

# **Service Repair Documentation**

# Level 2.5 – CFX 65



| Release | Date       | Department       | Notes to change |
|---------|------------|------------------|-----------------|
| 1.0     | 10.11.2004 | ICM MP CCQ GRM T | New document    |
| 1.1     | 09.12.2004 | ICM MP CCQ GRM T | Code Changes    |
|         |            |                  |                 |

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# Introduction

This Service Repair Documentation is intended to carry out repairs on Siemens repair level 2.5. The described failures shall be repaired in Siemens authorized local workshops only.

All repairs have to be carried out in an ESD protected environment and with ESD protected equipment/tools. For all activities the international ESD regulations have to be considered.

Assembling/ disassembling has to be done according to the latest CFX65 Level 2 repair documentation. It has to be ensured that every repaired mobile phone is checked according to the latest released General Test Instruction document (both documents are available in the Technical Support section of the C-market).

If you have any questions regarding the repair procedures or technical questions do not hesitate to contact our technical support team in Kamp-Lintfort, Germany:

# Scrap Handling: All Scrap information given in this manual are related to the SCRAP-Rules and instructions.

## Attention: Consider soldering rules, avoid excessive heat

Tel.: +49 2842 95 4666 Fax: +49 2842 95 4302 e-mail: st-support@klf.siemens.de



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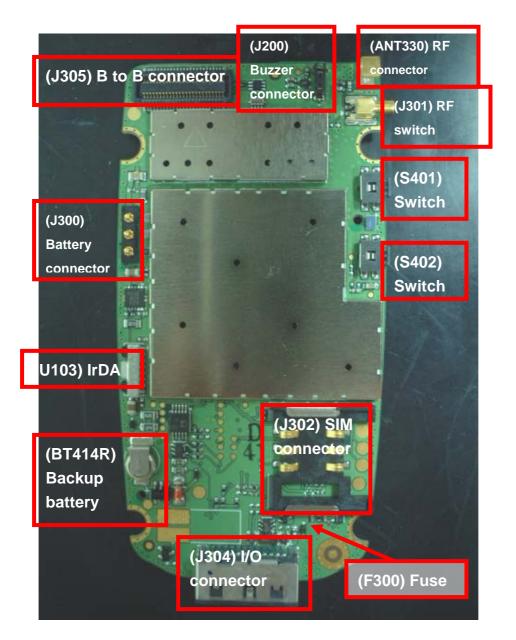
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## **CFX 65 board layout**

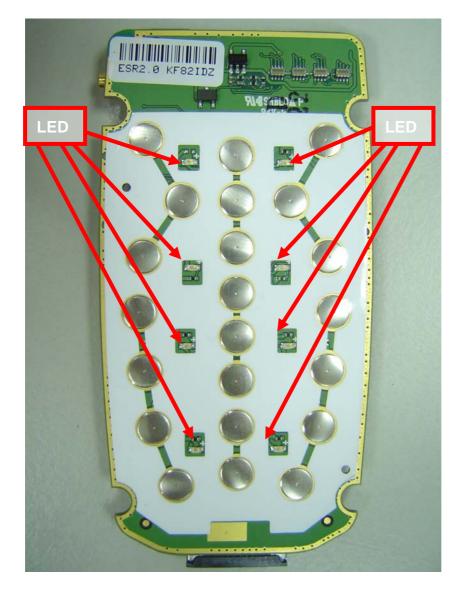
Jigs, Tools and working materials for all described repairs:

- hot air blower
- soldering iron
- a pair of tweezers
- flux
- solder



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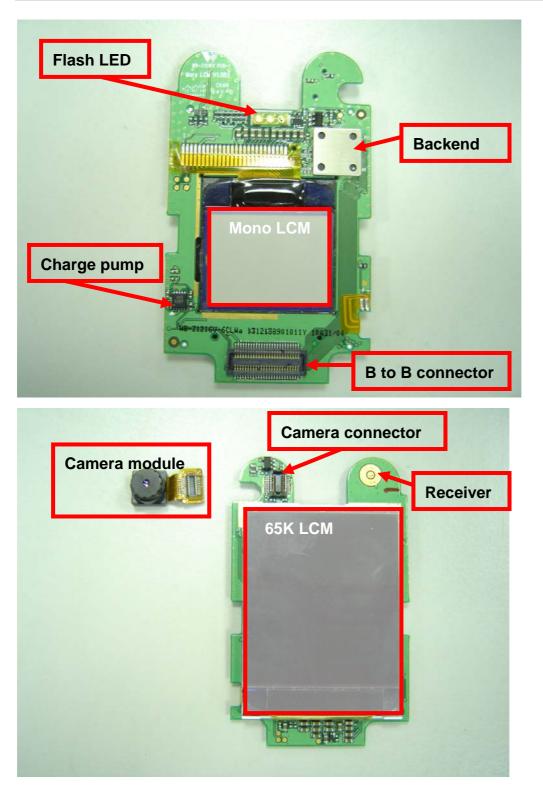


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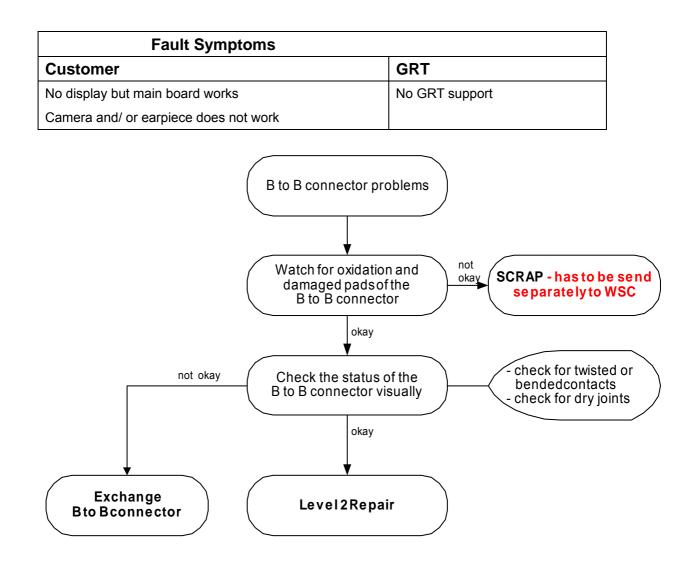
# **LCM** layout



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# SIEMENS Mobile

## 1. B to B connector (J305)



#### Connector board to board

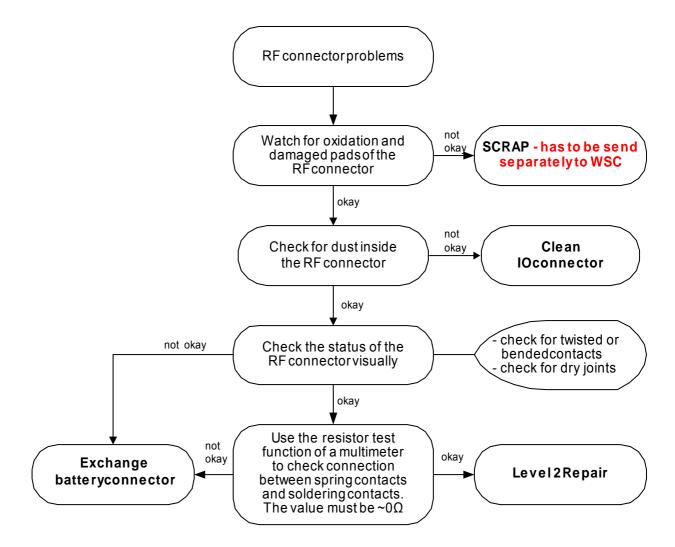
| E-commerce order number: | L50634-Z97-C377                       |
|--------------------------|---------------------------------------|
| Soldering temperature:   | 240 - 255°C                           |
| IRIS Diagnose Code:      | BA000 Accessories Camera              |
|                          | 21000 Display Performance             |
|                          | 22000 Display Background Illumination |

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# SIEMENS mobile

## 2. RF switch (ANT300)

| Fault Symptoms     |                |  |
|--------------------|----------------|--|
| Customer           | GRT            |  |
| Network search     | No GRT support |  |
| No location update | No GRT support |  |



#### Connector RF

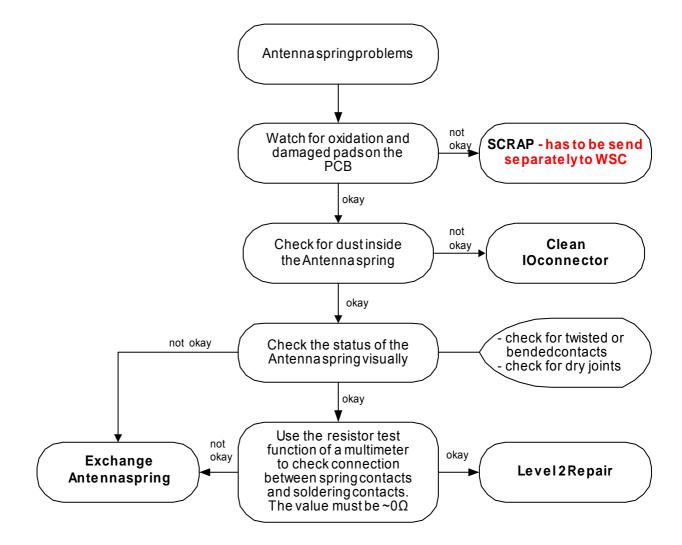
Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding

| E-commerce order number: | L50634-Z97-C375                                   |
|--------------------------|---|
| Soldering temperature:   | 240 - 255°C                                       |
| IRIS Diagnose Code:      | 45100 Interface / Antenna connector / No function |

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### 3. Antenna Spring (J301)

| Fault Symptoms |                |
|----------------|----------------|
| Customer       | GRT            |
| Poor network   | No GRT support |
| No network     | No GRT support |



#### Antenna Spring

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards. E-commerce order number: L50658-A136-B16

Soldering temperature: 240 - 255°C

IRIS Diagnose Code: 83140 TX power fault internal antenna

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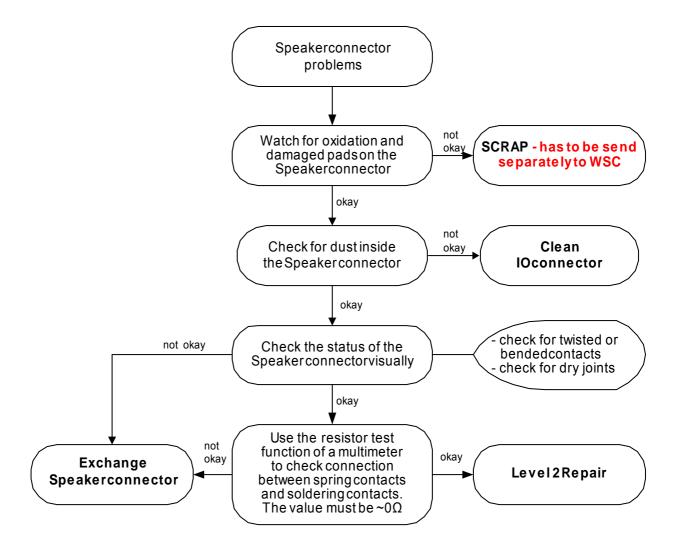
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# SIEMENS **M**obile

#### 4. Speaker connector (J200)

| Fault Symptoms                          |                |
|---|----------------|
| Customer                                | GRT            |
| No sound from speaker                   | No GRT support |
| The speaker is sometimes barely to hear | No GRT support |



#### Speaker connector

Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding

| E-commerce order number: | L50634-Z97-C381 |
|--------------------------|-----------------|
| Soldering temperature:   | 240 - 255°C     |
| IRIS Diagnose Code:      | 72110 Accustics |

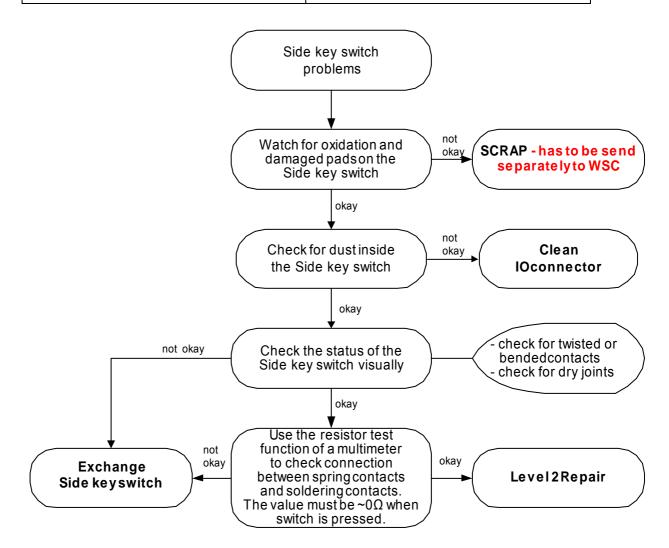
| IRIS Diagnose Code:   | 72110 Accusti |
|-----------------------|---------------|
| in the Diagnose obue. |               |

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# SIEMENS mobile

## 5. Side key switch (S400,S401)

| Fault Symptoms             |                |
|----------------------------|----------------|
| Customer                   | GRT            |
| No function while pressing | No GRT support |
| Pressing feeling is bad    | No GRT support |



#### Side key switch

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding

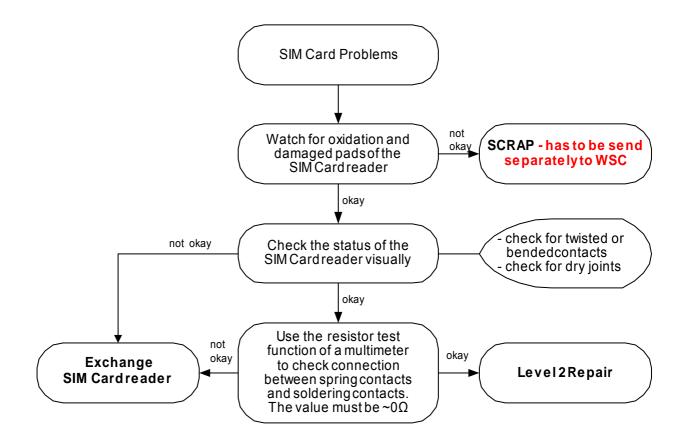
| E-commerce order number: | L50615-Z77-C240   |
|--------------------------|-------------------|
| Soldering temperature:   | 240 - 255°C       |
| IRIS Diagnose Code:      | 34100 Keys / Side |

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# 6. SIM reader (J302)

| Fault Symptoms              |                |
|-----------------------------|----------------|
| Customer                    | GRT            |
| Handset does not accept SIM | No GRT support |
| Can not read SIM            | No GRT support |



#### SIM Reader

| E-commerce order number: | L50634-Z97-C374                                      |
|--------------------------|--|
| Soldering temperature:   | 240 - 255°C  |
| IRIS Diagnose Code:      | 43300 Interface / SIM Cardreader / Mechanical Damage |

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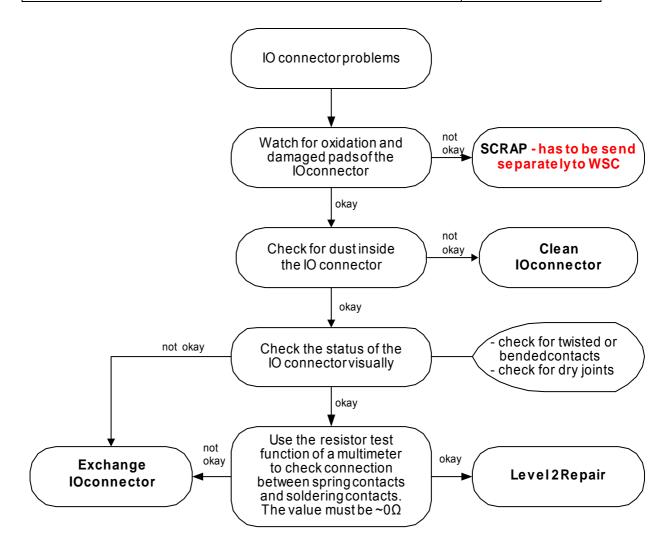
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## 7. I/O connector (J304)

| Fault Symptoms  |                |
|---|----------------|
| Customer  | GRT            |
| Charging problems   | No GRT support |
| Problems with external loudspeaker or microphone when using a car kit | No GRT support |
| Problems with accessories connected at the I/O connector              | No GRT support |



Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding

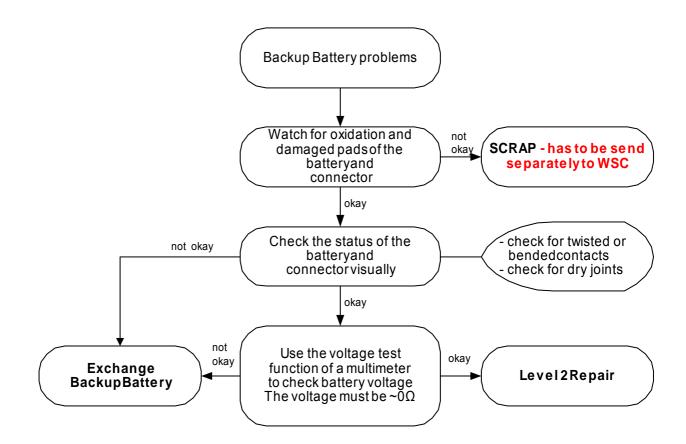
| E-commerce order number: | L50634-Z97-C375                                       |
|--------------------------|---|
| Soldering temperature:   | 240 - 255°C   |
| IRIS Diagnose Code:      | 46100 Interface/Charging connector/ Mechanical damage |

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## 8. Backup battery (BT414R)

| Fault Symptoms   |                |
|--|----------------|
| Customer   | GRT            |
| After removing and reassembling the battery, the time is not correct or default value. | No GRT support |



#### Backup battery

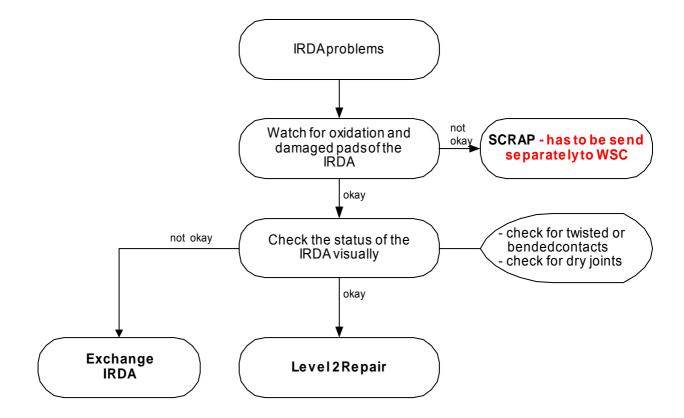
| E-commerce order number: | L50645-K1310-X320                          |
|--------------------------|--|
| Soldering temperature:   | 220 - 230°C                                |
| IRIS Diagnose Code:      | 16000 Battery / Backup Battery Performance |

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# 9. IRDA (U103)

| Fault Symptoms                  |                |
|---------------------------------|----------------|
| Customer                        | GRT            |
| No infrared connection possible | No GRT support |



#### IRDA

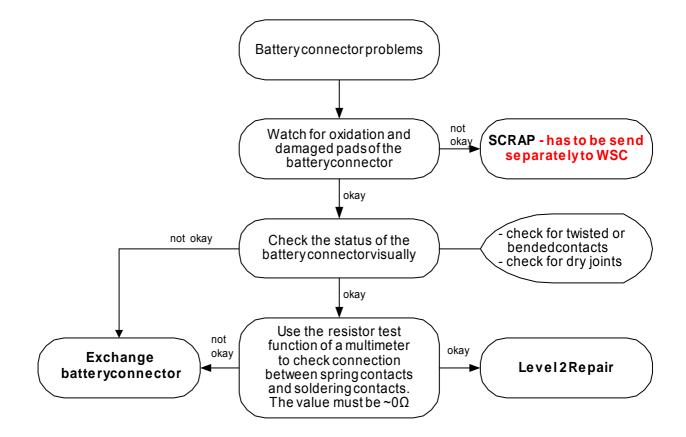
| E-commerce order number: | L50610-U6153-D670                           |
|--------------------------|---|
| Soldering temperature:   | 240 - 255°C                                 |
| IRIS Diagnose Code:      | 41000 Interfaces / IRDA / No function       |
|                          | 41300 Interfaces / IRDA / Mechanical damage |

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#### 10. Battery connector (J300)

| Fault Symptoms            |                |
|---------------------------|----------------|
| Customer                  | GRT            |
| Mobile does not switch on | No GRT support |



#### Battery connector

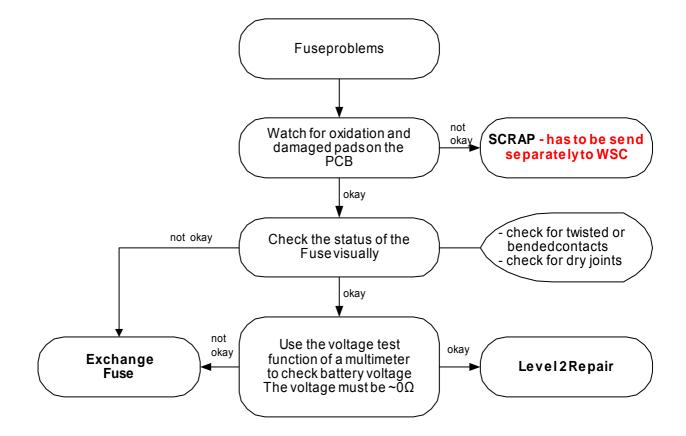
| E-commerce order number: | L50634-Z97-C376                   |
|--------------------------|-----------------------------------|
| Soldering temperature:   | 240 - 255°C                       |
| IRIS Diagnose Code:      | 13000 Battery / Mechanical damage |

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## 11. Fuse (F300)

| Fault Symptoms                 |                |
|--------------------------------|----------------|
| Customer                       | GRT            |
| Battery charging does not work | No GRT support |



#### Fuse

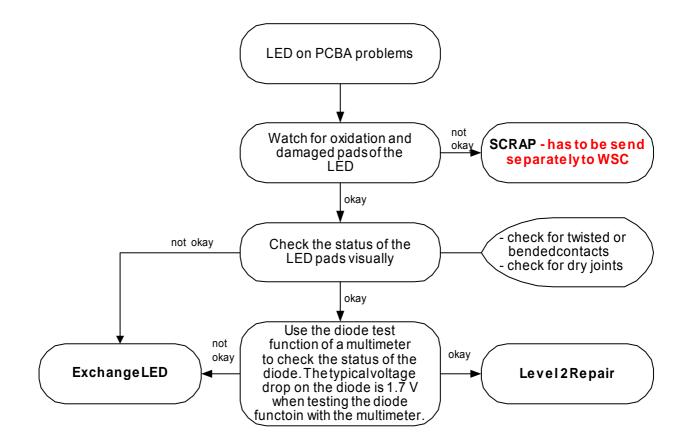
| E-commerce order number: | L50645-A820-Y20                              |
|--------------------------|--|
| Soldering temperature:   | 240 - 255°C                                  |
| IRIS Diagnose Code:      | 11000 Battery / No charging / Deep discharge |

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#### 12. LED on PCBA

| Fault Symptoms                  |                |
|---------------------------------|----------------|
| Customer                        | GRT            |
| LED does not work or not bright | No GRT support |



#### LED

Use soldering iron to remove defective component. Avoid excessive heat! Watch surrounding components! Resolder new component afterwards.

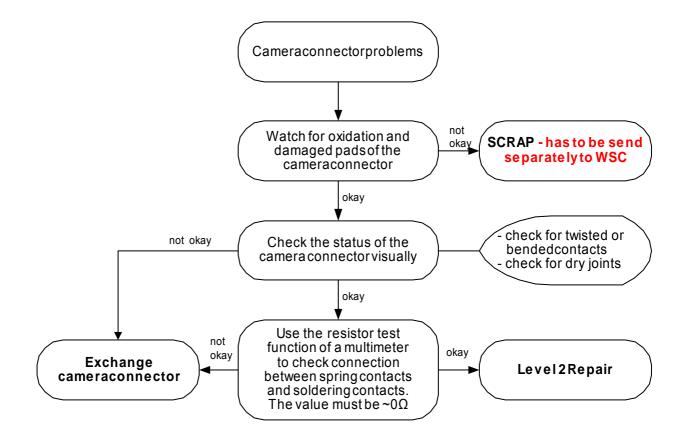
E-commerce order number:L50640-L2123-D670Soldering temperature:240 - 255°CIRIS Diagnose Code:36000 Keys / Illumination

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#### 13. Camera connector

| Fault Symptoms     |                |
|--------------------|----------------|
| Customer           | GRT            |
| Camera malfunction | No GRT support |



#### Camera connector

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding

| components! | Resolder new | component | afterwards. |
|-------------|--------------|-----------|-------------|
|             |              |           |             |

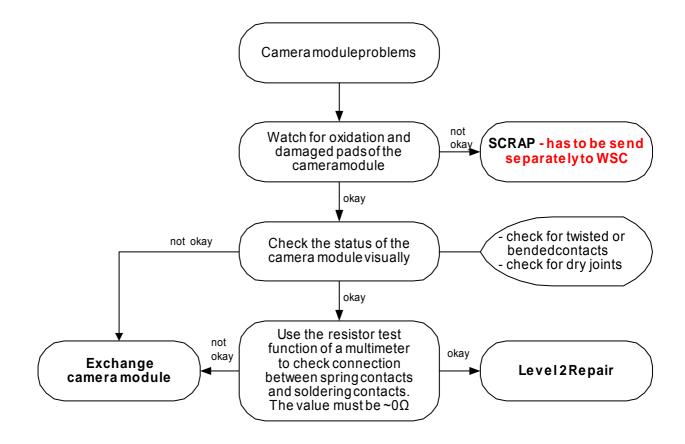
| E-commerce order number: | L50634-Z97-C378            |
|--------------------------|----------------------------|
| Soldering temperature:   | 240 - 255°C                |
| IRIS Diagnose Code:      | BA000 Accessories / Camera |

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#### 14. Camera module

| Fault Symptoms     |                |
|--------------------|----------------|
| Customer           | GRT            |
| Camera malfunction | No GRT support |



#### Camera module

Use hot air blower to remove defective component. Avoid excessive heat! Watch surrounding

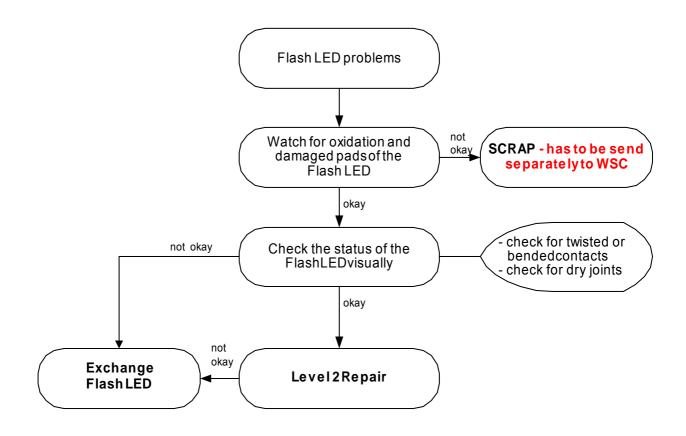
| E-commerce order number: | L50653-Z5-C297             |
|--------------------------|----------------------------|
| Soldering temperature:   | 240 - 255°C                |
| IRIS Diagnose Code:      | BA000 Accessories / Camera |

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# 15. Flash LED on the LCM

| Fault Symptoms           | Solution       |
|--------------------------|----------------|
| Customer                 | GRT            |
| -Flash LED does not work | No GRT support |
| -Flash LED not bright    |                |



#### **Connector Flash LED**

| E-commerce order number: | L50640-L2106-D670  |
|--------------------------|--|
| Soldering temperature:   | 240 - 255°C  |
| IRIS Diagnose Code:      | 9B300 Functionality / Integrated Camera / Flashlight defective |

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