

CROSSCALL

CORE-S5



DISASSEMBLY - ASSEMBLY GUIDE

| | |
|--|-----------|
| Contents | |
| INTRODUCTION | 3 |
| WARNINGS | 3 |
| ELECTROSTATIC DISCHARGES, WORKING ENVIRONMENT | 5 |
| DISASSEMBLY, ASSEMBLY AND EXCHANGE OF PARTS | 7 |
| Dis-assembly of the Shell A and Shell B | 7 |
| Remove the SIM tray | 7 |
| Remove the Shell A assembly and Shell B assembly | 7 |
| View of the Shell A assembly and Shell B assembly | 8 |
| Assembly the Shell B assembly | 8 |
| Shell B assembly component replacement | 9 |
| View of the Shell B assembly | 9 |
| Replacement of Magconn FPC | 10 |
| Dis-assembly the Magconn FPC | 10 |
| Assembly the Magconn FPC | 10 |
| Replacement of Speaker | 11 |
| Disassembly the speaker | 11 |
| Assembly the speaker | 12 |
| Shell A assembly component replacement | 13 |
| View of the Shell A assembly | 13 |
| Disassembly the Bracket panel (up) | 14 |
| Disassembly the Battery | 15 |
| Disassembly the Bracket panel (Down) | 16 |
| Disassembly the Main board assembly | 16 |
| View of Main board assembly | 17 |
| Disassembly the LCD | 18 |
| View of LCD | 18 |
| INFORMATION FOR RECYCLERS | 20 |
| BLOCK DIAGRAM | 26 |

INTRODUCTION

Crosscall was founded more than 10 years ago on a commitment: to manufacture durable mobile phones, even under the most difficult conditions of use.

It is thanks to its years of experience and the special attention of its teams to design, industrialization and quality control that Crosscall offers its users a **5-year manufacturer's warranty** and spare parts available for 10 years. on all products from the new CORE range, which is exceptional in the world of telephony.

This document is a disassembly and reassembly guide for the **Crosscall CORE-S5** smartphone.

It also explains what operations must be carried out when changing a part.

It is organized as follows:

- **Warnings and precautions to be taken before disassembling the device.**
- **Necessary equipment: List of essential tools for the disassembly/reassembly of the parts**
- **Change of parts:**
 - Structured as follows for each main room:
 - Disassembly of the part.
 - Exchange of the part: concerns the preparation of the new part.
 - Reassembly of the part.

WARNINGS

Beyond the impact on the warranty (see box below), opening the device and replacing parts can have an impact on the water resistance, resistance and autonomy of your product if this is not carried out in a center approved by CROSSCALL.

Before having a repair carried out, check whether or not it is guaranteed by referring to the general after-sales service conditions on our website and read the elements below.

WARRANTY IMPACT

Any modification or change made to your device outside of an authorized CROSSCALL repair center will void the warranty. If your device needs to be repaired, we advise you to entrust it to the CROSSCALL after-sales service (contact available on our website <https://crosscall.com/sav/>).

WATERPROOFING

Please note that telephones repaired outside an approved CROSSCALL center are no longer watertight.

BATTERY

The dangers of handling batteries.

To ensure your safety, CROSSCALL batteries and devices are tested according to international standards. The design of our devices also contributes to your safety: the battery is confined in a metal frame.

The battery is a part that can present risks for the person carrying out the repair if the latter does not have the required qualifications. Failure to remove the battery correctly may damage the device and cause personal injury.

A lithium battery is characterized by its **high energy density**. Before handling a battery, you should be aware of the following risks (non-exhaustive list).

The main risk is related to **poor handling** (shocks, blows, deterioration) which can pose a **significant security risk**.

Mechanical damage can lead to deformation of the cells inside the battery and cause internal shorts and **battery runaway**. The lithium battery then releases the energy it has stored in an uncontrolled manner.

Thermal runaway, with temperatures above 250°C, will lead to a strong generation of flammable gases inside the battery concerned and these gases will trigger the explosion of the battery casing. The metals then merge and burn.

The fumes given off are **toxic** and **highly corrosive**.

Contact with moisture can also cause short circuit.

Safety instructions

- Switch off the device before any intervention.
- Do not turn it back on before complete reassembly.
- Turn off the device before removing the battery. If you remove the battery while the device is on, the device may malfunction.
- Do not disassemble or puncture the battery, as this may cause an explosion or fire.
- Do not cause a short circuit.

- Do not reuse the battery if you have any doubts about its integrity following dismantling.
- Recycle the battery according to the standards in force.
- Do not throw it into fire



Please observe the waste disposal rules when disposing of the packaging, battery, device and its electronic parts. Drop them off at a collection point so that they can be properly recycled. Do not dispose of used electrical and electronic devices or batteries in an ordinary trash can. Please deposit the used lithium batteries in a place designed for this purpose.

ELECTROSTATIC DISCHARGES, WORKING ENVIRONMENT

During the disassembly / reassembly operation, it is advisable to wear an antistatic bracelet connected to the ground. If this is not possible, it is essential to wash your hands and discharge yourself of any static electricity build-up by touching a grounded metal object (ex. radiator) before proceeding with the disassembly / reassembly of the device.








Electrostatic discharge can permanently damage the electronics of the device.



Any work on the device must be carried out in a bright, clean and dust-free environment. The latter can deposit on parts related to photography and video and distort the focus. Metallic dust can also cause short circuits.

TOOL'S REQUIREMENT




Tools require for the assembly and dis-assembly.

| Item | Description | Picture | Quantity |
|------|-------------------------|--|----------|
| 1. | Anti-static mat |  | 1 pc |
| 2. | Anti-static wrist-strip |  | 1 pc |
| 3. | Plastic opener |  | 1 pc |
| 4. | Screwdriver(PH00) |  | 1 pc |
| 5. | Screwdriver(H1.5) |  | |
| 6. | Antistatic tweezer |  | 1pc |
| 7. | Sim Card Release Pin |  | 1 pc |


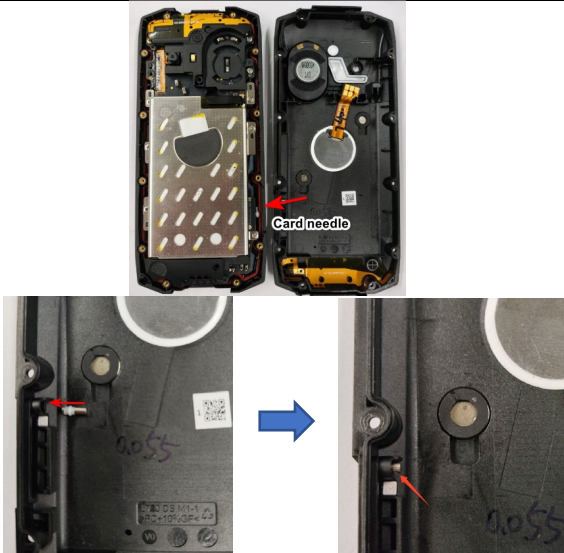

DISASSEMBLY, ASSEMBLY AND EXCHANGE OF PARTS

Dis-assembly of the Shell A and Shell B

Remove the SIM tray

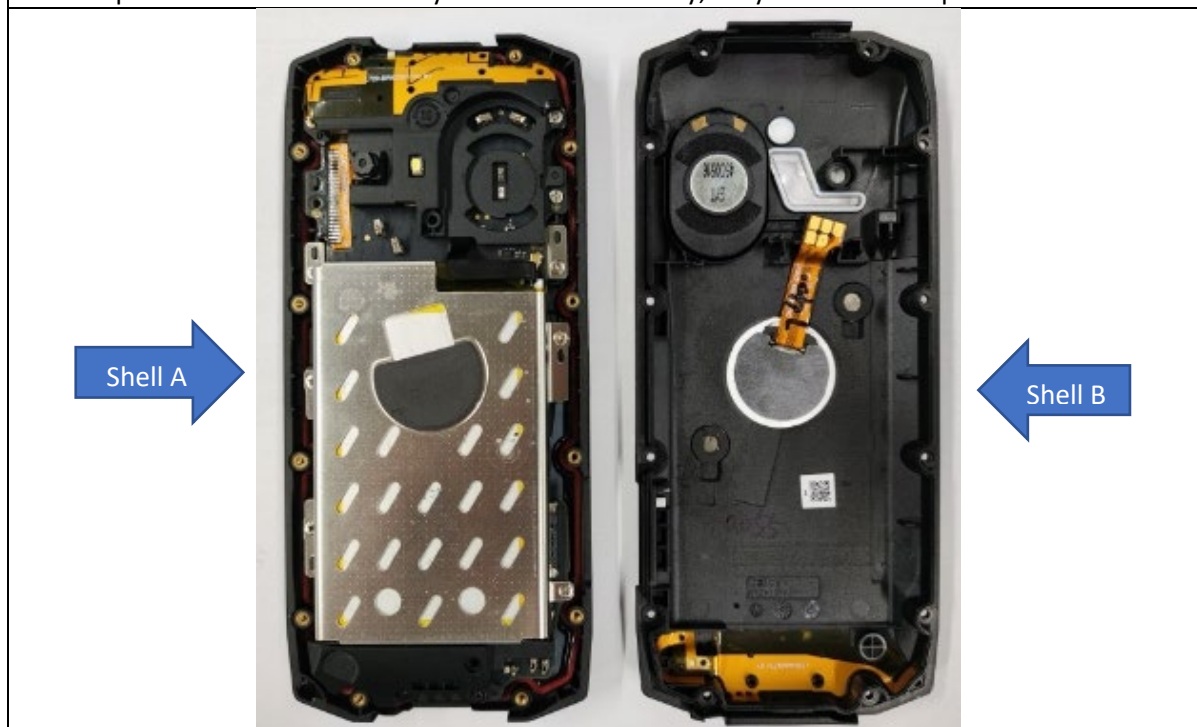
| | |
|---|--|
| Step 1: | |
|  | <p>Remove the sim tray by insert the Sim card release pin</p> <p>Sim card release pin</p>  <p>Sim tray</p>  |

Remove the Shell A and Shell B

| | |
|---|---|
| Step 1: | |
|  | <p>Unlock the 12pcs screws of M1.6×4.8F with the cross screwdriver(H1.5).</p> |
| Step 2: | |
|  | <p>Slowly open the B shell, find the dropped card needle, and put the card needle back into the B shell hole as shown.</p> <p>Card needle</p>  |

View of the Shell A and Shell B

After separate the Shell A assembly and Shell B assembly, they are individual part.





Assembly the Shell B

Step 1:



Check that the card needle is in place;
Headphone cap is in place;
The USB cap is in place

| | |
|---|--|
| Step 2: | |
|  | Put the shell A and shell B case buckles together, and make sure that the headphone cap and USB cap are in place |
| Step3: | |
|  | Tighten 12 screws of M1.6×4.8F with the cross screwdriver(H1.5). |

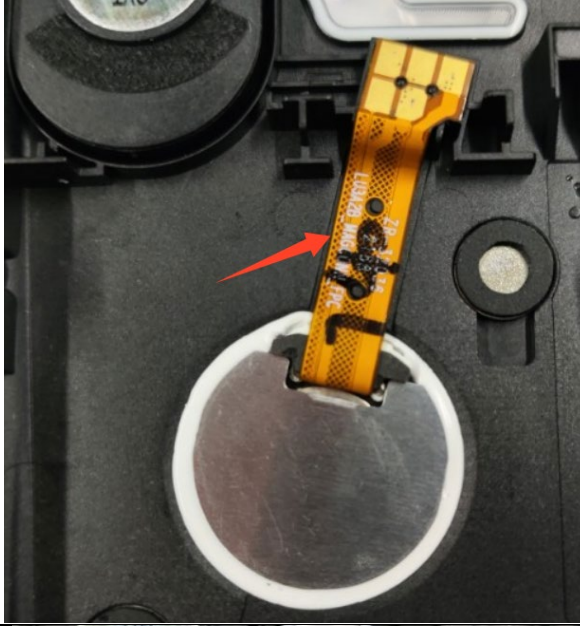

Shell B assembly component replacement

View of the Shell B assembly


| | |
|---|--|
| Shell B assembly Front and back view | |
|  |  |

Replacement of Magconn FPC

Dis-assembly the Magconn FPC


| | |
|--|---|
| Step 1: | |
|  | Unmover the magconn FPC |
|  | Use the cutter to cut away the gray glue then Remove the magconn FPC |

Assembly the Magconn FPC

| | |
|---|---|
| Step1: | |
|  | Clean up the glue residue in the casing and paste Magconn double-sided tape. |

| | |
|---|---|
|  | <p>Use the white glue to seal the Magconn FPC</p> <p>Magconn FPC Part no: 3527941</p> |
|---|---|

Replacement of Speaker Disassembly the speaker

| | |
|--|--|
| <p>Step 1:</p> | |
|  | <p>Use a plastic opener to the speaker from the notch shown in the picture</p> |

Assembly the speaker

Step 1:



Clean up the adhesive residue and paste the double-sided tape of the speaker.



Peel off the double-sided adhesive release paper, put the speaker into the B shell, pay attention to the assembly in place at one time, and press the speaker firmly for 10S clock (50N)



Shell A assembly component replacement

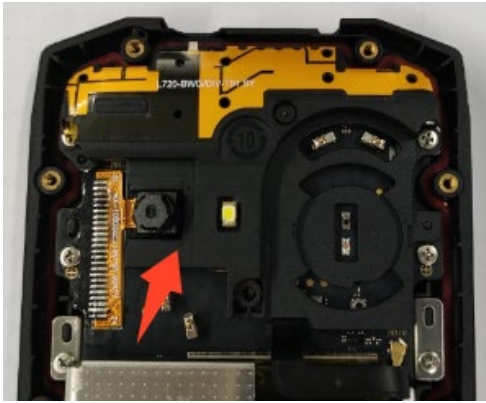
View of the Shell A assembly

Shell B assembly Front and back view



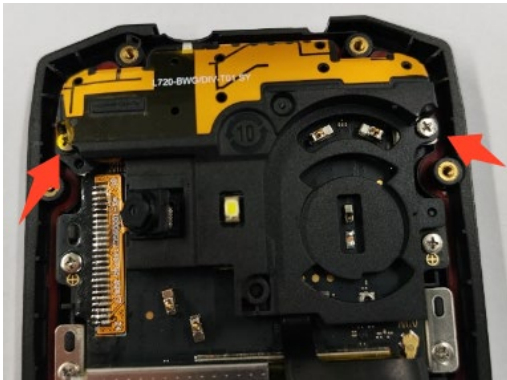
Disassembly the Bracket panel (up)

Step 1:



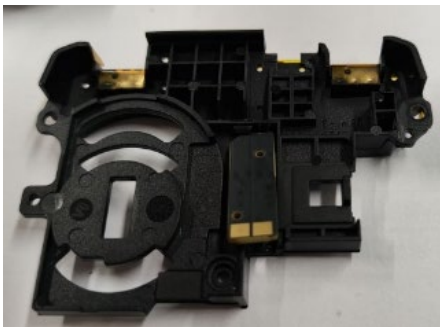
Tilt the camera from the upper Bracket panel so that the camera is detached from the Bracket panel.

Step 2:

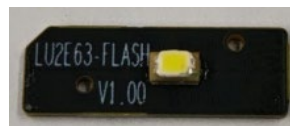


Remove the 2 ST1.7*3.5 screws and remove the upper bracket.


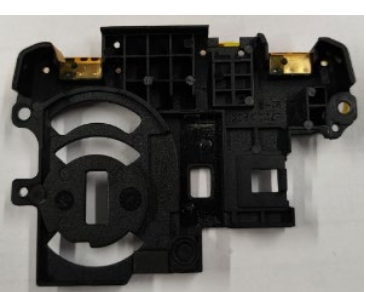
Step 3:




Remove the flash board from the upper bracket panel.




Step 4:

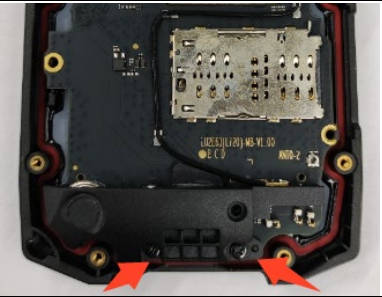


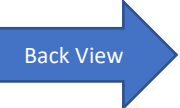

| | |
|---|---|
| <p>Front View</p>  | <p>Remove the flash board from the upper bracket panel by Tweezers.</p> |
| <p>Back View</p>  | |

Disassembly the Battery

| | |
|--|---|
| <p>Step 1:</p> | |
|  | <p>Remove the battery connector on the main board side, Remove the 4 ST1.7*3.5 screws, and remove the battery assembly.</p> |
| <p>Step 2:</p> | |

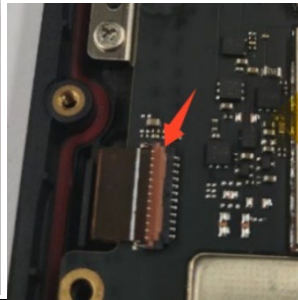
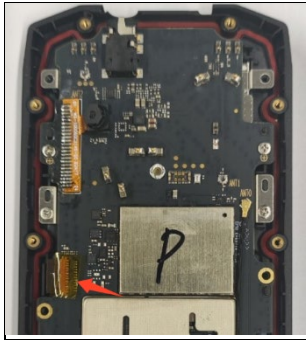
| | |
|---|--|
|  | <p>Remove the battery then separate the battery and the battery panel.</p> |
|---|--|

Disassembly the Bracket panel (Down)

| | |
|--|---|
| <p>Step 1:</p>  | <p>Remove the 2 ST1.7*5 screws and remove the lower bracket</p> |
| <div data-bbox="225 1249 405 1357"> <p>Front View</p>  </div>  <div data-bbox="225 1440 405 1547"> <p>Back View</p>  </div>  | <p>View the Bracket panel(Down)</p> |

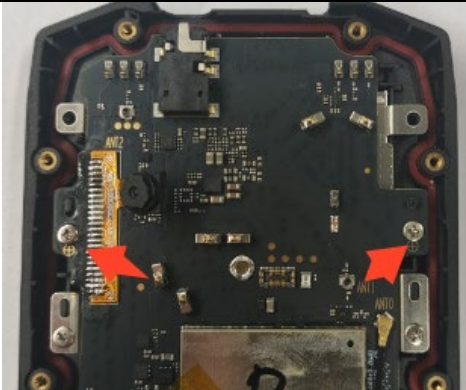
Disassembly the Main board assembly

| | |
|----------------|--|
| <p>Step 1:</p> | |
|----------------|--|



Remove the insulating tape from the connector and open the connector.

Step 2:

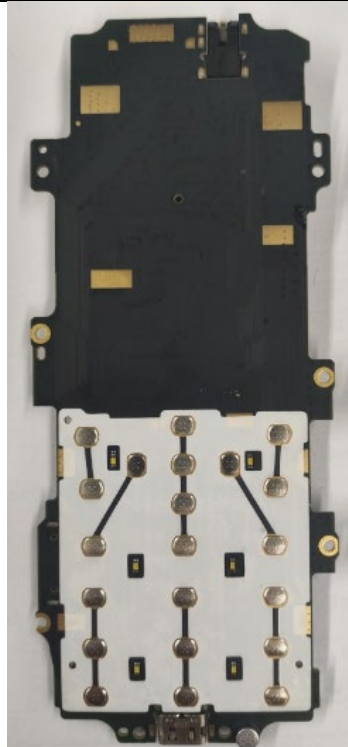


Remove the 2 ST1.7*3.5 screws that hold the motherboard in place, then remove the motherboard

View of Main board assembly

View of Main board assembly

Front View



Back View

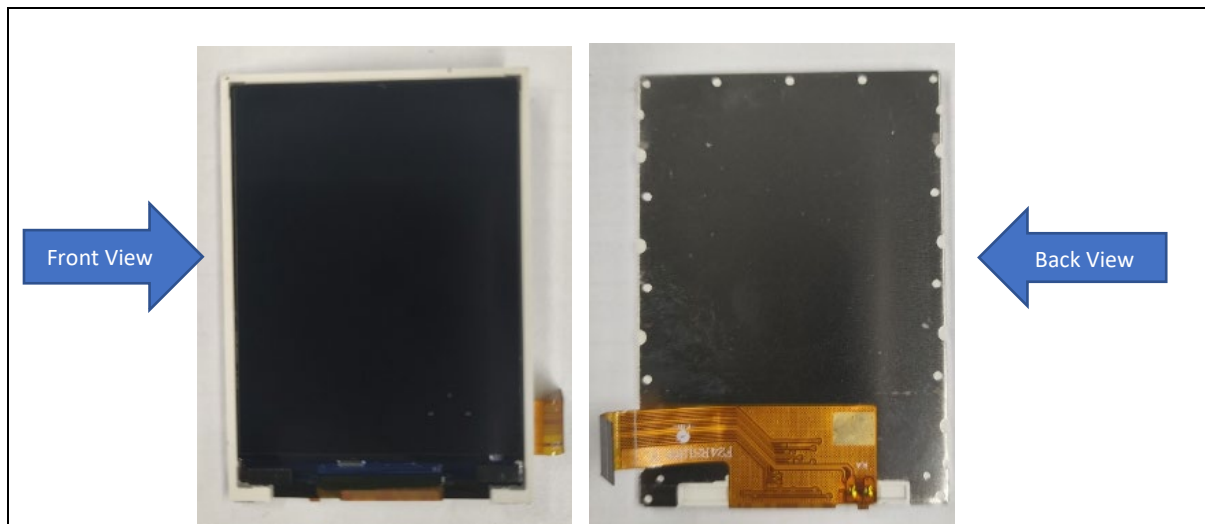


Disassembly the LCD

| | |
|---|--|
| <p>Step 1:</p>  | <p>Remove 2 ST1.7*3.5 screws from the LCD panel, then remove the LCD panel.</p>  |
|   | <p>Then remove the LCD.</p> <p>The LCD, Part no: 12574753</p> <p>Note: Do not touch the LCD with your hands after removing it, and use a clean protective film to cover it.</p> <p>Then the case is placed upright so that dust does not fall into the lenses</p> |

View of LCD

| | |
|------------------|--|
| View of Receiver | |
|------------------|--|



INFORMATION FOR RECYCLERS

| MATERIAL | Mass (mg) | Mass per component |
|------------------|-----------------|--------------------|
| ALUMINIUM | 4776,28 | |
| BATTERY | 1994,49 | 41,76% |
| PCB COMPONENT | 61,43 | 1,29% |
| PROTECTION | 79,31 | 1,66% |
| USB-C CABLE | 358,21 | 7,50% |
| ANTIMONY | 20,01 | 100,00% |
| USB-C CABLE | 20,01 | 100,00% |
| BARIUM | 410,72 | 100,00% |
| ANTENNA PANEL | 14,00 | 3,41% |
| PCB | 302,18 | 73,57% |
| PCB COMPONENT | 93,02 | 22,65% |
| BISMUTH | 0,36 | 100,00% |
| PCB COMPONENT | 0,35 | 98,54% |
| USB-C CABLE | 0,01 | 1,46% |
| BORON | 22,98 | 100,00% |
| CAMERA | 0,32 | 1,39% |
| MAGNET | 14,66 | 63,79% |
| PCB COMPONENT | 0,29 | 1,24% |
| RECEIVER | 0,92 | 4,01% |
| SPEAKER | 4,65 | 20,25% |
| VIBRATOR | 2,03 | 8,82% |
| CADMIUM | 10,00 | 100,00% |
| FRONT CASING | 10,00 | 99,95% |
| CARBON | 12,04 | 100,00% |
| SPEAKER | 0,57 | 4,76% |
| USB-C CABLE | 11,40 | 94,71% |
| CHROMIUM | 1744,66 | 100,00% |
| LCD | 341,64 | 19,58% |
| PCB COMPONENT | 21,80 | 1,25% |
| PROTECTION | 912,59 | 52,31% |
| SIM PICK | 109,33 | 6,27% |
| SIM TRAY | 144,00 | 8,25% |
| USB-C CABLE | 153,75 | 8,81% |
| USB-C CONNECTOR | 35,66 | 2,04% |
| COBALT | 11602,33 | 100,00% |
| BATTERY | 11581,00 | 99,82% |
| COPPER | 18635,32 | 100,00% |
| ANTENNA PANEL | 400,40 | 2,15% |
| BATTERY | 2366,18 | 12,70% |
| FRONT CASING | 610,00 | 3,27% |
| PCB | 7955,56 | 42,69% |

| | | |
|-------------------|-----------------|----------------|
| PCB COMPONENT | 1173,53 | 6,30% |
| USB-C CABLE | 4978,63 | 26,72% |
| DYSPROSIUM | 1,27 | 100,00% |
| VIBRATOR | 1,27 | 100,00% |
| GADOLINIUM | 20,35 | 100,00% |
| MAGNET | 20,35 | 100,00% |
| GALLIUM | 1,88 | 100,00% |
| PCB COMPONENT | 1,45 | 77,18% |
| VIBRATOR | 0,42 | 22,42% |
| GERMANIUM | 0,00 | 100,00% |
| PCB COMPONENT | 0,00 | 100,00% |
| GLASS | 12550,16 | 100,00% |
| BACK CASING | 2380,80 | 18,97% |
| GLASS | 1414,00 | 11,27% |
| LCD | 5497,38 | 43,80% |
| PCB | 2677,67 | 21,34% |
| SPEAKER | 212,64 | 1,69% |
| GOLD | 19,90 | 100,00% |
| JACK CONNECTOR | 1,99 | 10,02% |
| PCB | 2,83 | 14,24% |
| PCB COMPONENT | 2,39 | 12,02% |
| SIM TRAY | 0,50 | 2,50% |
| SPEAKER | 1,41 | 7,08% |
| USB-C CABLE | 10,00 | 50,24% |
| GRAPHITE | 6252,40 | 100,00% |
| BATTERY | 6252,10 | 100,00% |
| INDIUM | 0,83 | 100,00% |
| LCD | 0,80 | 96,40% |
| PCB COMPONENT | 0,03 | 3,60% |
| IRON | 18679,66 | 100,00% |
| LCD | 3259,18 | 17,45% |
| MAGNET | 716,72 | 3,84% |
| PROTECTION | 6810,33 | 36,46% |
| SCREW | 1689,52 | 9,04% |
| SIM PICK | 394,69 | 2,11% |
| SIM TRAY | 544,09 | 2,91% |
| SPEAKER | 1880,24 | 10,07% |
| USB-C CABLE | 2328,11 | 12,46% |
| VIBRATOR | 390,30 | 2,09% |
| LEAD | 370,25 | 100,00% |
| FRONT CASING | 370,00 | 99,93% |
| LITHIUM | 514,61 | 100,00% |
| BATTERY | 501,20 | 97,39% |
| PCB COMPONENT | 13,41 | 2,61% |

| | | |
|------------------|----------------|----------------|
| MAGNESIUM | 46,59 | 100,00% |
| BATTERY | 0,89 | 1,92% |
| SIM TRAY | 32,86 | 70,53% |
| VIBRATOR | 11,55 | 24,79% |
| MANGANESE | 538,29 | 100,00% |
| LCD | 150,70 | 28,00% |
| PROTECTION | 165,54 | 30,75% |
| SCREW | 13,00 | 2,42% |
| SIM TRAY | 11,15 | 2,07% |
| USB-C CABLE | 84,20 | 15,64% |
| VIBRATOR | 86,11 | 16,00% |
| NEODYMIUM | 676,50 | 100,00% |
| MAGNET | 363,59 | 53,74% |
| RECEIVER | 43,69 | 6,46% |
| SPEAKER | 220,67 | 32,62% |
| VIBRATOR | 48,55 | 7,18% |
| NICKEL | 1298,91 | 100,00% |
| ANTENNA PANEL | 27,71 | 2,13% |
| BATTERY | 118,57 | 9,13% |
| CAMERA | 60,00 | 4,62% |
| FRONT CASING | 30,00 | 2,31% |
| LCD | 166,26 | 12,80% |
| PCB | 76,42 | 5,88% |
| PCB COMPONENT | 294,30 | 22,66% |
| PROTECTION | 148,03 | 11,40% |
| SIM PICK | 50,74 | 3,91% |
| SIM TRAY | 65,85 | 5,07% |
| USB-C CABLE | 192,37 | 14,81% |
| VIBRATOR | 27,42 | 2,11% |
| NIOBIUM | 91,07 | 100,00% |
| LCD | 2,32 | 2,55% |
| PROTECTION | 79,31 | 87,09% |
| SIM TRAY | 2,40 | 2,64% |
| USB-C CABLE | 6,90 | 7,58% |
| PALLADIUM | 1,21 | 100,00% |
| BATTERY | 0,08 | 6,33% |
| PCB COMPONENT | 1,12 | 92,65% |
| PET | 2052,99 | 100,00% |
| ANTENNA PANEL | 114,09 | 5,56% |
| BACK CASING | 191,17 | 9,31% |
| BATTERY | 457,60 | 22,29% |
| LCD | 181,11 | 8,82% |
| MAGCONN | 37,76 | 1,84% |
| PCB COMPONENT | 265,80 | 12,95% |

| | | |
|-----------------------------|-----------------|----------------|
| PROTECTION | 65,22 | 3,18% |
| SPEAKER | 41,45 | 2,02% |
| TAPE | 113,00 | 5,50% |
| USB-C CABLE | 379,75 | 18,50% |
| PHOSPHOROUS | 8,29 | 100,00% |
| PCB | 3,83 | 46,27% |
| PCB COMPONENT | 0,48 | 5,81% |
| SCREW | 0,27 | 3,28% |
| SIM TRAY | 0,42 | 5,03% |
| USB-C CABLE | 2,86 | 34,49% |
| PLATINUM | 0,07 | 100,00% |
| LCD | 0,06 | 83,53% |
| PCB COMPONENT | 0,01 | 16,47% |
| POLYCARBONATE | 31597,94 | 100,00% |
| ANTENNA PANEL | 1239,10 | 3,92% |
| BACK CASING | 18312,04 | 57,95% |
| FRONT CASING | 10140,00 | 32,09% |
| LCD | 716,80 | 2,27% |
| SIM TRAY | 955,00 | 3,02% |
| POLYDIMETHYLSILOXANE | 7,73 | 100,00% |
| PCB COMPONENT | 0,83 | 10,72% |
| PROTECTION | 6,90 | 89,28% |
| POLYETHYLENE | 5552,88 | 100,00% |
| BATTERY | 402,10 | 7,24% |
| TAPE | 816,50 | 14,70% |
| USB-C CABLE | 1550,00 | 27,91% |
| POLYPROPYLENE | 2122,12 | 100,00% |
| BATTERY | 1335,70 | 62,94% |
| LCD | 257,53 | 12,14% |
| PROTECTION | 196,97 | 9,28% |
| POLYURETHANE | 1412,90 | 100,00% |
| ANTENNA PANEL | 42,03 | 2,97% |
| BACK CASING | 932,56 | 66,00% |
| BATTERY | 350,00 | 24,77% |
| FRONT CASING | 38,00 | 2,69% |
| MAGCONN | 30,00 | 2,12% |
| POTASSIUM | 0,32 | 100,00% |
| CAMERA | 0,32 | 99,81% |
| PRASEODYMIUM | 48,76 | 100,00% |
| MAGNET | 31,88 | 65,37% |
| VIBRATOR | 16,89 | 34,63% |
| RHODIUM | 0,90 | 100,00% |
| GLASS | 0,90 | 100,00% |
| SILICA | 9392,78 | 100,00% |

| | | |
|------------------|----------------|----------------|
| KEYBOARD | 8270,00 | 88,05% |
| PCB COMPONENT | 163,94 | 1,75% |
| USB-C CABLE | 705,00 | 7,51% |
| SILICON | 4367,73 | 100,00% |
| KEYBOARD | 420,00 | 9,62% |
| PROTECTION | 82,61 | 1,89% |
| SIM TRAY | 139,22 | 3,19% |
| TAPE | 1505,00 | 34,46% |
| USB-C CABLE | 2031,91 | 46,52% |
| SILVER | 16,69 | 100,00% |
| BATTERY | 1,12 | 6,73% |
| CABLE | 1,20 | 7,21% |
| PCB COMPONENT | 12,97 | 77,71% |
| USB-C CABLE | 1,20 | 7,18% |
| SODIUM | 262,47 | 100,00% |
| BATTERY | 261,70 | 99,71% |
| STEEL | 5,97 | 100,00% |
| MICROPHONE | 5,97 | 100,00% |
| STRONTIUM | 1,14 | 100,00% |
| PCB COMPONENT | 1,14 | 100,00% |
| TANTALUM | 2,12 | 100,00% |
| PCB COMPONENT | 2,12 | 100,00% |
| TELLURIUM | 0,00 | 100,00% |
| USB-C CABLE | 0,00 | 100,00% |
| TERBIUM | 0,00 | 100,00% |
| PCB COMPONENT | 0,00 | 100,00% |
| THALLIUM | 0,00 | 100,00% |
| PCB COMPONENT | 0,00 | 100,00% |
| TIN | 151,65 | 100,00% |
| CABLE | 4,37 | 2,88% |
| FPC | 3,34 | 2,20% |
| FRONT CASING | 50,00 | 32,97% |
| GLASS | 12,00 | 7,91% |
| JACK CONNECTOR | 5,95 | 3,92% |
| PCB COMPONENT | 54,47 | 35,92% |
| SIM TRAY | 17,28 | 11,39% |
| TITANIUM | 178,65 | 100,00% |
| LCD | 89,10 | 49,87% |
| PCB | 12,78 | 7,15% |
| PCB COMPONENT | 17,14 | 9,59% |
| PROTECTION | 39,66 | 22,20% |
| USB-C CABLE | 14,18 | 7,94% |
| TUNGSTEN | 122,84 | 100,00% |
| PCB COMPONENT | 4,51 | 3,67% |

| | | |
|------------------|---------------|----------------|
| SIM TRAY | 4,32 | 3,52% |
| VIBRATOR | 114,00 | 92,81% |
| YTTRIUM | 0,02 | 100,00% |
| PCB COMPONENT | 0,02 | 100,00% |
| ZINC | 711,58 | 100,00% |
| FRONT CASING | 339,00 | 47,64% |
| PCB COMPONENT | 232,43 | 32,66% |
| RECEIVER | 33,60 | 4,72% |
| USB-C CABLE | 99,81 | 14,03% |
| ZIRCONIUM | 8,71 | 100,00% |
| PCB COMPONENT | 8,45 | 97,09% |
| VIBRATOR | 0,25 | 2,91% |

BLOCK DIAGRAM

