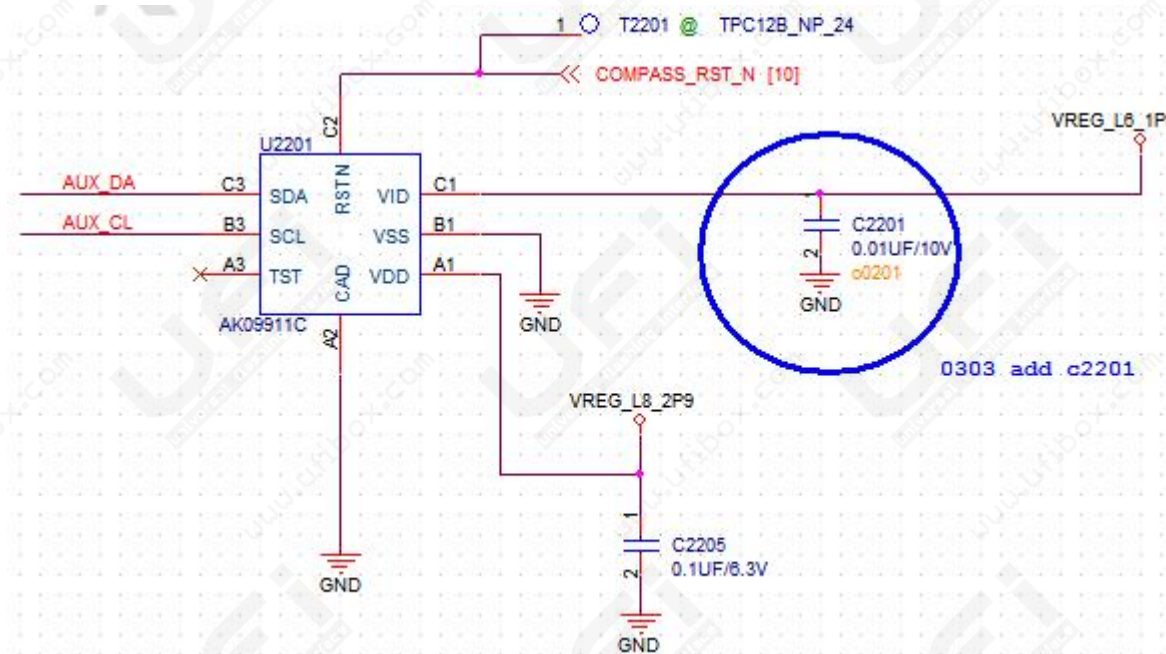
P-Sensor/Light Sensor異常

-
- VREG_L8_2P9
- R2201 220ohm
- C2204 2.2uF/6.3V
- C2206 1uF/6.3V
- U2202 CM36688M3OE-H5
- ALS_VDD
- ALS_INT_N [10]
- T2203 @ TPC12B_NP24

Trouble Shooting Guide

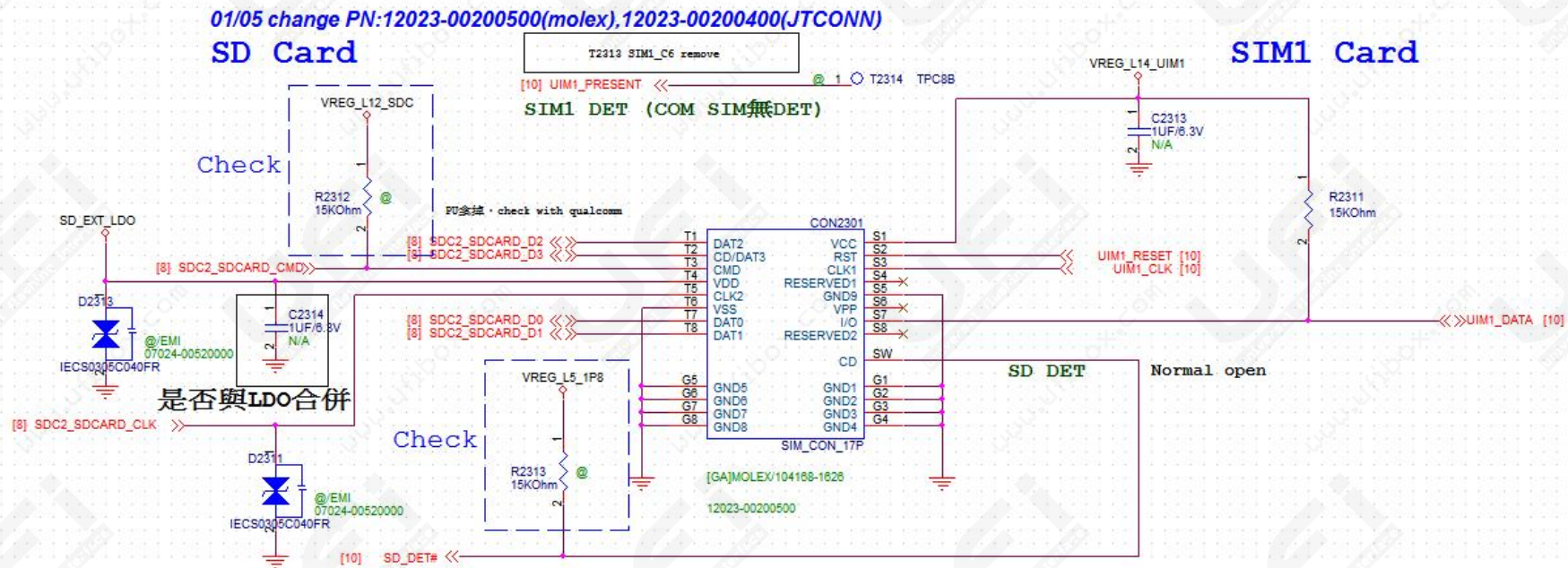
e-compass异常

- 确认VREG_L6_1P8与VREG_L8_2P9皆有电
- 确认SENSOR_I2C有通



SD卡异常

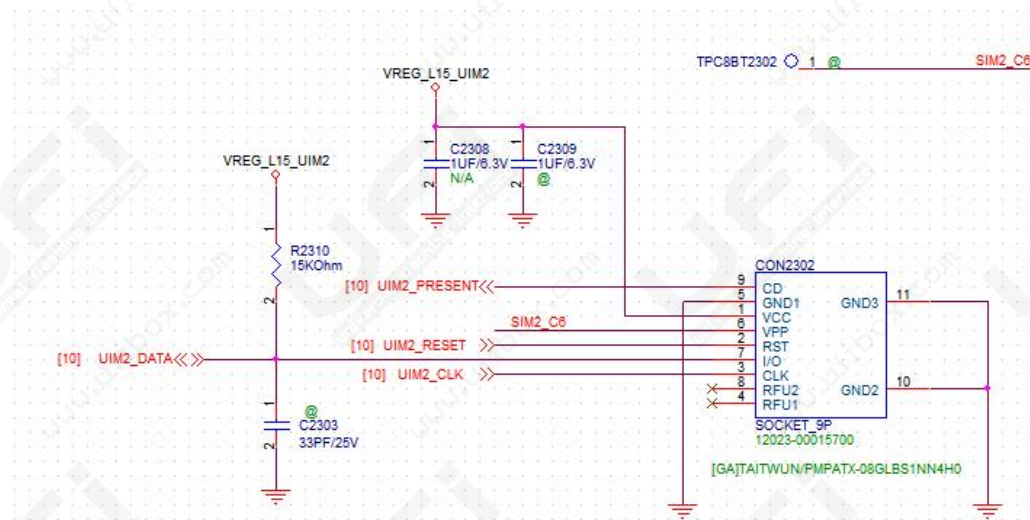
1. 目检，有无空焊；
2. 插入SD card时，SD_DET#是否拉low；
3. 確認SD_EXT_LDO电压是否为3V，若无电压，檢查U2301；
4. 若有3V輸出，檢查DATA0~3/CMD/CLK；



Trouble Shooting Guide

SIM卡异常

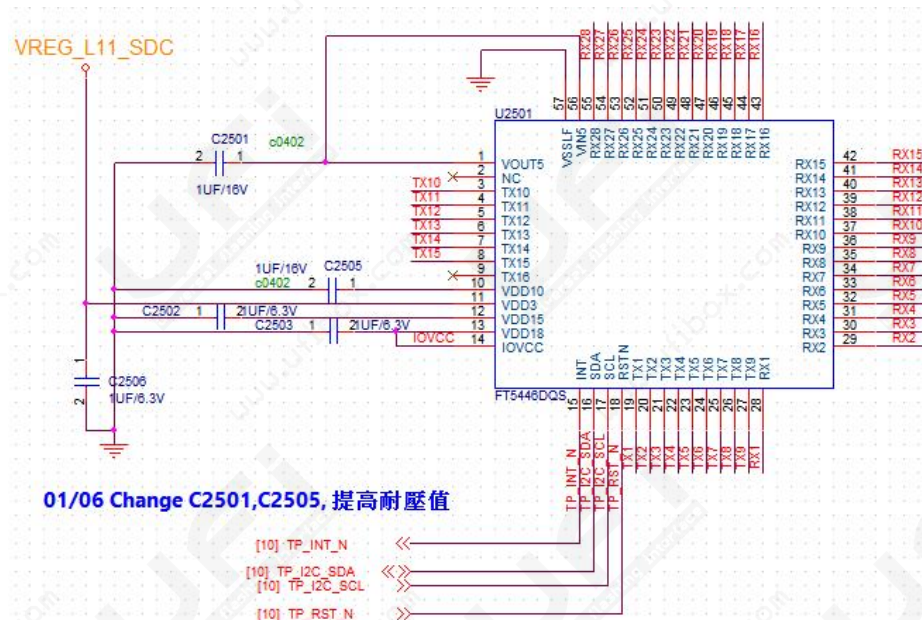
1. 目检，有无空焊；
2. For sim1:确认VREG_L14_UIM1电压；
3. For sim2: 插入SIM2 card时， UIM2_PRESENT是否拉low；
确认VREG_L15_UIM2电压; UIM2_RESET是否拉high;



Trouble Shooting Guide

TP 异常

- 交换touch panel验证;
- 确认VREG_L11_SDC是否有电压;
- 确认TP_RST_N是否为high;
- 确认TP_INT_N是否有high-low变化;



Thanks !

Yammy_zhao@asus.com