

### 3. FAILURE LIST

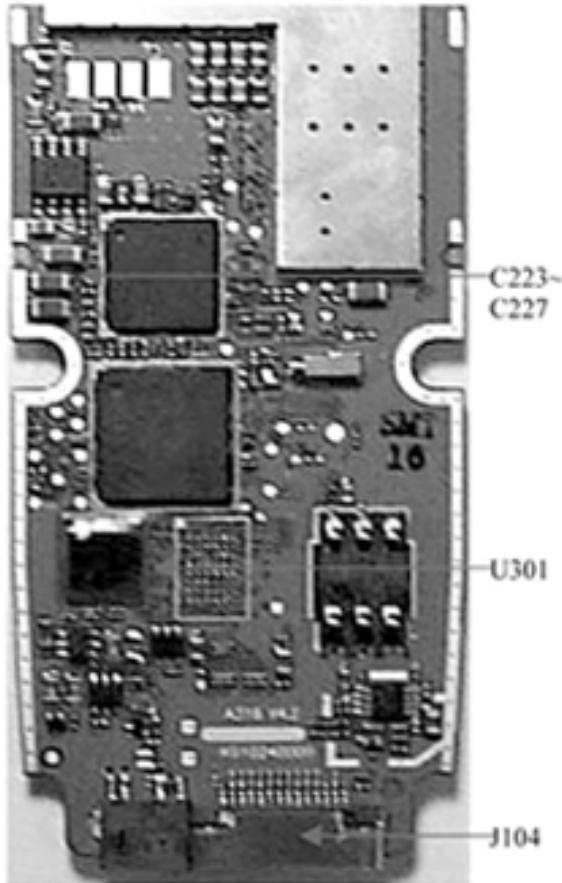
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## 3. FAILURE LIST

FAILURE ITEM	L1	L2	L3
NO RING TONE		V	
RING TONE DISTORTION		V	
NO KEY TONE		V	
AUDIO NOISE	V	V	
POOR VOICE QUALITY	V	V	
LOW VOICE VOLUME	V	V	
RECEIVER / EARPIECE MUTE	V	V	
POOR HANDFREE VOICE QUALITY		V	
TOTALLY DEAD/NO POWER		V	V
UNEXPECTED POWER ON			V
UNEXPECTED POWER OFF / POWER OFF BY PLUG IN A EARPIECE			V
RANDOM TIME DISPLAY		V	
CLOCK RESET AT POWER ON / CLOCK DEAD		V	V
NO SERVICE FOUND/NO NETWORK REGISTER			V
ROAMING AT POWER ON / UNEXPECTED INTERNATIONAL ROAMING		V	
WRONG IMEI CODE		V	
LCD NOT DISPLAY		V	
LCD DISPLAY MISSING ROW/LCD DISPLAY DETECT		V	
BLACK LCD		V	
FLICKING LCD DISPLAY / DISPLAY UNSTABLE		V	
BLACK LINE ON LCD DISPLAY		V	
RANDOM LCD DISPLAY		V	
LED FAIL		V	
WEAK SIGNAL/ECHO IN TALKS			V
NO TRANSMIT / RECEIVE			V
ANTENNA DEFECT	V		
INCOME CALLS CAN'T BE PICKED UP			V
REMOTE SIDE AUDIO MUTE		V	V
SIGNAL INTERCEPT			V
BAD CHARGER CONNECTOR		V	
CAN'T POWER ON AFTER CHARGING		V	V
SHORT WAITING HOURS		V	V
HIGH POWER CONSUMPTION		V	V
BATTERY DAMAGE	V		
BATTERY CAN'T BE CHARGED	V		
BATTERY LEVEL DON'T DISPLAY			V
BATTERY LEVEL DISPLAY NOT CORRECT			V
INCOMPATIBLE WITH BATTERY	V		
SIM CARD UNRECOGNIZE		V	V
BAD SIM CARD CONTACT		V	
UNEXPECTED SIM CARD LOCK			V
HOUSING DAMAGE	V		
BAD KEYPAD RESPONSE	V	V	

## 4. TROUBLE SHOOTING

### Power Supply Failure



#### a) Failure :

- Problem with turning on mobile phone

#### Solution:

- Test the set's current by using battery simulator: observe the value of current used

#### - Case 1:

If the Current is higher than 300mA, please check C223~C227, if short circuit, Replace it.

#### - Case 2:

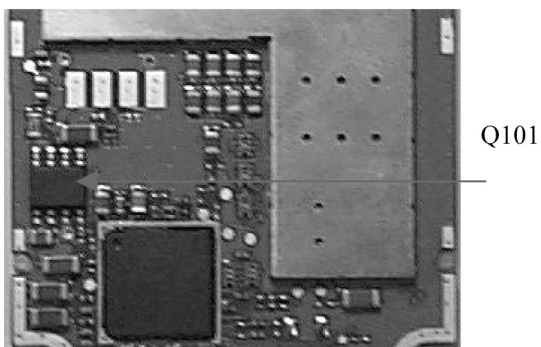
In the case the current is between 10 and 30mA, The cause could be FLASH ROM(U301) defect, please use monitor to re-install software. If the software can't be re-install through serial port, use JTAG interface to re-install software.

#### b) Failure :

- Problem with charging the battery
- Charging connector damage

#### Solution :

- J104 may be bad connection or broken, check the connector.
- J104 may be a cold soldering, Please re-solder again.
- If J104 is broken, replace the connector carefully



#### c) Failure :

- The value of the charging current look like short circuit.

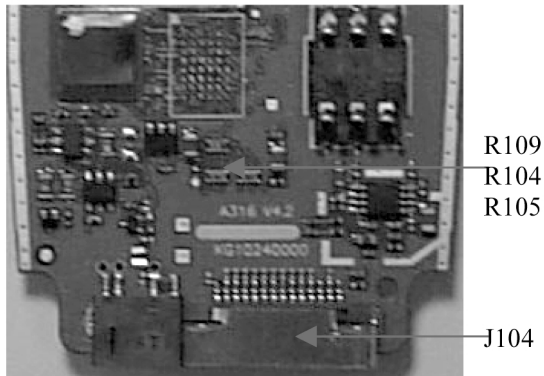
#### Solution :

- Re-install the software
- Check Q101, if short circuit, replace it.

## 4. TROUBLE SHOOTING

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### Software Download Failure



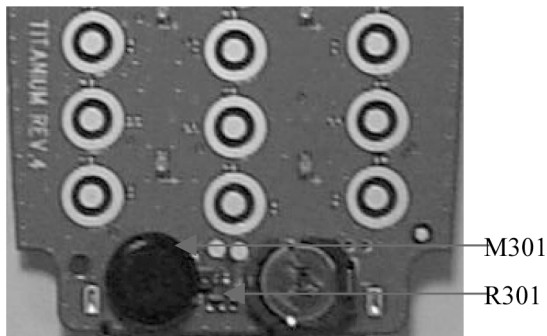
#### a) Failure :

- Problem with software download

#### Solution :

- J104 may be bad connection or broken, check the connector.
- J104 may be a cold soldering, Please re-solder again.
- Check R104, R105 & R109, if cold soldering, Please re-solder again.

### Voice Function Failure



#### a) Failure :

- Microphone voice failure

#### Solution :

- Check M301, the microphone holder may be bad connection
- Test the bias voltage on R301, it should be 2.5V,
- Replace Microphone, if microphone holder & bias voltage is fine.

#### b) Failure :

- Speaker failure

#### Solution :

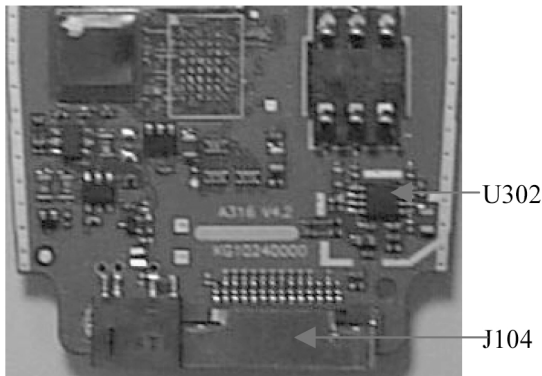
- check speaker connector, it may be bad connection.
- Check U302 and related circuit, if short circuit, replace it.

#### c) Failure :

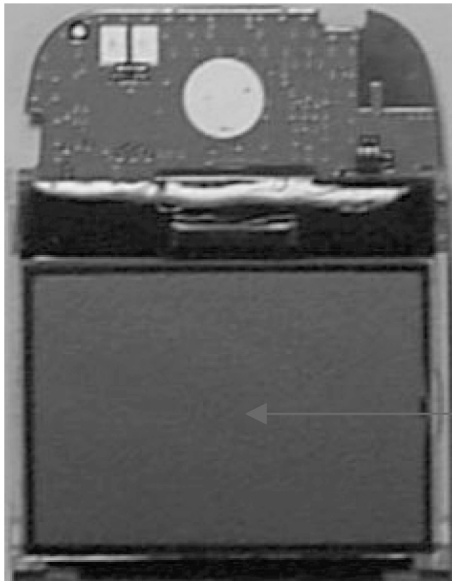
- Headset function failure

#### Solution :

- J104 may be bad connection or broken, check the connector.
- J104 may be a cold soldering, Please re-solder again.
- If J104 is broken, replace the connector carefully



### Display Function Failure



#### a) Failure :

- No display on LCD

#### Solution :

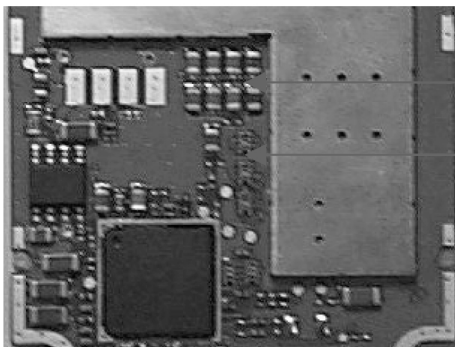
- Test the capacitance of C319~C327 by using multi-meter, the value should be infinity. Replace the capacitor, which has any impedance.
- Test the resistance of R311~R313, if cold soldering, Please re-solder again.
- Otherwise, replace LCD module .

#### b) Failure :

- Broken LCD

#### Solution :

- Replace whole LCD module.
- Solder the LCD module with care.



#### c) Failure :

- Fails on dark display, black line, short of lines, unstable brightness

#### Solution :

- Test R311,~R313, if cold soldering, Please re-solder again.
- Test C319~C327, if cold soldering, Please re-solder again.
- Otherwise, Replace whole LCD module.

## 4. TROUBLE SHOOTING

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### d) Failure :

- No Back-light

### Solution :

- Replace the LED that doesn't light up including any failing parts of LED.
- If all of the LED fails, Please check Q301, Q302 and related circuits.

