**TEST REPORT**

**IEC 60950-1**

**Information Technology Equipment – Safety – Part 1: General Requirements**

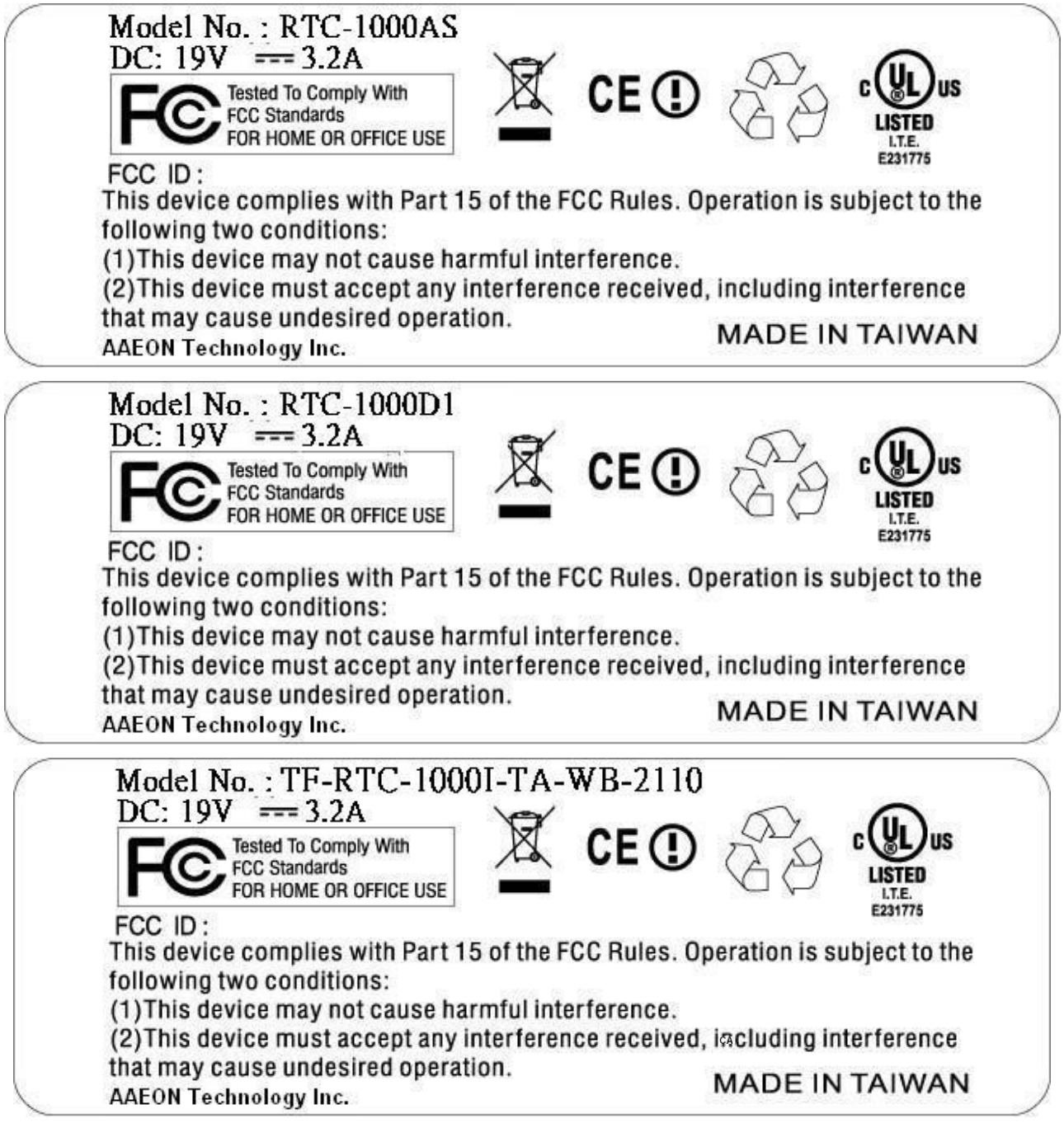
| | |
|---|---|
| Test Report No.: | **L111103-05-A0** |
| Client | |
| Name : | **AAEON Technology Inc.** |
| Address : | **5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien Dist, New Taipei City 231, Taiwan, R.O.C** |
| Test Item : | **Rugged Tablet Computer** |
| Identification : | **xxxxxRTC-1000yz-xxxxxxxxxx(x=A-Z,0-9, " – " or blank;yz=AS,D1 or I)** |
| Testing laboratory | |
| Name : | **Prodigy Technology Consultant Co., Ltd.** |
| Address : | **No.181, Sec. 2, Wunhua 1st Rd., Linkou District, New Taipei City 244, CHINESE TAIPEI** |
| Test specification | |
| Standard : | **EN 60950-1:2006+A11:2009+A1:2010 and IEC 60950-1:2005+A1:2009 excluding national deviation** |
| Test Result : | The test item passed. |
| Prepared By : |  Senior Signature<br>Yama Cheng<br>Supervisor<br>December 5 , 2011<br>Date |
| Approved By: |  Signature<br>Angus Hsu<br>General Manager<br>December 5 , 2011<br>Date |
| Other Aspects:<br>The completed test report includes the following documents:<br>■ EN 60950-1 report (115 pages) | |

**The test report shall not be reproduced except in full, without written approval of the laboratory. This test report does not entitle to carry any safety mark on this or similar products.**

| TEST REPORT<br>IEC 60950-1<br>Information Technology Equipment – Safety – Part 1: General Requirements | |
|---|---|
| Report Reference No. ..... : | L111103-05-A0 |
| Tested by (+ signature) ..... : | See cover sheet |
| Approved by (+ signature) ..... : | See cover sheet |
| Date of issue ..... : | 2011-12-02 |
| **Testing laboratory** | |
| Name ..... : | Prodigy Technology Consultant Co., Ltd. |
| Address ..... : | No.181, Sec. 2, Wunhua 1st Rd., Linkou District, New Taipei City 244, CHINESE TAIPEI |
| Testing location ..... : | Prodigy Technology Consultant Co., Ltd. |
| Address ..... : | No.181, Sec. 2, Wunhua 1st Rd., Linkou District, New Taipei City 244, CHINESE TAIPEI |
| **Applicant** | |
| Name ..... : | AAEON Technology Inc. |
| Address ..... : | 5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien Dist, New Taipei City 231, Taiwan, R.O.C |
| **Test specification** | |
| Standard..... : | EN 60950-1:2006+A11:2009+A1:2010 |
| Test procedure ..... : | CE Marking serial in LVD |
| Procedure deviation..... : | N/A |
| Non-standard test method..... : | N/A |
| **Test Report Form/blank test report** | |
| Test Report Form No. ..... : | IEC60950_1B |
| TRF originator. ..... : | SGS Fimko Ltd |
| Master TRF ..... : | Dated 2010-04 |
| **Test equipment** | |
| Description ..... : | Rugged Tablet Computer |
| Trademark..... : | None |
| Manufacturer ..... : | AAEON Technology Inc. |
| Model and/or type reference ..... : | xxxxxRTC-1000yz-xxxxxxxxxx(x=A-Z,0-9, " – " or blank;yz=AS,D1 or I) |
| Rating(s)……..……: | Optional, 19Vdc, 3.2A |

| **Summary of Testing:**<br>Unless otherwise indicated, all tests were conducted at Prodigy Technology Consultant Co., Ltd. No.181, Sec. 2, Wunhua 1st Rd., Linkou District, New Taipei City 244, CHINESE TAIPEI | |
|---|---|
| **Tests performed (name of test and test clause)** | **Testing location / Comments** |
| 1.6.2 - INPUT TEST: SINGLE-PHASE | |
| 2.5 - LIMITED POWER SOURCE MEASUREMENTS | |
| 2.9.1,2.9.2,5.2.2 – HUMIDITY TEST | |
| 2.10.2, PART 22 6.1 – DETERMINATION OF WORKING VOLTAGE-HAZARDOUS VOLTAGE (CIRCUIT) MEASUREMENT TEST | |
| 4.2.1 – 4.2.4- STEADY FORCE TESTS | |
| 4.2.6,4.2.1 – DROP TEST | |
| 4.3.8 – LITHIUM BATTERY REVERSE CURRENT MEASUREMENT TEST | |
| 4.3.8 – BATTERY PACK | |
| 4.5.1, 1.4.12, 1.4.13 - HEATING TEST | |
| 5.1.8.1 – LIMITATION OF THE TOUCH CURRENT TO A TELECOMMUNICATIONS NETWORK AND A CABLE DISTRIBUTION SYSTEM (SINGLE-PHASE) | |
| 5.1.8.3 - LIMITATION OF TOUCH CURRENT DUE TO RINGING SIGNALS | (for reference) **(US deviation)** |
| 5.3.1 - 5.3.9 - ABNORMAL OPERATION TESTS | |
| 5.3.7 - OVERLOAD OF OPERATOR ACCESSIBLE CONNECTOR TEST | (for reference) **(US deviation)** |
| 6.2.2 (6.2.2.1) – ELECTRIC STRENGTH TEST PROCEDURE - IMPULSE TEST | |
| 6.2.2 (6.2.2.2) – ELECTRIC STRENGTH TEST PROCEDURE - STEADY-STATE TEST | |

**Copy of marking plate and summary of test results (information/comments)**




These are reference Labels. Final label shall be including the content of it.

| | |
|---|---|
| **Particulars: test item vs. test requirements** | |
| Equipment mobility | : Transportable |
| Operating condition | : Continuous |
| Mains supply tolerance (%) | No direct connection |
| Tested for IT power systems | : No |
| IT testing, phase-phase voltage (V) | : N/A |
| Class of equipment | : Class III |
| Mass of equipment (kg) | : For **Construction** A: 1.9kg;<br>For **Construction** B: 2.3kg **max.;**<br>For Docking Station: 2.7kg |
| Protection against ingress of water | : IPX0 |
| **Test case verdicts** | |
| Test case does not apply to the test object | : N/A |
| Test item does meet the requirement | : Pass |
| Test item does not meet the requirement | : Fail |
| **Testing** | |
| Date of receipt of test item | : 2011-11-03 |
| Date(s) of performance of test | : 2011-11-07 to 2011-11-16 |

**General remarks**

This test report shall not be reproduced except in full without the written approval of the testing laboratory.
The test results presented in this report relate only to the item tested.
"(see remark #)" refers to a remark appended to the report.
"(see appended table)" refers to a table appended to the report.
Throughout this report a point is used as the decimal separator.

**Models difference**

**Construction A** is similar to **Construction B**, expect for Rechargeable Lithium Battery type main board and overall enclosure dimension .

**Brief description of the test equipment**

1) The equipment is a Class III Rugged Tablet Computer. Electronic components were mounted on PWB, CPU, HDD and housed with a plastic enclosure and Megnesium alloy enclosure, powered by battery pack or power adaptor.
2) The maximum ambient temperature specified by manufacturer is for **Construction A**: 35 degree C;, and for **Construction B**: 40 degree C.
3) EUT Dimension: See Appendix Tabel for detail.
4) Construction description:
Main board A, C with built-in battery pack (J.S Power Co., Ltd / DR202) for **Construction** B,
Main board B with built-in battery pack (Formosan United Corporation / H705084) for **Construction** A.
**(See Appendix Additional Table for detail.)**
**5) This report is a re-issue of Report Ref. No. L110113-05-A0.**
**6) Based on previously conducted testing and the review of product construction, only below tests were deemed necessary.**
**1.6.2 - Input Test: Single-Phase**
**2.5 - Limited Power Source Measurements**
**2.9.1 - Humidity Test**
**4.2.1- 4.2.4 - Steady Force Test**
**4.2.5, 4.2.1,PART 22 10.2 - Impact Test**
**4.3.8 - Lithium Battery Reverse Current Measurement Test**
**4.5.1 – Heating Test**
**5.1.8.1 - Limitation of the Touch Current to a Telecommunication Network**
**5.1.8.3 - Limitation of Touch Current due to Ringing Signals (for reference) (US deviation)**
**5.3.1- 5.3.9 - Abnormal Operation Tests**
**5.3.7 - Overload of Operator Accessible Connector Test (for reference) (US deviation)**
**6.2.2,(6.2.2.1) - Electric Strength Test Procedure; Impulse Test**
**6.2.2, (6.2.2.2) - Electric Strength Test Procedure; Steady-State Test**

**-This report is re-issued from**
**1) Add one Non-approved Main board C**
**2) Revise Client Address from "5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien Dist, New Taipei City 231, Taiwan, R.O.C" to "5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien Dist, New Taipei City 231, Taiwan, R.O.C"**
**3) Revise Model name from "RTC-1000xx (xx is 0-9 or A-Z)" to "xxxxxRTC-1000yz-xxxxxxxxxx(x=A-Z,0-9, " – " or blank;yz=AS,D1 or I)"**
**4) Revise Report Reference No. from "L110113-05-A0" to "L111103-05-A0"**

**Test condition**

Temperature: 25°C
Relative humidity: 60%
Air pressure: 950 mbar

The test samples are pre-production without serial numbers.

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 1 | **GENERAL** | | Pass |
| 1.5 | **Components** | | Pass |
| 1.5.1 | General | See below. | Pass |
| | Comply with IEC 60950 or relevant component standard | (see appended table 1.5.1) | Pass |
| 1.5.2 | Evaluation and testing of components | Components certified to IEC harmonized standard and checked for correct application.<br><br>Components not certified are used in accordance with their ratings and they comply with applicable parts of IEC 60950-1 and the relevant component Standard.<br><br>Components, for which no relevant IEC-Standard exist, have been tested under the conditions occurring in the equipment, using applicable parts of IEC 60950-1. | Pass |
| 1.5.3 | Thermal controls | | N/A |
| 1.5.4 | Transformers | Evaluated as part of Power Supply. | N/A |
| 1.5.5 | Interconnecting cables | Interconnecting cables comply with the relevant requirements of this standard. | Pass |
| 1.5.6 | Capacitors bridging insulation | | N/A |
| 1.5.7 | Resistors bridging insulation | Evaluated as part of power adapter. | N/A |
| 1.5.7.1 | Resistors bridging functional, basic or supplementary insulation | | N/A |
| 1.5.7.2 | Resistors bridging double or reinforced insulation between a.c. mains and other circuits | | N/A |
| 1.5.7.3 | Resistors bridging double or reinforced insulation between a.c. mains and antenna or coaxial cable | | N/A |
| 1.5.8 | Components in equipment for IT power systems | | N/A |
| 1.5.9 | Surge suppressors | | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| 1.5.9.1 | General | | N/A |
| 1.5.9.2 | Protection of VDRs | | N/A |
| 1.5.9.3 | Bridging of functional insulation by a VDR | | N/A |
| 1.5.9.4 | Bridging of basic insulation by a VDR | | N/A |
| 1.5.9.5 | Bridging of supplementary, double or reinforced insulation by a VDR | | N/A |

| | | | |
|---|---|---|---|
| 1.6 | **Power interface** | | Pass |
| 1.6.1 | AC power distribution systems ..... : | The unit is supplied by SELV. | N/A |
| 1.6.2 | Input current | The steady state input current of the equipment did not exceed the RATED CURRENT by more than 10% under NORMAL LOAD. | Pass |
| 1.6.3 | Voltage limit of hand-held equipment | This is not a hand-held equipment. | N/A |
| 1.6.4 | Neutral conductor | | N/A |

| | | | |
|---|---|---|---|
| 1.7 | **Marking and instructions** | | Pass |
| 1.7.1 | Power rating | Rating marking readily visible to operator.(Optional) | Pass |
| | Rated voltage(s) or voltage range(s) (V) ..... : | 12Vdc | Pass |
| | Symbol for nature of supply, for d.c. only ..... : | ⎓ (60417-2-IEC-5031) | Pass |
| | Rated frequency or frequency range (Hz) ..... : | DC source | N/A |
| | Rated current (mA or A) ..... : | 3.2A | Pass |
| | Manufacturer's name or trade-mark or identification mark..... : | AAEON Technology Inc. | Pass |
| | Model identification or type reference ..... : | xxxxxRTC-1000yz-xxxxxxxxxx(x=A-Z,0-9, " – " or blank;yz=AS,D1 or I) | Pass |
| | Symbol for Class II equipment only ..... : | Class III equipment. | N/A |
| | Other markings and symbols ..... : | Additional symbol may be provided when submitted for national approval. | N/A |
| 1.7.2 | Safety instructions and marking | Safety instructions in English. Other languages will be provided when submitted for national approval. | Pass |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 1.7.2.1 | General | | Pass |
| 1.7.2.2 | Disconnect devices | | N/A |
| 1.7.2.3 | Overcurrent protective device | | N/A |
| 1.7.2.4 | IT power distribution systems | TN system | N/A |
| 1.7.2.5 | Operator access with a tool | | N/A |
| 1.7.2.6 | Ozone | This product does not produce ozone. | N/A |
| 1.7.3 | Short duty cycles | Equipment is designed for continuous operation. | N/A |
| 1.7.4 | Supply voltage adjustment ..... : | No adjustment can be made. | N/A |
| | Methods and means of adjustment; reference to installation instructions ..... | | N/A |
| 1.7.5 | Power outlets on the equipment ..... : | No power outlet | N/A |
| 1.7.6 | Fuse identification (marking, special fusing characteristics, cross-reference) ..... : | | N/A |
| 1.7.7 | Wiring terminals | | N/A |
| 1.7.7.1 | Protective earthing and bonding terminals | | N/A |
| 1.7.7.2 | Terminal for a.c. mains supply conductors | Not permanently connected equipment. | N/A |
| 1.7.7.3 | Terminals for d.c. mains supply conductors | Not permanently connected equipment. | N/A |
| 1.7.8 | Controls and indicators | See below. | Pass |
| 1.7.8.1 | Identification, location and marking ..... : | | N/A |
| 1.7.8.2 | Colours ..... : | Only functional indicators used | Pass |
| 1.7.8.3 | Symbols according to IEC 60417 ..... : | Symbol No. 5009 according to IEC 60417-1 is placed near the stand-by knob. | Pass |
| 1.7.8.4 | Markings using figures ..... : | Figures are not used for indicating different positions of controls. | N/A |
| 1.7.9 | Isolation of multiple power sources ..... : | | N/A |
| 1.7.10 | Thermostats and other regulating devices ..... : | | N/A |
| 1.7.11 | Durability | All markings provided on UL Recognized Component labels suitable for surface they are applied upon and meet the durability test. | Pass |
| 1.7.12 | Removable parts | No marking is located on a removable parts. | Pass |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 1.7.13 | Replaceable batteries ..... | Caution statement is marked close to the battery or in both the users and service manual (in service manual) | Pass |
| | Language(s) ..... | Reviewed only English markings/instructions. May be provided in other languages upon request from the manufacturer. | — |
| 1.7.14 | Equipment for restricted access locations ..... | | N/A |
| 2 | **PROTECTION FROM HAZARDS** | | Pass |
| 2.1 | **Protection from electric shock and energy hazards** | | Pass |
| 2.1.1 | Protection in operator access areas | | Pass |
| 2.1.1.1 | Access to energized parts | See below | Pass |
| | Test by inspection ..... | All accessible circuits are SELV circuits | Pass |
| | Test with test finger (Figure 2A) ..... | The test finger was unable to contact bare hazardous parts, basic insulation or ELV circuits | Pass |
| | Test with test pin (Figure 2B) ..... | The test pin was unable to contact bare hazardous parts | Pass |
| | Test with test probe (Figure 2C) ..... | Test probe can not touch the expose live part of TNV connector. | Pass |
| 2.1.1.2 | Battery compartments | | N/A |
| 2.1.1.3 | Access to ELV wiring | | N/A |
| | Working voltage (Vpeak or Vrms); minimum distance through insulation (mm) | | — |
| 2.1.1.4 | Access to hazardous voltage circuit wiring | | N/A |
| 2.1.1.5 | Energy hazards ..... | No energy hazards | Pass |
| 2.1.1.6 | Manual controls | | N/A |
| 2.1.1.7 | Discharge of capacitors in equipment | Class III equipment | N/A |
| | Measured voltage (V); time-constant (s) ..... | | — |
| 2.1.1.8 | Energy hazards – d.c. mains supply | | N/A |
| | a) Capacitor connected to the d.c. mains supply . | | N/A |
| | b) Internal battery connected to the d.c. mains supply ..... | | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 2.1.1.9 | Audio amplifiers ..... : | | N/A |
| 2.1.2 | Protection in service access areas | | N/A |
| 2.1.3 | Protection in restricted access locations | | N/A |
| 2.2 | **SELV circuits** | | Pass |
| 2.2.1 | General requirements | The unit intended to be supplied by SELV. | Pass |
| 2.2.2 | Voltages under normal conditions (V) ..... : | All accessible voltage are less than 42.4Vp or 60Vdc and are classified as SELV. | Pass |
| 2.2.3 | Voltages under fault conditions (V) ..... : | | N/A |
| 2.2.4 | Connection of SELV circuits to other circuits..... : | SELV circuits are only connected to other SELV circuit. | Pass |
| 2.3 | **TNV circuits** | | Pass |
| 2.3.1 | Limits | Complies by inspection based on review of circuit voltages. | Pass |
| | Type of TNV circuits ..... : | TNV-3 Circuit. | — |
| 2.3.2 | Separation from other circuits and from accessible parts | The TNV circuits are separated from unearthed operator accessible conductive parts by basic insulation. | Pass |
| 2.3.2.1 | General requirements | Basic insulation | Pass |
| 2.3.2.2 | Protection by basic insulation | | Pass |
| 2.3.2.3 | Protection by earthing | | N/A |
| 2.3.2.4 | Protection by other constructions ..... | | N/A |
| 2.3.3 | Separation from hazardous voltages | | N/A |
| | Insulation employed..... : | | — |
| 2.3.4 | Connection of TNV circuits to other circuits | TNV circuit only connected to SELV circuit. | Pass |
| | Insulation employed..... : | Basic insulation | — |
| 2.3.5 | Test for operating voltages generated externally | | N/A |
| 2.4 | **Limited current circuits** | | N/A |
| 2.4.1 | General requirements | LED backlight | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| 2.4.2 | Limit values | | N/A |
| | Frequency (Hz) ..... : | | — |
| | Measured current (mA) ..... : | | — |
| | Measured voltage (V)..... : | | — |
| | Measured capacitance (nF or µF) ..... : | | — |
| 2.4.3 | Connection of limited current circuits to other circuits | | N/A |

| | | | |
|---|---|---|---|
| 2.5 | **Limited power sources** | | Pass |
| | a) Inherently limited output | RS232 port, RJ11 port, RJ45 port, Audio port, PCMCIA card socket, and SIM, CF card socket | Pass |
| | b) Impedance limited output | VGA port | Pass |
| | c) Regulating network limited output under normal operating and single fault condition | For USB, mini USB Protective IC used. See appended table 1.5.1 for detail. | Pass |
| | d) Overcurrent protective device limited output | | N/A |
| | Max. output voltage (V), max. output current (A), max. apparent power (VA) ..... | See appended table 2.5 for details. | — |
| | Current rating of overcurrent protective device (A) | | — |

| | | | |
|---|---|---|---|
| 2.6 | **Provisions for earthing and bonding** | | N/A |
| 2.6.1 | Protective earthing | Class III equipment. | N/A |
| 2.6.2 | Functional earthing | | N/A |
| 2.6.3 | Protective earthing and protective bonding conductors | | N/A |
| 2.6.3.1 | General | | N/A |
| 2.6.3.2 | Size of protective earthing conductors | | N/A |
| | Rated current (A), cross-sectional area ($mm^2$), AWG..... : | | — |
| 2.6.3.3 | Size of protective bonding conductors | | N/A |
| | Rated current (A), cross-sectional area ($mm^2$), AWG..... : | | — |
| | Protective current rating (A), cross-sectional area ($mm^2$), AWG ..... | | — |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 2.6.3.4 | Resistance of earthing conductors and their terminations; resistance (Ω), voltage drop (V), test current (A), duration (min) ..... : | | N/A |
| 2.6.3.5 | Colour of insulation ..... : | | N/A |
| 2.6.4 | Terminals | | N/A |
| 2.6.4.1 | General | | N/A |
| 2.6.4.2 | Protective earthing and bonding terminals | | N/A |
| | Rated current (A), type and nominal thread diameter (mm) ..... : | | — |
| 2.6.4.3 | Separation of the protective earthing conductor from protective bonding conductors | | N/A |
| 2.6.5 | Integrity of protective earthing | | — |
| 2.6.5.1 | Interconnection of equipment | | N/A |
| 2.6.5.2 | Components in protective earthing conductors and protective bonding conductors | | N/A |
| 2.6.5.3 | Disconnection of protective earth | | N/A |
| 2.6.5.4 | Parts that can be removed by an operator | | N/A |
| 2.6.5.5 | Parts removed during servicing | | N/A |
| 2.6.5.6 | Corrosion resistance | | N/A |
| 2.6.5.7 | Screws for protective bonding | No such component used. | N/A |
| 2.6.5.8 | Reliance on telecommunication network or cable distribution system | | N/A |

| | | | |
|---|---|---|---|
| 2.7 | **Overcurrent and earth fault protection in primary circuits** | | N/A |
| 2.7.1 | Basic requirements | Class III equipment. | N/A |
| | Instructions when protection relies on building installation | | N/A |
| 2.7.2 | Faults not simulated in 5.3.7 | | N/A |
| 2.7.3 | Short-circuit backup protection | | N/A |
| 2.7.4 | Number and location of protective devices ..... : | | N/A |
| 2.7.5 | Protection by several devices | | N/A |
| 2.7.6 | Warning to service personnel..... : | | N/A |

| | | | |
|---|---|---|---|
| 2.8 | **Safety interlocks** | | N/A |
| 2.8.1 | General principles | No safety interlocks provided. | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 2.8.2 | Protection requirements | | N/A |
| 2.8.3 | Inadvertent reactivation | | N/A |
| 2.8.4 | Fail-safe operation | | N/A |
| 2.8.5 | Moving parts | | N/A |
| 2.8.6 | Overriding | | N/A |
| 2.8.7 | Switches and relays | | N/A |
| 2.8.7.1 | Contact gaps (mm) .....: | | N/A |
| 2.8.7.2 | Overload test | | N/A |
| 2.8.7.3 | Endurance test | | N/A |
| 2.8.7.4 | Electric strength test (V) | | N/A |
| 2.8.8 | Mechanical actuators | | N/A |
| 2.9 | **Electrical insulation** | | Pass |
| 2.9.1 | Properties of insulating materials | Natural rubber, materials containing asbestos and hygroscopic materials are not used as insulation. | Pass |
| 2.9.2 | Humidity conditioning | Electric strength test was conducted after the humidity treatment. | Pass |
| | Relative humidity (%), temperature (°C) .....: | Relative humidity: 95%, temperature: 25°C, test duration: 48 hours | — |
| 2.9.3 | Grade of insulation | Basic insulation between TNV and SELV circuits. All other critical clearance and creepage were evaluated under separate power adapter certification. | Pass |
| 2.9.4 | Separation from hazardous voltages | | N/A |
| | Method(s) used .....: | | — |
| 2.10 | **Clearances, creepage distances and distances through insulation** | | Pass |
| 2.10.1 | General | Pollution Degree 2 applicable. | Pass |
| 2.10.1.1 | Frequency .....: | | N/A |
| 2.10.1.2 | Pollution degrees .....: | Pollution degree 2 applicable. | Pass |
| 2.10.1.3 | Reduced values for functional insulation | See 5.3.4 | Pass |
| 2.10.1.4 | Intervening unconnected conductive parts | | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 2.10.1.5 | Insulation with varying dimensions | | N/A |
| 2.10.1.6 | Special separation requirements | | N/A |
| 2.10.1.7 | Insulation in circuits generating starting pulses | | N/A |
| 2.10.2 | Determination of working voltage | See appendix additional table for details | Pass |
| 2.10.2.1 | General | | Pass |
| 2.10.2.2 | RMS working voltage | | Pass |
| 2.10.2.3 | Peak working voltage | | N/A |
| 2.10.3 | Clearances | See below. | Pass |
| 2.10.3.1 | General | Considered. | Pass |
| 2.10.3.2 | Mains transient voltages | Overvoltage Category I | N/A |
| | a) AC mains supply ..... | | N/A |
| | b) Earthed d.c. mains supplies ..... | | N/A |
| | c) Unearthed d.c. mains supplies ..... | | N/A |
| | d) Battery operation ..... | | N/A |
| 2.10.3.3 | Clearances in primary circuits | | N/A |
| 2.10.3.4 | Clearances in secondary circuits | Basic insulation between TNV (approved Modem Card) and SELV circuit. Functional insulation for other SELV circuits. | Pass |
| 2.10.3.5 | Clearances in circuits having starting pulses | | N/A |
| 2.10.3.6 | Transients from a.c. mains supply ..... | | N/A |
| 2.10.3.7 | Transients from d.c. mains supply ..... | | N/A |
| 2.10.3.8 | Transients from telecommunication networks and cable distribution systems ..... | TELECOMMUNICATION NETWORK TRANSIENT VOLTAGE of TNV-3 is considered as 1500 Vpeak. | Pass |
| 2.10.3.9 | Measurement of transient voltage levels | | N/A |
| | a) Transients from a mains supply | | N/A |
| | For an a.c. mains supply ..... | | N/A |
| | For a d.c. mains supply ..... | | N/A |
| | b) Transients from a telecommunication network | | N/A |
| 2.10.4 | Creepage distances | See appended table 2.10.3 and 2.10.4 for details | Pass |
| 2.10.4.1 | General | See below. | Pass |
| 2.10.4.2 | Material group and comparative tracking index | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | CTI tests ..... | Material group IIIb, 100≦CTI<175 | — |
| 2.10.4.3 | Minimum creepage distances | | N/A |
| 2.10.5 | Solid insulation | | Pass |
| 2.10.5.1 | General | | Pass |
| 2.10.5.2 | Distances through insulation | With approved Modem Card (See appended table 1.5.1) | Pass |
| 2.10.5.3 | Insulating compound as solid insulation | | N/A |
| 2.10.5.4 | Semiconductor devices | | N/A |
| 2.10.5.5. | Cemented joints | | N/A |
| 2.10.5.6 | Thin sheet material – General | | N/A |
| 2.10.5.7 | Separable thin sheet material | | N/A |
| | Number of layers (pcs) ..... | | — |
| 2.10.5.8 | Non-separable thin sheet material | | N/A |
| 2.10.5.9 | Thin sheet material – standard test procedure | | N/A |
| | Electric strength test | | — |
| 2.10.5.10 | Thin sheet material – alternative test procedure | | N/A |
| | Electric strength test | | — |
| 2.10.5.11 | Insulation in wound components | | N/A |
| 2.10.5.12 | Wire in wound components | | N/A |
| | Working voltage ..... | | N/A |
| | a) Basic insulation not under stress ..... | | N/A |
| | b) Basic, supplementary, reinforced insulation .... | | N/A |
| | c) Compliance with Annex U ..... | | N/A |
| | Two wires in contact inside wound component; angle between 45° and 90° ..... | | N/A |
| 2.10.5.13 | Wire with solvent-based enamel in wound components | | N/A |
| | Electric strength test | | — |
| | Routine test | | N/A |
| 2.10.5.14 | Additional insulation in wound components | | N/A |
| | Working voltage ..... | | N/A |
| | - Basic insulation not under stress ..... | | N/A |
| | - Supplementary, reinforced insulation ..... | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 2.10.6 | Construction of printed boards | No special coating used. | N/A |
| 2.10.6.1 | Uncoated printed boards | | N/A |
| 2.10.6.2 | Coated printed boards | | N/A |
| 2.10.6.3 | Insulation between conductors on the same inner surface of a printed board | | N/A |
| 2.10.6.4 | Insulation between conductors on different layers of a printed board | | N/A |
| | Distance through insulation | | N/A |
| | Number of insulation layers (pcs) ..... | | N/A |
| 2.10.7 | Component external terminations | | N/A |
| 2.10.8 | Tests on coated printed boards and coated components | | N/A |
| 2.10.8.1 | Sample preparation and preliminary inspection | | N/A |
| 2.10.8.2 | Thermal conditioning | | N/A |
| 2.10.8.3 | Electric strength test | | N/A |
| 2.10.8.4 | Abrasion resistance test | | N/A |
| 2.10.9 | Thermal cycling | | N/A |
| 2.10.10 | Test for Pollution Degree 1 environment and insulating compound | | N/A |
| 2.10.11 | Tests for semiconductor devices and cemented joints | | N/A |
| 2.10.12 | Enclosed and sealed parts | | N/A |
| 3 | **WIRING, CONNECTIONS AND SUPPLY** | | Pass |
| 3.1 | **General** | | Pass |
| 3.1.1 | Current rating and overcurrent protection | All wires/conductors possess adequate cross-sectional areas for their intended application and internal wiring and adequately insulated | Pass |
| 3.1.2 | Protection against mechanical damage | The wires are well routed away from sharp edges , etc. and are adequately fixed to prevent excessive strain on wire and terminals | Pass |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 3.1.3 | Securing of internal wiring | The wires are positioned in such a manner that prevents excessive strain, loosening of terminal connections and damage of conductor. | Pass |
| 3.1.4 | Insulation of conductors | | Pass |
| 3.1.5 | Beads and ceramic insulators | | N/A |
| 3.1.6 | Screws for electrical contact pressure | | N/A |
| 3.1.7 | Insulating materials in electrical connections | No contact pressure through insulating material. | Pass |
| 3.1.8 | Self-tapping and spaced thread screws | | N/A |
| 3.1.9 | Termination of conductors | All conductors are reliably secured. | Pass |
| | 10 N pull test | | Pass |
| 3.1.10 | Sleeving on wiring | | N/A |
| 3.2 | **Connection to a mains supply** | | N/A |
| 3.2.1 | Means of connection | | N/A |
| 3.2.1.1 | Connection to an a.c. mains supply | | N/A |
| 3.2.1.2 | Connection to a d.c. mains supply | | N/A |
| 3.2.2 | Multiple supply connections | | N/A |
| 3.2.3 | Permanently connected equipment | | N/A |
| | Number of conductors, diameter of cable and conduits (mm) .....: | | — |
| 3.2.4 | Appliance inlets | | N/A |
| 3.2.5 | Power supply cords | | N/A |
| 3.2.5.1 | AC Power supply cords | | N/A |
| | Type .....: | | — |
| | Rated current (A), cross-sectional area ($mm^2$), AWG .....: | . | — |
| 3.2.5.2 | DC power supply cords | | N/A |
| 3.2.6 | Cord anchorages and strain relief | | N/A |
| | Mass of equipment (kg), pull (N) .....: | | — |
| | Longitudinal displacement (mm) .....: | | — |
| 3.2.7 | Protection against mechanical damage | | N/A |
| 3.2.8 | Cord guards | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | D (mm); test mass (g) .....: | | — |
| | Radius of curvature of cord (mm) .....: | | — |
| 3.2.9 | Supply wiring space | | N/A |
| 3.3 | **Wiring terminals for connection of external conductors** | | N/A |
| 3.3.1 | Wiring terminals | | N/A |
| 3.3.2 | Connection of non-detachable power supply cords | | N/A |
| 3.3.3 | Screw terminals | | N/A |
| 3.3.4 | Conductor sizes to be connected | | N/A |
| | Rated current (A), cord/cable type, cross-sectional area ($mm^2$).....: | | — |
| 3.3.5 | Wiring terminals sizes | | N/A |
| | Rated current (A), type, nominal thread diameter (mm).....: | | — |
| 3.3.6 | Wiring terminals design | | N/A |
| 3.3.7 | Grouping of wiring terminals | | N/A |
| 3.3.8 | Standard wire | | N/A |
| 3.4 | **Disconnection from the mains supply** | | N/A |
| 3.4.1 | General requirement | | N/A |
| 3.4.2 | Disconnect devices | | N/A |
| 3.4.3 | Permanently connected equipment | Not permanently connected equipment. | N/A |
| 3.4.4 | Parts which remain energised | | N/A |
| 3.4.5 | Switches in flexible cords | | N/A |
| 3.4.6 | Number of poles - single-phase and d.c. equipment | | N/A |
| 3.4.7 | Number of poles - three-phase equipment | | N/A |
| 3.4.8 | Switches as disconnect devices | | N/A |
| 3.4.9 | Plugs as disconnect devices | | N/A |
| 3.4.10 | Interconnected equipment | | N/A |
| 3.4.11 | Multiple power sources | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 3.5 | **Interconnection of equipment** | | Pass |
| 3.5.1 | General requirements | | Pass |
| 3.5.2 | Types of interconnection circuits ..... : | Interconnection circuits are SELV or TNV-3 circuit | Pass |
| 3.5.3 | ELV circuits as interconnection circuits | No ELV interconnection circuits. | N/A |
| 3.5.4 | Data ports for additional equipment | | Pass |
| 4 | **PHYSICAL REQUIREMENTS** | | Pass |
| 4.1 | Stability | | N/A |
| | Angle of 10° | <7kg | N/A |
| | Test: force (N) ..... : | | N/A |
| 4.2 | **Mechanical strength** | | Pass |
| 4.2.1 | General | See below | Pass |
| 4.2.2 | Steady force test, 10 N | | Pass |
| 4.2.3 | Steady force test, 30 N | | N/A |
| 4.2.4 | Steady force test, 250 N | No hazards as a result of the 250 N test. | Pass |
| 4.2.5 | Impact test | | Pass |
| | Fall test | | Pass |
| | Swing test | | N/A |
| 4.2.6 | Drop test; height (mm) .....: | No hazards as a result of the drop test | Pass |
| 4.2.7 | Stress relief | | N/A |
| 4.2.8 | Cathode ray tubes | | N/A |
| | Picture tube separately certified..... : | | N/A |
| 4.2.9 | High pressure lamps | | N/A |
| 4.2.10 | Wall or ceiling mounted equipment; force (N) ...: | | N/A |
| 4.3 | **Design and construction** | | Pass |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 4.3.1 | Edges and corners | All edges and corners are judged to be sufficiently well rounded so as not to constitute a hazard. | Pass |
| 4.3.2 | Handles and manual controls; force (N) .....: | | N/A |
| 4.3.3 | Adjustable controls | | N/A |
| 4.3.4 | Securing of parts | | N/A |
| 4.3.5 | Connection by plugs and sockets | | N/A |
| 4.3.6 | Direct plug-in equipment | | N/A |
| | Torque .....: | | — |
| | Compliance with the relevant mains plug standard .....: | | N/A |
| 4.3.7 | Heating elements in earthed equipment | | N/A |
| 4.3.8 | Batteries | Battery is protected against charging current by multiple components within the system clock integrated circuit package. See Critical Components List. | Pass |
| | - Overcharging of a rechargeable battery | See appended table 4.3.8 for details. | Pass |
| | - Unintentional charging of a non-rechargeable battery | | N/A |
| | - Reverse charging of a rechargeable battery | | N/A |
| | - Excessive discharging rate for any battery | See appended table 4.3.8 for details. | Pass |
| 4.3.9 | Oil and grease | | N/A |
| 4.3.10 | Dust, powders, liquids and gases | | N/A |
| 4.3.11 | Containers for liquids or gases | | N/A |
| 4.3.12 | Flammable liquids .....: | | N/A |
| | Quantity of liquid (l) .....: | | N/A |
| | Flash point (°C) .....: | | N/A |
| 4.3.13 | Radiation | | Pass |
| 4.3.13.1 | General | See below | Pass |
| 4.3.13.2 | Ionizing radiation | | N/A |
| | Measured radiation (pA/kg) .....: | | — |
| | Measured high-voltage (kV) .....: | | — |
| | Measured focus voltage (kV) .....: | | — |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| | CRT markings .....: | | — |
| 4.3.13.3 | Effect of ultraviolet (UV) radiation on materials | | N/A |
| | Part, property, retention after test, flammability classification .....: | | N/A |
| 4.3.13.4 | Human exposure to ultraviolet (UV) radiation ...: | | N/A |
| 4.3.13.5 | Laser (including LEDs) | This product contains only visible indicator LEDs (Class 1). | Pass |
| | Laser class .....: | For indicator LEDs, see above statement.) | — |
| 4.3.13.6 | Other types .....: | | N/A |

| | | | |
|---|---|---|---|
| 4.4 | **Protection against hazardous moving parts** | | Pass |
| 4.4.1 | General | | Pass |
| 4.4.2 | Protection in operator access areas | Hazardous moving parts of equipment are adequately enclosed and guarded. | Pass |
| 4.4.3 | Protection in restricted access locations | | N/A |
| 4.4.4 | Protection in service access areas | | N/A |
| 4.4.5 | Protection against moving fan blades | | N/A |
| 4.4.5.1 | General | | N/A |
| | Not considered to cause pain or injury. a).....: | | N/A |
| | Is considered to cause pain, not injury. b) .....: | | N/A |
| | Considered to cause injury. c) .....: | | N/A |
| 4.4.5.2 | Protection for users | | N/A |
| | Use of symbol or warning .....: | | N/A |
| 4.4.5.3 | Protection for service persons | | N/A |
| | Use of symbol or warning .....: | | N/A |

| | | | |
|---|---|---|---|
| 4.5 | **Thermal requirements** | | Pass |
| 4.5.1 | General | See appended table 4.5 | Pass |
| 4.5.2 | Temperature tests | Temperature tests see appended table 4.5 for details. | Pass |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Normal load condition per Annex L .....: | Operated in the most unfavorable way of operation given in the operating instructions until steady conditions established. | — |
| 4.5.3 | Temperature limits for materials | See appended table 4.5 for details. | Pass |
| 4.5.4 | Touch temperature limits | See appended table 4.5 for details. | Pass |
| 4.5.5 | Resistance to abnormal heat .....: | | N/A |
| 4.6 | **Openings in enclosures** | | Pass |
| 4.6.1 | Top and side openings | For docking station: Foreign objects entering the enclosure will not contact bare parts at hazardous voltage or energy.(No hazardous parts within 5° projection).<br>For Table Computer: transportable equipment | Pass |
| | Dimensions (mm) ……: | See Appendix Tabel for detail. | — |
| 4.6.2 | Bottoms of fire enclosures | For docking station:<br>No openings.<br>For Table Computer: transportable equipment. | Pass |
| | Construction of the bottom, dimensions (mm) ....: | | — |
| 4.6.3 | Doors or covers in fire enclosures | | N/A |
| 4.6.4 | Openings in transportable equipment | The openings outside of the fan or heatsink:<br>The internal enclosure was served as the barrier provided between internal parts, and the outside enclosure was served as fan guard. | Pass |
| 4.6.4.1 | Constructional design measures | | Pass |
| | Dimensions (mm) .....: | See Appendix Tabel for detail. | — |
| 4.6.4.2 | Evaluation measures for larger openings | | N/A |
| 4.6.4.3 | Use of metallized parts | | N/A |
| 4.6.5 | Adhesives for constructional purposes | | N/A |
| | Conditioning temperature (°C), time (weeks).....: | | — |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 4.7 | **Resistance to fire** | | Pass |
| 4.7.1 | Reducing the risk of ignition and spread of flame | Method 1: Selection and application of components and materials which minimize the possibility of ignition and spread of flame. | Pass |
| | Method 1, selection and application of components wiring and materials | | Pass |
| | Method 2, application of all of simulated fault condition tests | | N/A |
| 4.7.2 | Conditions for a fire enclosure | A fire enclosure is required | Pass |
| 4.7.2.1 | Parts requiring a fire enclosure | Fire enclosure covers all parts | Pass |
| 4.7.2.2 | Parts not requiring a fire enclosure | | N/A |
| 4.7.3 | Materials | | Pass |
| 4.7.3.1 | General | See below. | Pass |
| 4.7.3.2 | Materials for fire enclosures | Alumimum-Magnesium alloy enclosure | Pass |
| 4.7.3.3 | Materials for components and other parts outside fire enclosures | Decoration parts rated HB min. | Pass |
| 4.7.3.4 | Materials for components and other parts inside fire enclosures | All internal materials are rated V-2 or better or are mounted on a PWB rated V-1 or better.<br>Internal wiring is UL Recognized, rated VW-1 or FT-1. (See appended table 1.5.1) | Pass |
| 4.7.3.5 | Materials for air filter assemblies | | N/A |
| 4.7.3.6 | Materials used in high-voltage components | | N/A |
| 5 | **ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS** | | Pass |
| 5.1 | **Touch current and protective conductor current** | | Pass |
| 5.1.1 | General | | Pass |
| 5.1.2 | Configuration of equipment under test (EUT) | | Pass |
| 5.1.2.1 | Single connection to an a.c. mains supply | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 5.1.2.2 | Redundant multiple connections to an a.c. mains supply | | N/A |
| 5.1.2.3 | Simultaneous multiple connections to an a.c. mains supply | | N/A |
| 5.1.3 | Test circuit | | N/A |
| 5.1.4 | Application of measuring instrument | | N/A |
| 5.1.5 | Test procedure | | N/A |
| 5.1.6 | Test measurements | | N/A |
| | Supply voltage (V) ..... : | | — |
| | Measured touch current (mA) ..... : | | — |
| | Max. allowed touch current (mA) ..... : | | — |
| | Measured protective conductor current (mA) ... : | | — |
| | Max. allowed protective conductor current (mA): | | — |
| 5.1.7 | Equipment with touch current exceeding 3,5 mA | | N/A |
| 5.1.7.1 | General ..... | | N/A |
| 5.1.7.2 | Simultaneous multiple connections to the supply | | N/A |
| 5.1.8 | Touch currents to and from telecommunication networks and cable distribution systems and from telecommunication networks | | Pass |
| 5.1.8.1 | Limitation of the touch current to a telecommunication network or to a cable distribution system | See below | Pass |
| | Supply voltage (V) ..... : | 264 Vac | — |
| | Measured touch current (mA) ..... : | See Appendix Tabel for detail. | — |
| | Max. allowed touch current (mA) ..... : | 0.25mA | — |
| 5.1.8.2 | Summation of touch currents from telecommunication networks..... : | | N/A |
| | a) EUT with earthed telecommunication ports | | N/A |
| | b) EUT whose telecommunication ports have no reference to protective earth | | N/A |

| | | | |
|---|---|---|---|
| 5.2 | **Electric strength** | | Pass |
| 5.2.1 | General | | Pass |
| 5.2.2 | Test procedure | (See appended table 5.2) | Pass |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 5.3 | **Abnormal operating and fault conditions** | | Pass |
| 5.3.1 | Protection against overload and abnormal operation | See appended table 5.3 for details. | Pass |
| 5.3.2 | Motors | Certified fan used | N/A |
| 5.3.3 | Transformers | Evaluated as parts of power supply | N/A |
| 5.3.4 | Functional insulation..... : | Method C | Pass |
| 5.3.5 | Electromechanical components | | N/A |
| 5.3.6 | Audio amplifiers in ITE .....: | | N/A |
| 5.3.7 | Simulation of faults | See appended table 5.3 for details. | Pass |
| 5.3.8 | Unattended equipment | | N/A |
| 5.3.9 | Compliance criteria for abnormal operating and fault conditions | No fire, emission of molten metal or deformation was noted during the tests. | Pass |
| 5.3.9.1 | During the tests | No fire, emission of molten metal or deformation was noted during the tests.<br>The fire which occurred did not propagate beyond the equipment. | Pass |
| 5.3.9.2 | After the tests | Electric Strength tests performed after abnormal and fault tests. | Pass |

| 6 | **CONNECTION TO TELECOMMUNICATION NETWORKS** . | Pass |
|---|---|---|
| 6.1 | Protection of telecommunication network service personnel, and users of other equipment connected to the network, from hazards in the equipment | Pass |
| 6.1.1 | Protection from hazardous voltages | Pass |
| 6.1.2 | Separation of the telecommunication network from earth | Pass |
| 6.1.2.1 | Requirements | N/A |
| | Supply voltage (V) .....: | — |
| | Current in the test circuit (mA) .....: | — |
| 6.1.2.2 | Exclusions .....: | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| 6.2 | **Protection of equipment users from overvoltages on telecommunication networks** | | Pass |
| 6.2.1 | Separation requirements | Adequate electrical separation between TNV-3 to b) metal enclosure c) user accessible connectors | Pass |
| 6.2.2 | Electric strength test procedure | | Pass |
| 6.2.2.1 | Impulse test | (See appended table 5.2) | Pass |
| 6.2.2.2 | Steady-state test | (See appended table 5.2) | Pass |
| 6.2.2.3 | Compliance criteria | No breakdown of insulation. | Pass |
| 6.3 | **Protection of telecommunication wiring system from overheating** | | N/A |
| | Max. output current (A) .....: | | — |
| | Current limiting method.....: | | — |
| 7 | **CONNECTION TO CABLE DISTRIBUTION SYSTEMS** | | N/A |
| 7.1 | General | | N/A |
| 7.2 | Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment | | N/A |
| 7.3 | Protection of equipment users from overvoltages on the cable distribution system | | N/A |
| 7.4 | Insulation between primary circuits and cable distribution systems | | N/A |
| 7.4.1 | General | | N/A |
| 7.4.2 | Voltage surge test | | N/A |
| 7.4.3 | Impulse test | | N/A |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| A | **ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE** | | N/A |
| A.1 | Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2) | | N/A |
| A.1.1 | Samples | | N/A |
| | Wall thickness (mm) ..... : | | — |
| A.1.2 | Conditioning of samples; temperature (°C)..... : | | N/A |
| A.1.3 | Mounting of samples..... : | | N/A |
| A.1.4 | Test flame (see IEC 60695-11-3) | | N/A |
| | Flame A, B, C or D ..... : | | — |
| A.1.5 | Test procedure | | N/A |
| A.1.6 | Compliance criteria | | N/A |
| | Sample 1 burning time (s)..... : | | — |
| | Sample 2 burning time (s)..... : | | — |
| | Sample 3 burning time (s)..... : | | — |
| A.2 | Flammability test for fire enclosures of movable equipment having a total mass not exceeding 18 kg, and for material and components located inside fire enclosures (see 4.7.3.2 and 4.7.3.4) | | N/A |
| A.2.1 | Samples | | N/A |
| | Wall thickness (mm) ..... : | | — |
| A.2.2 | Conditioning of samples; temperature (°C)..... : | | N/A |
| A.2.3 | Mounting of samples..... : | | N/A |
| A.2.4 | Test flame (see IEC 60695-11-4) | | N/A |
| | Flame A, B or C ..... : | | — |
| A.2.5 | Test procedure | | N/A |
| A.2.6 | Compliance criteria | | N/A |
| | Sample 1 burning time (s)..... : | | — |
| | Sample 2 burning time (s)..... : | | — |
| | Sample 3 burning time (s)..... : | | — |
| A.2.7 | Alternative test acc. to IEC 60695-11-5, cl. 5 and 9 | | N/A |
| | Sample 1 burning time (s)..... : | | — |
| | Sample 2 burning time (s)..... : | | — |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| | Sample 3 burning time (s).....: | | — |
| A.3 | Hot flaming oil test (see 4.6.2) | | N/A |
| A.3.1 | Mounting of samples | | N/A |
| A.3.2 | Test procedure | | N/A |
| A.3.3 | Compliance criterion | | N/A |
| B | **ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)** | | N/A |
| B.1 | General requirements | | N/A |
| | Position .....: | | — |
| | Manufacturer .....: | | — |
| | Type .....: | | — |
| | Rated values .....: | | — |
| B.2 | Test conditions | | N/A |
| B.3 | Maximum temperatures | | N/A |
| B.4 | Running overload test | | N/A |
| B.5 | Locked-rotor overload test | | N/A |
| | Test duration (days) .....: | | — |
| | Electric strength test: test voltage (V) .....: | | — |
| B.6 | Running overload test for DC motors in secondary circuits | | N/A |
| B.7 | Locked-rotor overload test for DC motors in secondary circuits | | N/A |
| B.7.1 | General | | N/A |
| B.7.2 | Test procedure | | N/A |
| B.7.3 | Alternative test procedure | | N/A |
| B.7.4 | Electric strength test; test voltage (V) .....: | | N/A |
| B.8 | Test for motors with capacitors | | N/A |
| B.9 | Test for three-phase motors | | N/A |
| B.10 | Test for series motors | | N/A |
| | Operating voltage (V) .....: | | — |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| C | **ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)** | | N/A |
| | Position ..... : | | — |
| | Manufacturer ..... : | | — |
| | Type ..... : | | — |
| | Rated values ..... : | | |
| | Method of protection ..... : | | — |
| C.1 | Overload test | | N/A |
| C.2 | Insulation | | N/A |
| | Protection from displacement of windings ..... : | | — |

| | | | |
|---|---|---|---|
| D | **ANNEX D, MEASURING INSTRUMENTS FOR TOUCH-CURRENT TESTS (see 5.1.4)** | | Pass |
| D.1 | Measuring instrument | Simpson Meter 228 used. | Pass |
| D.2 | Alternative measuring instrument | | N/A |

| | | | |
|---|---|---|---|
| E | **ANNEX E, TEMPERATURE RISE OF A WINDING (see 1.4.13)** | | N/A |

| | | | |
|---|---|---|---|
| F | **ANNEX F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES (see 2.10 and Annex G)** | | Pass |

| | | | |
|---|---|---|---|
| G | **ANNEX G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES** | | N/A |
| G.1 | Clearances | | N/A |
| G.1.1 | General | | N/A |
| G.1.2 | Summary of the procedure for determining minimum clearances | | N/A |
| G.2 | Determination of mains transient voltage (V) | | N/A |
| G.2.1 | AC mains supply ..... : | | N/A |
| G.2.2 | Earthed d.c. mains supplies ..... : | | N/A |
| G.2.3 | Unearthed d.c. mains supplies ..... : | | N/A |
| G.2.4 | Battery operation ..... : | | N/A |
| G.3 | Determination of telecommunication network transient voltage (V) ..... : | | N/A |
| G.4 | Determination of required withstand voltage (V) | | N/A |
| G.4.1 | Mains transients and internal repetitive peaks ... : | | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| G.4.2 | Transients from telecommunication networks ....: | | N/A |
| G.4.3 | Combination of transients | | N/A |
| G.4.4 | Transients from cable distribution systems | | N/A |
| G.5 | Measurement of transient voltages (V) | | N/A |
| | a) Transients from a mains supply | | N/A |
| | For an a.c. mains supply | | N/A |
| | For a d.c. mains supply | | N/A |
| | b) Transients from a telecommunication network | | N/A |
| G.6 | Determination of minimum clearances .....: | | N/A |
| H | **ANNEX H, IONIZING RADIATION (see 4.3.13)** | | N/A |
| J | **ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)** | | N/A |
| | Metal(s) used .....: | | — |
| K | **ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.8)** | | N/A |
| K.1 | Making and breaking capacity | No thermal control. | N/A |
| K.2 | Thermostat reliability; operating voltage (V) ……: | | N/A |
| K.3 | Thermostat endurance test; operating voltage(V): | | N/A |
| K.4 | Temperature limiter endurance; operating voltage (V) .....: | | N/A |
| K.5 | Thermal cut-out reliability | | N/A |
| K.6 | Stability of operation | | N/A |
| L | **ANNEX L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.2)** | | Pass |
| L.1 | Typewriters | | N/A |
| L.2 | Adding machines and cash registers | | N/A |
| L.3 | Erasers | | N/A |
| L.4 | Pencil sharpeners | | N/A |
| L.5 | Duplicators and copy machines | | N/A |
| L.6 | Motor-operated files | | N/A |
| L.7 | Other business equipment | | Pass |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| M | **ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)** | | N/A |
| M.1 | Introduction | | N/A |
| M.2 | Method A | | N/A |
| M.3 | Method B | | N/A |
| M.3.1 | Ringing signal | | N/A |
| M.3.1.1 | Frequency (Hz)..... : | | N/A |
| M.3.1.2 | Voltage (V) ..... : | | N/A |
| M.3.1.3 | Cadence; time (s), voltage (V) ..... : | | N/A |
| M.3.1.4 | Single fault current (mA)..... : | | N/A |
| M.3.2 | Tripping device and monitoring voltage ..... : | | N/A |
| M.3.2.1 | Conditions for use of a tripping device or a monitoring voltage | | N/A |
| M.3.2.2 | Tripping device | | N/A |
| M.3.2.3 | Monitoring voltage (V) ..... : | | N/A |

| | | | |
|---|---|---|---|
| N | **ANNEX N, IMPULSE TEST GENERATORS (see 1.5.7.2, 1.5.7.3, 2.10.3.9, 6.2.2.1, 7.3.2, 7.4.3 and Clause G.5)** | | Pass |
| N.1 | ITU-T impulse test generators | | Pass |
| N.2 | IEC 60065 impulse test generator | | N/A |

| | | | |
|---|---|---|---|
| P | **ANNEX P, NORMATIVE REFERENCES** | | Pass |

| | | | |
|---|---|---|---|
| Q | ANNEX Q, Voltage dependent resistors (VDRs) (see 1.5.9.1) | | N/A |
| | a) Preferred climatic categories .....: | | N/A |
| | b) Maximum continuous voltage .....: | | N/A |
| | c) Pulse current .....: | | N/A |

| | | | |
|---|---|---|---|
| R | **ANNEX R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES** | | N/A |
| R.1 | Minimum separation distances for unpopulated coated printed boards (see 2.10.6.2) | | N/A |
| R.2 | Reduced clearances (see 2.10.3) | | N/A |

| | | | |
|---|---|---|---|
| S | **ANNEX S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)** | | Pass |
| S.1 | Test equipment | | Pass |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| S.2 | Test procedure | | Pass |
| S.3 | Examples of waveforms during impulse testing | | Pass |
| T | **ANNEX T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)** | | N/A |
| | | | — |
| U | **ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)** | | N/A |
| | Separate test report | | N/A |
| V | **ANNEX V, AC POWER DISTRIBUTION SYSTEMS (see 1.6.1)** | | N/A |
| V.1 | Introduction | | N/A |
| V.2 | TN power systems | | N/A |
| W | **ANNEX W, SUMMATION OF TOUCH CURRENTS** | | N/A |
| W.1 | Touch current from electronic circuits | | N/A |
| W.1.1 | Floating circuits | | N/A |
| W.1.2 | Earthed circuits | | N/A |
| W.2 | Interconnection of several equipments | | N/A |
| W.2.1 | Isolation | | N/A |
| W.2.2 | Common return, isolated from earth | | N/A |
| W.2.3 | Common return, connected to protective earth | | N/A |
| X | **ANNEX X, MAXIMUM HEATING EFFECT IN TRANSRORMER TESTS (see clause C.1)** | | N/A |
| X.1 | Determination of maximum input current | | N/A |
| X.2 | Overload test procedure | | N/A |
| Y | **ANNEX Y, ULTRAVIOLET LIGHT CONDITIONING TEST (see 4.3.13.3)** | | N/A |
| Y.1 | Test apparatus ..... : | | N/A |
| Y.2 | Mounting of test samples ..... : | | N/A |
| Y.3 | Carbon-arc light-exposure apparatus ..... : | | N/A |
| Y.4 | Xenon-arc light exposure apparatus ..... : | | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |
| Z | **ANNEX Z, OVERVOLTAGE CATEGORIES (see 2.10.3.2 and Clause G.2)** | | Pass |
| AA | **ANNEX AA, MANDREL TEST (see 2.10.5.8)** | | N/A |
| BB | **ANNEX BB, CHANGES IN THE SECOND EDITION** | | - |
| CC | **ANNEX CC, Evaluation of integrated circuit (IC) current limiters** | | N/A |
| CC.1 | General | | N/A |
| CC.2 | Test program 1……..: | | N/A |
| CC.3 | Test program 2……..: | | N/A |
| DD | **ANNEX DD, Requirements for the mounting means of rack-mounted equipment** | | N/A |
| DD.1 | General | | N/A |
| DD.2 | Mechanical strength test, variable N……..: | | N/A |
| DD.3 | Mechanical strength test, 250N, including end stops……..……: | | N/A |
| DD.4 | Compliance……: | | N/A |
| EE | **ANNEX EE, Household and home/office document/media shredders** | | N/A |
| EE.1 | General | | N/A |
| EE.2 | Markings and instructions | | N/A |
| | Use of markings or symbols……: | | N/A |
| | Information of user instructions, maintenance and/or servicing instructions……..: | | N/A |
| EE.3 | Inadvertent reactivation test……: | | N/A |
| EE.4 | Disconnection of power to hazardous moving parts: | | N/A |
| | Use of markings or symbols……: | | N/A |
| EE.5 | Protection against hazardous moving parts | | N/A |
| | Test with test finger (Figure 2A) ……..…: | | N/A |
| | Test with wedge probe (Figure EE1 and EE2) …: | | N/A |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| 1.5.1 | TABLE: List of critical components | | | | Pass |
|---|---|---|---|---|---|
| object/part No. | manufacturer/ trademark | type/model | technical data | standard | mark(s) of conformity[1]) |
| Power Adapter (Optional) | FSP GROUP INC | FSP065-RABXX | I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 19Vdc, 3.42A, Tma 40°C | EN 60950-1 | TUV Rh (Cert. No.: S 50144403) |
| Battery Pack (optional) for **Construction** B | J.S Power Co., Ltd | DR202 | 11.1Vdc, 7800mAh. **Overall dimension see Appendix Table for detail.** | -- | -- |
| - Enclosure | Sabic Innovative Plastics Japan L L C | 940 | V-0, 80 °C, 1.1 mm thick minimum, | UL 94, UL 746C | UL |
| - Enclosure Adhesive | Teijin Chemicals Ltd | LN-2250 | Max. Temp Rating: 60°C | UL 746C | UL |
| - Battery Cell (3S3P, three provided) | Sanyo Energy (U S A) Corp | UR18650F | 12.6Vdc, 2600mAh, Lithium ion | UL 1642 | UL |
| - Protective Circuitry | -- | -- | -- | -- | -- |
| - **Printed Wiring Board** | Various | Various | V-1 minimum, 105°C | UL 796 | UL |
| - Connector | Various | Various | V-2 min | UL 94 | UL |
| - Thermal Fuse (F1) | Nec Schott Components Corp | D6X | 32Vdc, 12A, 139°C | EN/UL 60691 | VDE, UL |
| - Mosfet (U4, U5, U6, U7) | Toshiba | TPC8025 | -- | -- | -- |
| - Protection IC (U1) | Texas Instrument | BQ20Z90 | -- | -- | -- |
| - Protection IC (U2) | Texas Instrument | BQ29330 | -- | -- | -- |
| - Protection IC (U3) | Seiko Instruments Inc | 8244AAAFN | -- | -- | -- |
| Battery Pack (optional) for **Construction** A | Formosan United Corporation | H705084 | 11.1Vdc, 3500mAh. **Overall dimension see Appendix Table for detail.** | -- | -- |
| - Plastic Frame for Enclosure | Various | Various | Min. V-2 | UL 94, UL 746C | UL |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| **1.5.1** | **TABLE: List of critical components** | | | | Pass |
|---|---|---|---|---|---|
| object/part No. | manufacturer/ trademark | type/model | technical data | standard | mark(s) of conformity[1]) |
| - Battery Cells | POWER SOURCE ENERGY CO LTD | H705084 | 11.1Vdc, 7800mAh, Lithium-ion polymer 3-series, 1-parallel cells provided. | UL 1642 | -- |
| - Protective Circuitry | -- | -- | -- | -- | -- |
| - **Printed Wiring Board** | Various | Various | V-1 minimum, 105°C | UL 796 | UL |
| - Connector | Various | Various | V-2 min | UL 94 | UL |
| - Thermal Links (F1) | NEC SCHOTT COMPONENTS CORP | D6X | 32 Vdc, 12 A, 139°C. | EN/UL 60691 | VDE, UL |
| - Thermistor (TH1) | Various | Various | NTC type, 10K ohm at 25°C | UL 1434 | UL |
| - Mosfet (Q2, Q3) | VISHAY | Si4410BDY | -- | -- | -- |
| - Protection IC (U2) | TEXAX\S INSTRUMENTS | bq20z95 | -- | -- | -- |
| - Current Sensing Resistor (R37) | -- | -- | 0.01 ohm, 1W, SMD type. | -- | -- |
| Telephone Line Cord (Optional) | Various | Various | Minimum No. 26 AWG wire. | UL 1863 | UL |
| Enclosure for **Construction** B | -- | AZ91D | Aluminum - Magnesium alloy, minimum **1.4 mm thickness, overall dimension and opening see Appendix Table for detail.** | -- | -- |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| 1.5.1 | TABLE: List of critical components | | | | Pass |
|---|---|---|---|---|---|
| object/part No. | manufacturer/ trademark | type/model | technical data | standard | mark(s) of conformity[1]) |
| Enclosure for **Construction A** | -- | AZ91D | Aluminum - Magnesium alloy, overall dimension 270 by 185 by 39 mm, minimum 1.5 mm thickness. Opening: See Appendix Tabel for detail. | -- | -- |
| Enclosure for docking station. | Various | Various | HB minimum, overall dimension. See Appendix Tabel for detail. | UL 94, UL 746C | UL |
| **Main board** A for **Construction** B | -- | -- | See below for unit. | -- | -- |
| - Rechargeable Lithium Battery (RTC Battery) | Various | ML1220(I) | Maximum abnormal charging current 300mA. Battery is protected against charging current by multiple components (one diode and one 470 ohm resistor) | UL 1642 | UL |
| - Protective IC for USB Ports (U29, U1) | RICHTEK TECHNOLOGY CORP | RT9702ACB, RT9702APB, RT9702AGB, RT9702ACJ5, RT9702APJ5, RT9702AGJ5 | 2-5.5 Vdc, Cont. Current: 1.1A, Prot. Current: 2.0A. | UL 2367 | UL |
| | **RICHTEK TECHNOLOGY CORP** | **RT9701CBL, RT9701PBL, RT9701GBL** | **2.6-6.0 Vdc, Cont. Current: 1.1A, Prot. Current: 2.0A.** | **UL 2367** | **UL** |
| - Polyswitch for VGA Port (FS6) | LITTELFUSE INC | 1206X110 | 6 V dc, Ih 1.1 A | EN 60738-1, UL 1434 | TUV, UL |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| 1.5.1 | TABLE: List of critical components | | | | Pass |
|---|---|---|---|---|---|
| object/part No. | manufacturer/ trademark | type/model | technical data | standard | mark(s) of conformity[1]) |
| - Capacitor (C280, C325) (Optional) | Various | Various | 1000pF, 3KV is between CN35 and **return**. | IEC 60384-14, UL 1283, UL 1414 | TUV, UL |
| - Modem Module | LSI Coproration | D40 | 3.3 Vdc | IEC 60950-1, UL 60950-1 | TUV, UL |
| - DC fan for CPU | A-power Electronic Co Ltd | BS4005H2B-R | One provided, 5Vdc, 0.3A max., 4.71 CFM max. | UL 507, EN 60950-1 | TUV, UL |
| - Heatsink for CPU | -- | -- | AL, see Appendix Tabel for detail. | -- | -- |
| **Main board C for Construction B** | **--** | **--** | **See below for unit.** | **--** | **--** |
| **- Rechargeable Lithium Battery (RTC Battery)** | **Various** | **ML1220(I)** | **Maximum abnormal charging current 300mA. Battery is protected against charging current by multiple components (one diode and one 470 ohm resistor)** | **UL 1642** | **UL** |
| **- Protective IC for USB Ports (U33, U2)** | **RICHTEK TECHNOLOGY CORP** | **RT9702ACB, RT9702APB, RT9702AGB, RT9702ACJ5, RT9702APJ5, RT9702AGJ5** | **2-5.5 Vdc, Cont. Current: 1.1A, Prot. Current: 2.0A.** | **UL 2367** | **UL** |
| | **RICHTEK TECHNOLOGY CORP** | **RT9701CBL, RT9701PBL, RT9701GBL** | **2.6-6.0 Vdc, Cont. Current: 1.1A, Prot. Current: 2.0A.** | **UL 2367** | **UL** |
| **- Polyswitch for VGA Port (FS3)** | **LITTELFUSE INC** | **1206X110** | **6 V dc, Ih 1.1 A** | **EN 60738-1, UL 1434** | **TUV, UL** |
| **- Capacitor (C431, C471) (Optional)** | **Various** | **Various** | **1000pF, 3KV is between CN35 and return.** | **IEC 60384-14, UL 1283, UL 1414** | **TUV, UL** |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| 1.5.1 | TABLE: List of critical components | | | | Pass |
|---|---|---|---|---|---|
| object/part No. | manufacturer/ trademark | type/model | technical data | standard | mark(s) of conformity[1]) |
| **- Modem Module** | **LSI Coproration** | **D40** | **3.3 Vdc** | **IEC 60950-1, UL 60950-1** | **TUV, UL** |
| **- DC fan for CPU** | **A-power Electronic Co Ltd** | **BS4005H2B-R** | **One provided, 5Vdc, 0.3A max., 4.71 CFM max.** | **UL 507, EN 60950-1** | **TUV, UL** |
| **- Heatsink for CPU** | **--** | **--** | **AL, see Appendix Tabel for detail.** | **--** | **--** |
| **Main board B for Construction A** | -- | -- | See below for unit. | -- | -- |
| - Rechargeable Lithium Battery (RTC Battery) | Various | ML1220(I) | Maximum abnormal charging current 300mA. Battery is protected against charging current by multiple components (one diode and one 470 ohm resistor) | UL 1642 | UL |
| - Protective IC for USB Ports (U16, U17) | RICHTEK TECHNOLOGY CORP | RT9702ACB, RT9702APB, RT9702AGB, RT9702ACJ5, RT9702APJ5, RT9702AGJ5 | 2-5.5 Vdc, Cont. Current: 1.1A, Prot. Current: 2.0A. | UL 2367 | UL |
| | **RICHTEK TECHNOLOGY CORP** | **RT9701CBL, RT9701PBL, RT9701GBL** | **2.6-6.0 Vdc, Cont. Current: 1.1A, Prot. Current: 2.0A.** | **UL 2367** | **UL** |
| - Polyswitch for VGA Port (FS1) | LITTELFUSE INC | 1206X110 | 6 V dc, Ih 1.1 A | EN 60738-1, UL 1434 | TUV, UL |
| - Capacitor (C504, C508) (Optional) | Various | Various | 1000pF, 3KV is between CN25 and earth | IEC 60384-14, UL 1283, UL 1414 | TUV, UL |
| - Modem Module | LSI Coproration | D40 | 3.3 Vdc | IEC 60950-1, UL 60950-1 | TUV, UL |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| 1.5.1 | TABLE: List of critical components | | | | Pass |
|---|---|---|---|---|---|
| object/part No. | manufacturer/ trademark | type/model | technical data | standard | mark(s) of conformity[1]) |
| - Heatsink for CPU | -- | -- | AL, see Appendix Tabel for detail. | -- | -- |
| Main board | -- | -- | See below for docking station. | -- | -- |
| - Protective IC for USB Ports (U5, U6) | MICREL INC | MIC2026 | 2.7-5.5 Vdc, Cont. Current: 0.5A, Prot. Current: 1.25A. | UL 2367 | UL |
| - Polyswitch for VGA Port (FS2) | LITTELFUSE INC | 1206X110 | 6 V dc, Ih 1.1 A | EN 60738-1, UL 1434 | TUV, UL |
| Printed Wiring Board | Various | Various | V-1 minimum, 105 degree C. | UL 796 | UL |
| LCD Panel | LITEMAX Electronics Inc. | CP1082E | 10.2 inch, TFT-LCD, LED Backlight | -- | -- |
| | Various | Various | 10.2 inch, TFT-LCD, LED Backlight | -- | -- |
| Hard Disk Drive (Optional) | Various | Various | 5Vdc, 0.55A maximum | EN 60950-1, UL 60950-1 | TUV, UL |
| | Western Diginal Technologies, Inc. | WD800BEVT | 5Vdc, 0.6A maximum | EN 60950-1, UL 60950-1 | TUV, UL |
| Speaker (one provided) | -- | -- | 4 ohm, 2W maximum | -- | -- |
| Supplementary information:<br>An asterisk indicates a mark that assures the agreed level of surveillance. | | | | | |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| 1.6.2 | TABLE: Electrical data (in normal conditions) | | | | | Pass |
|---|---|---|---|---|---|---|
| U(V)/f(Hz) | I (A) | Irated (A) | P (W) | Fuse # | Ifuse (A) | Condition/status |
| -- | -- | -- | -- | -- | -- | For **Construction** A with **Main board B** |
| 19Vdc | 2.68 | 3.2 | 50.92 | -- | -- | Maximum normal load (NO Docking Station) |
| 19Vdc | 1.79 | 3.2 | 34.01 | -- | -- | Stand by Charge (NO Docking Station) |
| 19Vdc | 3.17 | 3.2 | 60.23 | -- | -- | Maximum normal load (Docking Station) |
| 19Vdc | 1.91 | 3.2 | 36.29 | -- | -- | Stand by Charge (Docking Station) |
| 12.6Vdc | 2.32 | -- | 29.23 | -- | -- | Battrery discharge |
| -- | -- | -- | -- | -- | -- | For **Construction** B with **Main board A** |
| 19Vdc | 2.31 | 3.2 | 43.89 | -- | -- | Maximum normal load (NO Docking Station) |
| 19Vdc | 1.59 | 3.2 | 30.21 | -- | -- | Stand by Charge (NO Docking Station) |
| 19Vdc | 2.60 | 3.2 | 49.4 | -- | -- | Maximum normal load (Docking Station) |
| 19Vdc | 1.86 | 3.2 | 35.34 | -- | -- | Stand by Charge (Docking Station) |
| 12.6Vdc | 2.58 | -- | 32.51 | -- | -- | Battrery discharge |
| -- | -- | -- | -- | -- | -- | **For Construction B with Main board C** |
| **19Vdc** | **1.59** | **3.2** | **30.21** | **--** | **--** | **Standy mode (No Docking Station)** |
| **19Vdc** | **2.36** | **3.2** | **44.84** | **--** | **--** | **Charging mode (No Docking Station)** |
| **19Vdc** | **1.75** | **3.2** | **33.25** | **--** | **--** | **Standy mode (Docking Station)** |
| **19Vdc** | **3.04** | **3.2** | **57.76** | **--** | **--** | **Charging mode (Docking Station)** |
| **12.6Vdc** | **3.12** | **--** | **39.33** | **--** | **--** | **Battery discharge** |

Supplementary information:

Maximum normal load : Unit connected to pattern generator ,volume of a standard signal was applied to the audio input terminals and speaker and operated continuously with maximum brightness and contrast.

| 2.5 | TABLE: limited power source measurements | | | | | Pass |
|---|---|---|---|---|---|---|
| (Regulating network Limited) | | | | | | |
| output tested | measured | | single fault condition | measured value (maximum) | | |
| | from | to | | Uoc | Isc 5s | VA 5s |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| **For Construction A with Main board B** | | | | | | |
| USB(1) Pin 1 | V+ | V- | -- | 4.973 | 1.44 | 6.53 |
| USB(2) Pin 1 | V+ | V- | -- | 4.974 | 1.44 | 6.24 |
| Mini USB CN16 Pin 1 | V+ | V- | -- | 4.972 | 1.5 | 5.93 |
| USB(1) Pin 1 | V+ | V- | U16 pin 4-5 Short | 4.973 | 6.9 | 8.72 |
| USB(2) Pin 1 | V+ | V- | U16 pin 4-5 Short | 4.974 | 6.9 | 8.69 |
| Mini USB CN16 Pin 1 | V+ | V- | U17 pin 4-5 Short | 4.972 | 7.0 | 9.11 |
| **For Construction B with Main board A** | | | | | | |
| USB(1) Pin 1 | V+ | V- | -- | 4.951 | 1.45 | 5.89 |
| USB(2) Pin 1 | V+ | V- | -- | 4.951 | 1.45 | 5.88 |
| Mini USB CN1 Pin 1 | V+ | V- | -- | 4.947 | 1.45 | 5.93 |
| USB(1) Pin 1 | V+ | V- | U9 pin 4-5 Short | 4.951 | 6.2 | 8.45 |
| USB(2) Pin 1 | V+ | V- | U9 pin 4-5 Short | 4.951 | 6.2 | 8.49 |
| Mini USB CN1 Pin 1 | V+ | V- | U1 pin 4-5 Short | 4.947 | 6.1 | 8.24 |
| **For Construction B with Main board C** | | | | | | |
| **USB1 Pin1** | **V +** | **V-** | -- | **5.03** | **1.70** | **6.62** |
| **USB2 Pin 5** | **V +** | **V-** | -- | **5.03** | **1.70** | **6.69** |
| **Mini USB Pin 1** | **V +** | **V-** | -- | **5.06** | **1.45** | **5.82** |
| **USB1 Pin 1** | **V +** | **V-** | **U33 pin 4-5 short** | **5.06** | **6.05** | **8.69** |
| **USB2 Pin 5** | **V +** | **V-** | **U33 pin 4-5 short** | **5.06** | **6.05** | **8.51** |
| **Mini USB Pin 1** | **V +** | **V-** | **U2 pin 4-5 short** | **5.06** | **6.00** | **8.56** |

(Impedance limited)

| output tested | measured | | single fault condition | measured value (maximum) | | |
|---|---|---|---|---|---|---|
| | from | to | | Uoc | Isc 5s | VA 5s |
| **For Construction A with Main board B** | | | | | | |
| VGA Pin 9 | V+ | V- | -- | 4.71 | 1.5 | 4.8 |
| VGA Pin 12, 15 | V+ | V- | -- | 4.325 | 0.01 | 0.01 |
| CF Socket CN18 Pin 26 | V+ | V- | -- | 2.838 | 0.01 | 0.01 |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| PCMCIA Socket CN19 Pin 4, 66 | V+ | V- | -- | 2.899 | 0.01 | 0.01 |
| SIM Card CN12 Pin 2 | V+ | V- | -- | 1.691 | 0.01 | 0.01 |
| VGA Pin 9 | V+ | V- | -- | 4.71 | 1.5 | 4.8 |
| **For Construction B with Main board A** | | | | | | |
| VGA Pin 9 | V+ | V- | -- | 4.850 | 1.68 | 6.01 |
| VGA Pin 12, 15 | V+ | V- | -- | 4.447 | 0.01 | 0.01 |
| CF Socket CN13 Pin 25 | V+ | V- | -- | 2.83 | 0.01 | 0.01 |
| CF Socket CN13 Pin 26 | V+ | V- | -- | 2.83 | 0.01 | 0.01 |
| PCMCIA Socket CN12 Pin 4, 66 | V+ | V- | -- | 2.88 | 0.01 | 0.01 |
| SIM Card CN3 Pin 2 | V+ | V- | -- | 1.691 | 0.01 | 0.01 |
| **For Construction B with Main board C** | | | | | | |
| **VGA Pin 9** | **V+** | **V-** | **--** | **4.73** | **1.55** | **5.51** |
| For Docking Station | | | | | | |
| USB(2) Pin 1 | V+ | V- | -- | 5.037 | 1.3 | 5.62 |
| USB(1) Pin 1 | V+ | V- | -- | 5.037 | 1.3 | 5.88 |
| USB(3) Pin 1 | V+ | V- | -- | 5.038 | 1.3 | 5.80 |
| USB(4) Pin 1 | V+ | V- | -- | 5.038 | 1.3 | 5.92 |
| VGA Pin 9 | V+ | V- | -- | 4.988 | 1.54 | 5.53 |
| VGA Pin 12,15 | V+ | V- | -- | 4.667 | 0.01 | 0.01 |
| (Inherently limited) | | | | | | |

| output tested | measured | | single fault condition | measured value (maximum) | | |
|---|---|---|---|---|---|---|
| | from | to | | Uoc | Isc 60s | VA 60s |
| **For Construction A with Main board B** | | | | | | |
| VGA Pin 1-8, 10-11, 13-14 | V+ | V- | -- | 0 | -- | -- |
| CF Socket CN18 Pin 1-24, 27-50 | V+ | V- | -- | 0 | -- | -- |
| PCMCIA | V+ | V- | -- | 0 | -- | -- |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| Socket CN19, Pin 1-3, 5-65, 67-68 | | | | | | |
| SIM Card CN12 Pin 1, 3-6 | V+ | V- | -- | 0 | -- | -- |
| USB(1) Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| USB(2) Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| USB(1) Pin 2-4 | V+ | V- | U16 pin 4-5 Short | 0 | -- | -- |
| USB(2) Pin 2-4 | V+ | V- | U16 pin 4-5 Short | 0 | -- | -- |
| Mini USB CN16 Pin 2-4 | V+ | V- | U17 pin 4-5 Short | 0 | -- | -- |
| RS232 All Pins | V+ | V- | -- | 0 | -- | -- |
| RJ11 All Pins | V+ | V- | -- | 0 | -- | -- |
| Red Audio | V+ | V- | -- | 0 | -- | -- |
| Green Audio | V+ | V- | -- | 0 | -- | -- |
| RJ45 All Pins | V+ | V- | -- | 0 | -- | -- |
| **For Construction B with Main board A** | | | | | | |
| VGA Pin 1-8,10-11,13-14 | V+ | V- | -- | 0 | -- | -- |
| CF Socket CN13, Pin 1-24,27-50 | V+ | V- | -- | 0 | -- | -- |
| PCMCIA Socket CN12, Pin 1-3,5-65,67-68 | V+ | V- | -- | 0 | -- | -- |
| SIM Card CN3, Pin 1,3-6 | V+ | V- | -- | 0 | -- | -- |
| USB(2) Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| Mini USB CN1, Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| USB(1) Pin 2-4 | V+ | V- | U9 pin 4-5 Short | 0 | -- | -- |
| USB(2) Pin | V+ | V- | U9 pin 4-5 Short | 0 | -- | -- |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2-4 | | | | | | |
| Mini USB CN1, Pin 2-4 | V+ | V- | U1 pin 4-5 Short | 0 | -- | -- |
| RS232 All Pins | V+ | V- | -- | 0 | -- | -- |
| RJ11 All Pins | V+ | V- | -- | 0 | -- | -- |
| Red Audio All Pins | V+ | V- | -- | 0 | -- | -- |
| Green Audio All Pins | V+ | V- | -- | 0 | -- | -- |
| RJ45 All Pins | V+ | V- | -- | 0 | -- | -- |
| For Docking Station | | | | | | |
| USB(1) Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| USB(2) Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| USB(3) Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| USB(4) Pin 2-4 | V+ | V- | -- | 0 | -- | -- |
| VGA Pin 1-8, 10-11, 13-14 | V+ | V- | -- | 0 | -- | -- |
| RJ45 All Pins | V+ | V- | -- | 0 | -- | -- |
| RS232 All Pins | V+ | V- | -- | 0 | -- | -- |
| **For Construction B with Main board C** | | | | | | |
| **USB1 pin2-4** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **USB1 pin6-8** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **Mini USB pin2-4** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **RJ45 All pins** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **Red Audio All pins** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **Green Audio All pins** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **RJ11 All pins** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **VGA pin1-8,10-15** | **V+** | **V-** | **--** | **0** | **--** | **--** |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| **PCMCIA socket pin1-3,5-65,67-68** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **PCMCIA socket pin4** | **V+** | **V-** | **--** | **2.80** | **0.01** | **0.01** |
| **PCMCIA socket pin66** | **V+** | **V-** | **--** | **2.80** | **0.01** | **0.01** |
| **CF socket All pins** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **SIM card All pins** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| **RS232 All pins** | **V+** | **V-** | **--** | **0** | **--** | **--** |
| Note : -- | | | | | | |

| **2.9.1, 2.9.2, 5.2.2** | **TABLE: humidity Test** | Pass |
|---|---|---|

| Test Location | Test Voltage (V) | Breakdown |
|---|---|---|
| RJ-11 to Output Connector | 1500 Vac | No |
| RJ-11 to Metal Enclosure | 1500 Vac | No |
| RJ-11 to Panel body with foil | 1500 Vac | No |
| Note : Temperature: 25℃; Humidity: 95%, 48hrs. | | |

| **4.3.8** | **TABLE: Batteries** | | | | | | | | Pass |
|---|---|---|---|---|---|---|---|---|---|
| | Non-rechargeable batteries | | | Rechargeable batteries | | | | | |
| | Discharging | | Un-intentional charging | Charging | | Discharging | | Reversed charging | |
| | Meas. current | Manuf. Specs. | | Meas. current | Manuf. Specs. | Meas. current | Manuf. Specs. | Meas. current | Manuf. Specs. |
| For Model: **Construction** A | | | | | | | | | |
| Max. current during normal condition | -- | -- | -- | 2000mA | 2000mA | -- | -- | -- | -- |
| Max. A during fault condition 1 | -- | -- | -- | 2000mA | 2000mA | -- | -- | -- | -- |
| Max. A during fault condition 2 | -- | -- | -- | -- | -- | 3000mA | 3000mA | -- | -- |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| 4.3.8 | TABLE: Batteries | | | | | | | | | Pass |
|---|---|---|---|---|---|---|---|---|---|---|
| | Non-rechargeable batteries | | | Rechargeable batteries | | | | | | |
| | Discharging | | Un-intentional charging | Charging | | Discharging | | Reversed charging | | |
| | Meas. current | Manuf. Specs. | | Meas. current | Manuf. Specs. | Meas. current | Manuf. Specs. | Meas. current | Manuf. Specs. | |
| For Model: **Construction** B | | | | | | | | | | |
| Max. current during normal condition | -- | -- | -- | 2500mA | 2500mA | -- | -- | -- | -- | |
| Max. A during fault condition 1 | -- | -- | -- | 2500mA | 2500mA | -- | -- | -- | -- | |
| Max. A during fault condition 2 | -- | -- | -- | -- | -- | 5890mA | 5890mA | -- | -- | |
| Note :<br>For **Construction** A<br>1. Fault condition 1: Q2 Pin 1, 2, 3 - Pin 5, 6, 7, 8, Short; C.C mode, change 2000mA.<br>2. Fault condition 2: Q3 Pin 1, 2, 3 - Pin 5, 6, 7, 8, Short; Discharge 3000mA.<br>For **Construction** B<br>1. Fault condition 1: U4 Pin 1 - Pin 8 Short; C.C mode, change 2500mA.<br>2. Fault condition 2: U6 Pin 1 - Pin 8 Short; Discharge 5890mA. | | | | | | | | | | |

| 4.5 | TABLE: Temperature rise measurements | | Pass |
|---|---|---|---|
| | test voltage (V) ..... | See below | — |
| | $t_{amb1}$ (°C) .....: | See below | — |
| | $t_{amb2}$ (°C) .....: | See below | — |

| maximum temperature T of part/at:: | T (°C) | | allowed $T_{max}$ (°C) |
|---|---|---|---|
| **For Construction A with Main board B** | Maximum Normal Load at 19Vdc, Charge (Normal),0° | Maximum Normal Load at 19Vdc, Charge(Normal),45° | -- |
| 01.Ambient | 35.0 | 35.2 | -- |
| For Touch board | -- | -- | -- |
| 02.L1 coil | 66.2 | 66.1 | 105 |
| 03.PWB under D1 | 63.1 | 62.6 | 105 |
| For Main board | -- | -- | -- |
| 04.DC jack | 53.5 | 54.5 | 75 |
| 05.L14 coil | 64.3 | 65.9 | 105 |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| 06.RTC body | 58.0 | 58.4 | 100 |
| 07.PWB under U6 | 68.2 | 69.0 | 105 |
| 08.PWB under U1 | 59.0 | 59.1 | 105 |
| 09.PWB under TF1 | 50.1 | 51.1 | 105 |
| For RXTX board | -- | -- | -- |
| 10.RXTX board | 57.6 | 58.5 | 105 |
| For Battery Pack | -- | -- | -- |
| 11.Wire Line | 49.9 | 50.2 | 80 |
| 12.R37 body | 50.8 | 50.9 | 105 |
| 13.PWB under U2 | 54.9 | 51.1 | 105 |
| 14.PWB under Q3 | 55.8 | 53.4 | 105 |
| 15.PWB under Q3 | 56.2 | 54.1 | 105 |
| 16.cell body inside | 49.0 | 49.0 | 100 |
| 17.cell body outside | 47.9 | 48.1 | 100 |
| 18.Metel Enclosure outside near top | 43.3 | 44.2 | 55 |
| 19.Panel body | 40.0 | 39.9 | 75 |
| For Docking Station | -- | -- | -- |
| 20.PWB under U3 | 60.9 | 60.2 | 105 |
| 21.L1 coil | 69.1 | 69.2 | 105 |
| 22.CE2 body | 61.1 | 60.5 | 85 |
| 23.Plastic Enclosure inside near connect | 46.2 | 45.4 | -- |
| 24.Plastic Enclosure outside near connect | 41.4 | 40.1 | 95 |
| 25.Metel Enclosure outside near bottom | 39.9 | 40.2 | 70 |
| Test duration: | 3.4hrs | 2.5hrs | -- |
| **For Construction A with Main board B** | Maximum Normal Load at 19Vdc, DisCharge (Normal) | Maximum Normal Load at 19Vdc (Shift to Tma 35 degree C), DisCharge (Normal) | -- |
| 01.Ambient | 34.8 | 35.0 | -- |
| For Touch board | -- | -- | -- |
| 02.L1 coil | 60.8 | 61.0 | 105 |
| 03.PWB under D1 | 57.6 | 57.8 | 105 |
| For Main board | -- | -- | -- |
| 04.DC jack | 42.3 | 42.5 | 75 |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| 05.L14 coil | 45.8 | 46.0 | 105 |
| 06.RTC body | 50.5 | 50.7 | 100 |
| 07.PWB under U6 | 61.0 | 61.2 | 105 |
| 08.PWB under U1 | 50.6 | 50.8 | 105 |
| 09.PWB under TF1 | 43.6 | 43.8 | 105 |
| For RXTX board | -- | -- | -- |
| 10.RXTX board | 52.5 | 52.7 | 105 |
| For Battery Pack | -- | -- | -- |
| 11.Wire Line | 44.0 | 44.2 | 80 |
| 12.R37 body | 46.1 | 46.3 | 105 |
| 13.PWB under U2 | 46.7 | 46.9 | 105 |
| 14.PWB under Q3 | 49.1 | 49.3 | 105 |
| 15.PWB under Q3 | 49.9 | 50.1 | 105 |
| 16.cell body inside | 45.5 | 45.7 | 100 |
| 17.cell body outside | 43.7 | 43.9 | 100 |
| 18.Metel Enclosure outside near top | 41.4 | 41.6 | 55 |
| 19.Panel body | 39.1 | 39.3 | 75 |
| Test duration: | 3.2hrs | 3.2hrs | -- |
| **For Construction B with Main board A** | Maximum Normal Load at 19Vdc, Charge (Normal),0° | Maximum Normal Load at 19Vdc (Shift to Tma 40 degree C), Charge (Normal),0° | -- |
| 01.Ambient | 39.6 | 40.0 | -- |
| For Touch board | -- | -- | -- |
| 02.L1 coil | 79.4 | 79.8 | 105 |
| 03.PWB under D1 | 75.6 | 76.0 | 105 |
| For Main board | -- | -- | -- |
| 04.DC jack | 64.5 | 64.9 | 75 |
| 05.L14 coil | 62.8 | 63.2 | 105 |
| 06.RTC body | 65.7 | 66.1 | 100 |
| 07.PWB under U6 | 75.4 | 75.8 | 105 |
| 08.PWB under U1 | 60.1 | 60.5 | 105 |
| 09.PWB under TF1 | 56.8 | 57.2 | 105 |
| For RXTX board | -- | -- | -- |
| 10.RXTX board | 71.1 | 71.5 | 105 |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| For Battery Pack | -- | -- | -- |
| 11.Wire Line | 58.9 | 59.3 | 80 |
| 12.R37 body | 58.9 | 59.3 | 105 |
| 13.PWB under U2 | 59.0 | 59.4 | 105 |
| 14.PWB under Q3 | 58.8 | 59.2 | 105 |
| 15.PWB under Q3 | 58.4 | 58.8 | 105 |
| 16.cell body inside | 53.0 | 53.4 | 100 |
| 17.cell body outside | 50.5 | 50.9 | 100 |
| 18.Metel Enclosure outside near top | 46.3 | 46.7 | 55 |
| 19.Panel body | 46.0 | 46.4 | 75 |
| For Docking Station | -- | -- | -- |
| 20.PWB under U3 | 65.4 | 65.8 | 105 |
| 21.L1 coil | 69.7 | 70.1 | 105 |
| 22.CE2 body | 63.9 | 64.3 | 85 |
| 23.Plastic Enclosure inside near connect | 54.3 | 54.7 | -- |
| 24.Plastic Enclosure outside near connect | 47.9 | 48.3 | 95 |
| 25.Metel Enclosure outside near bottom | 45.0 | 45.4 | 70 |
| Test duration: | 3.4hrs | 3.4hrs | -- |
| **For Construction B with Main board A** | Maximum Normal Load at 19Vdc (Shift to Tma 40 degree C), Charge(Normal),45° | -- | -- |
| 01.Ambient | 40.0 | -- | -- |
| For Touch board | -- | -- | -- |
| 02.L1 coil | 78.5 | -- | 105 |
| 03.PWB under D1 | 74.3 | -- | 105 |
| For Main board | -- | -- | -- |
| 04.DC jack | 63.4 | -- | 75 |
| 05.L14 coil | 62.4 | -- | 105 |
| 06.RTC body | 65.0 | -- | 100 |
| 07.PWB under U6 | 74.7 | -- | 105 |
| 08.PWB under U1 | 60.1 | -- | 105 |
| 09.PWB under TF1 | 56.8 | -- | 105 |
| For RXTX board | -- | -- | -- |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| 10.RXTX board | 70.5 | -- | 105 |
| For Battery Pack | -- | -- | -- |
| 11.Wire Line | 58.6 | -- | 80 |
| 12.R37 body | 58.8 | -- | 105 |
| 13.PWB under U2 | 59.0 | -- | 105 |
| 14.PWB under Q3 | 58.8 | -- | 105 |
| 15.PWB under Q3 | 58.4 | -- | 105 |
| 16.cell body inside | 53.0 | -- | 100 |
| 17.cell body outside | 50.8 | -- | 100 |
| 18.Metel Enclosure outside near top | 47.5 | -- | 55 |
| 19.Panel body | 44.5 | -- | 75 |
| For Docking Station | -- | -- | -- |
| 20.PWB under U3 | 64.2 | -- | 105 |
| 21.L1 coil | 69.7 | -- | 105 |
| 22.CE2 body | 63.0 | -- | 85 |
| 23.Plastic Enclosure inside near connect | 52.1 | -- | |
| 24.Plastic Enclosure outside near connect | 43.6 | -- | 95 |
| 25.Metel Enclosure outside near bottom | 45.0 | -- | 70 |
| Test duration: | 3.2hrs | -- | -- |
| **For Construction B with Main board A** | Maximum Normal Load at 19Vdc (Shift to Tma 40 degree C), DisCharge (Normal) | -- | -- |
| 01.Ambient | 41.3 | -- | -- |
| For Touch board | -- | -- | -- |
| 02.L1 coil | 74.5 | -- | 105 |
| 03.PWB under D1 | 71.2 | -- | 105 |
| For Main board | -- | -- | -- |
| 04.DC jack | 56.0 | -- | 75 |
| 05.L14 coil | 53.2 | -- | 105 |
| 06.RTC body | 61.1 | -- | 100 |
| 07.PWB under U6 | 70.2 | -- | 105 |
| 08.PWB under U1 | 57.2 | -- | 105 |
| 09.PWB under TF1 | 54.5 | -- | 105 |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| For RXTX board | -- | -- | -- |
| 10.RXTX board | 65.1 | -- | 105 |
| For Battery Pack | -- | -- | -- |
| 11.Wire Line | 58.7 | -- | 80 |
| 12.R37 body | 60.3 | -- | 105 |
| 13.PWB under U2 | 58.3 | -- | 105 |
| 14.PWB under Q3 | 60.1 | -- | 105 |
| 15.PWB under Q3 | 59.2 | -- | 105 |
| 16.cell body inside | 54.1 | -- | 100 |
| 17.cell body outside | 48.4 | -- | 100 |
| 18.Metel Enclosure outside near top | 46.4 | -- | 55 |
| 19.Panel body | 45.1 | -- | 75 |
| Test duration: | 4.7hrs | -- | -- |
| For Rechargeable Lithium Battery (RTC Battery), ML1220(I) | Maximum Normal Load at discharge output: 17mA, DisCharge(RTC) | Maximum Normal Load at discharge output:17mA (Shift to Tma 40 degree C), DisCharge(RTC) | -- |
| 01.Ambient | 24.2 | 40.0 | -- |
| 02.RTC body | 24.4 | 40.2 | 100 |
| Test duration: | 3.4hrs | 3.4hrs | -- |
| **For Construction B with Main board C** | **Maximum Normal Load at 19Vdc, Charge (Normal), 0°** | **Maximum Normal Load at 19Vdc, Charge(Normal), 45°** | **--** |
| **1. Ambient** | **40.0** | **40.2** | **--** |
| **For touch board** | **--** | **--** | **--** |
| **2. L1 coil** | **76.5** | **74.4** | **105** |
| **3. PWB under D1** | **73.5** | **71.6** | **105** |
| **For Main board** | **--** | **--** | **--** |
| **4. DC jack** | **57.0** | **53.8** | **75** |
| **5. L21 coil** | **72.0** | **72.0** | **105** |
| **6. PWB under TF1** | **55.0** | **56.0** | **105** |
| **7. RTC body** | **63.5** | **62.5** | **100** |
| **8. PWB under U11** | **70.5** | **68.2** | **105** |
| **9. PWB under U4** | **74.2** | **71.1** | **105** |
| **10. PWB under U8** | **58.4** | **58.5** | **105** |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| **For RXTX board** | **--** | **--** | **--** |
| **11. RXTX board** | **59.2** | **59.6** | **105** |
| **For battery pack** | **--** | **--** | **--** |
| **12. Wire line** | **51.7** | **51.9** | **80** |
| **13. PWB under U2** | **53.0** | **52.4** | **105** |
| **14. PWB under R1** | **52.8** | **52.8** | **105** |
| **15. PWB under U5** | **52.3** | **52.0** | **105** |
| **16. PWB under U7** | **52.6** | **52.9** | **105** |
| **17. Cell body inside** | **48.4** | **49.0** | **100** |
| **18. Cell body outside** | **47.0** | **47.6** | **100** |
| **19.Metel enclosure outside near TOP** | **49.0** | **47.6** | **55** |
| **20. Panel body** | **45.0** | **45.2** | **75** |
| **For Docking station** | **--** | **--** | **--** |
| **21.PWB under U3** | **65.4** | **63.5** | **105** |
| **22.L1 coil** | **71.6** | **71.3** | **105** |
| **23.CE2 body** | **64.1** | **63.4** | **85** |
| **24.Plastic enclosure inside near connect** | **51.5** | **50.1** | **60** |
| **25.Plastic enclosure outside near connect** | **46.9** | **45.8** | **95** |
| **26.Metel enclosure outside near bottom** | **46.1** | **44.9** | **70** |
| **Test Duration** | **2.6hrs** | **2.9hrs** | **--** |
| **For Construction B with Main board C** | **Maximum Normal Load at 19Vdc, DisCharge (Normal), 0°** | **--** | **--** |
| **1. Ambient** | **40.2** | **--** | **--** |
| **For touch board** | **--** | **--** | **--** |
| **2. L1 coil** | **78.4** | **--** | **105** |
| **3. PWB under D1** | **74.5** | **--** | **105** |
| **For Main board** | **--** | **--** | **--** |
| **4. DC jack** | **53.5** | **--** | **75** |
| **5. L21 coil** | **62.9** | **--** | **105** |
| **6. PWB under TF1** | **58.8** | **--** | **105** |
| **7. RTC body** | **66.1** | **--** | **100** |
| **8. PWB under U11** | **72.6** | **--** | **105** |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | |
|---|---|---|---|
| **9. PWB under U4** | **78.6** | **--** | **105** |
| **10. PWB under U8** | **60.5** | **--** | **105** |
| **For RXTX board** | **--** | **--** | **--** |
| **11. RXTX board** | **60.7** | **--** | **105** |
| **For battery pack** | **--** | **--** | **--** |
| **12. Wire line** | **65.9** | **--** | **80** |
| **13. PWB under U2** | **60.6** | **--** | **105** |
| **14. PWB under R1** | **69.7** | **--** | **105** |
| **15. PWB under U5** | **66.3** | **--** | **105** |
| **16. PWB under U7** | **69.2** | **--** | **105** |
| **17. Cell body inside** | **57.9** | **--** | **100** |
| **18. Cell body outside** | **53.5** | **--** | **100** |
| **19.Metel enclosure outside near TOP** | **50.0** | **--** | **55** |
| **20. Panel body** | **45.8** | **--** | **75** |
| **Test Duration** | **4.6hrs** | **--** | **--** |

Supplementary information:

The temperatures were measured under worst case normal mode defined in 1.2.2.1 and as described in 1.6.1 at voltages as described in 1.4.5.

The max. ambient temperature $T_{max}$ is defined at for **Construction** A: 35°C and for **Construction** B: 40°C.Therefore the maximum temperatures measured are recalculated.

Components with:

- max. absolute temp. of 85 °C (Capacitor)→ Tmax = 85 °C
- max. absolute temp. of 105 °C (Chock)→ Tmax = 105 °C
- max. absolute temp. of 105 °C (PWB)→ Tmax = 105 °C
- max. absolute temp. of 100 °C (RTC Battery, Battery Cell)→ Tmax = 100 °C
- max. absolute temp. of 75 °C (Panel body)→ Tmax = 75 °C
- when no class of insulation is given, minimum insulation 105°C assumed.

User accessible area:

- Metal enclosure which may be touch temp. 55°C → Tmax = 55°C

| **5.1.8.1** | **TABLE: touch current test (Single-Phase Equipment, Figure 5A)** | | | | | Pass |
|---|---|---|---|---|---|---|
| Terminal A of Measuring Instrument Connected to | Test Voltage | Switch "e" Position | Polarity P1/Primary Switch Condition | | | |
| | | | Normal/On | Normal/Off | Reverse/On | Reverse/Off |
| For **Main board A** (for **Construction** B) with power adapter (FSP Group Inc, Model : FSP065-RAB) | | | | | | |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| TNC (RJ-11) | 264 | Open | 0.08 | 0.08 | 0.08 | 0.08 |
| For **Main board B** (for **Construction** A) with power adapter (FSP Group Inc, Model : FSP065-RAB) | | | | | | |
| TNC(RJ-11) | 264 | Open | 0.08 | 0.08 | 0.08 | 0.08 |
| **For Main board C (for Construction C) with power adapter (FSP Group Inc, Model : FSP065-RAB)** | | | | | | |
| **TNC(RJ-11)** | **264** | **Open** | **0.05** | **0.05** | **0.05** | **0.05** |
| Notes:<br>The limited did not exceed 0.25 mA r.m.s<br>Single-Phase equipment- Test circuit Fig. 5A | | | | | | |

| **5.2** | **TABLE: Electric strength tests and impulse tests** | Pass |
|---|---|---|
| test voltage applied between: | test voltage (V) | Breakdown Yes / No |
| For Mother board A, B**, C** | | |
| Impulse Test: RJ-11(TNC) / Output connector | 1500 Vac | No |
| Impulse Test: RJ-11(TNC) / Metal enclosure | 2500 Vac | No |
| Impulse Test: RJ-11(TNC) / Panel body with foil | 2500 Vac | No |
| Steady-State Test: RJ-11(TNC) / Output connector | 1500 Vac | No |
| Steady-State Test: RJ-11(TNC) / Metal enclosure | 1500 Vac | No |
| Steady-State Test: RJ-11(TNC) / Panel body with foil | 1500 Vac | No |
| Note: -- | | |

| **5.3** | **TABLE: Fault condition tests** | | | | | Pass |
|---|---|---|---|---|---|---|
| | ambient temperature (°C) | | | | See below | — |
| | model/type of power supply | | | | See Table 1.5.1 for details | — |
| | manufacturer of power supply | | | | See Table 1.5.1 for details | — |
| | rated markings of power supply | | | | See Table 1.5.1 for details | — |
| component No. | fault | test voltage (V) | test time | fuse No. | fuse current (A) | result |
| 5.3.1 - 5.3.9 - Abnormal Operation Tests | | | | | | |
| -- | -- | -- | -- | -- | -- | For **Construction** B **with Main board A** |

| IEC 60950-1 | | | |
|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| 01. Stalled System fans,0° | Stalled | 19Vdc | 6.5hrs | -- | -- | NC,NT,CT<br>Measured fuse curment:2.60A<br>Ambient:20.1/40.0degree C<br>Max temp<br>02.L1 coil:79.2/99.1degree C |
| 02. Ventilation openings Blocked,0° | Blocked | 19Vdc | 7.6hrs | -- | -- | NC,NT,CT<br>Measured fuse curment:2.60A<br>Ambient:18.9/40.0degree C<br>Max temp<br>02.L1 coil:78.0/99.1degree C |
| **--** | **--** | **--** | **--** | **--** | **--** | **For Construction B with Main board C** |
| **01.ventilation openings** | **Blocked** | **19Vdc** | **8.9hrs** | **--** | **--** | **NB,NC,NT<br>Measured fuse current: 3.12A<br>Ambient: 23.3/40.0°C<br>Max temp.<br>PWB under U4: 79.4/96.1°C** |
| 5.3.7 - OVERLOAD OF OPERATOR ACCESSIBLE CONNECTOR TEST **(US deviation)** | | | | | | |
| -- | -- | -- | -- | -- | -- | For **Construction** A **with Main board B** |
| VGA Pin 9 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.71<br>Maximum Current: 1200mA,NC,NT |
| VGA Pin 12,15 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.325<br>Maximum Current: 10mA,NC,NT |
| VGA Pin 1-8,10-11,13-14 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| CF Socket CN18Pin 25 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 2.839<br>Maximum Current: 10mA,NC,NT |
| CF Socket CN18Pin 26 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 2.838<br>Maximum Current: 10mA,NC,NT |
| CF Socket CN18Pin 1-24,27-50 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| PCMCIA Socket CN19Pin 4,66 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 2.899<br>Maximum Current: 10mA,NC,NT |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| PCMCIA Socket CN19Pin 1-3,5-65,67-68 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| SIM Card CN12Pin 2 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 1.691<br>Maximum Current: 10mA,NC,NT |
| SIM Card CN12Pin 1,3-6 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| USB(1)Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.973<br>Maximum Current: 1140mA,NC,NT |
| USB(1)Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| USB(2)Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.974<br>Maximum Current: 1140mA,NC,NT |
| USB(2)Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| Mini USB CN16Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.972<br>Maximum Current: 1200mA,NC,NT |
| Mini USB CN16Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RS232 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RJ11 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| Red Audio All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| Green Audio All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RJ45 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| -- | -- | -- | -- | -- | -- | For **Construction** B **with Main board A** |
| VGA Pin 9 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.850<br>Maximum Current: 1380mA,NC,NT |
| VGA Pin 12,15 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.447<br>Maximum Current: 10mA,NC,NT |
| VGA Pin 1-8,10-11,13-14 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| CF Socket CN13 Pin 25 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 2.83<br>Maximum Current: 10mA,NC,NT |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| CF Socket CN13 Pin 26 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 2.83 Maximum Current: 10mA,NC,NT |
| CF Socket CN13 Pin 1-24,27-50 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| PCMCIA Socket CN12 Pin 4,66 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 2.88 Maximum Current: 10mA,NC,NT |
| PCMCIA Socket CN12 Pin 1-3,5-65,67-68 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| SIM Card CN3 Pin 2 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 1.691 Maximum Current: 10mA,NC,NT |
| SIM Card CN3 Pin 1,3-6 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| USB(1) Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.951 Maximum Current: 1150mA,NC,NT |
| USB(1) Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| USB(2) Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.951 Maximum Current: 1150mA,NC,NT |
| USB(2)Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| Mini USB CN1 Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.947 Maximum Current: 1150mA,NC,NT |
| Mini USB CN1 Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RS232 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RJ11 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| Red Audio All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| Green Audio All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RJ45 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| -- | -- | -- | -- | -- | -- | For Docking Station |
| USB(1) Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 5.037 Maximum Current: 1000mA,NC,NT |
| USB(1) Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| USB(2) Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 5.037<br>Maximum Current: 1000mA,NC,NT |
| USB(2) Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| USB(3) Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 5.038<br>Maximum Current: 1000mA,NC,NT |
| USB(3) Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| USB(4) Pin 1 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 5.038<br>Maximum Current: 1000mA,NC,NT |
| USB(4) Pin 2-4 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| VGA Pin 9 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.988<br>Maximum Current: 1240mA,NC,NT |
| VGA Pin 12,15 | Overload | 19Vdc | 1hr | -- | -- | Open Voltage: 4.667<br>Maximum Current: 10mA,NC,NT |
| VGA Pin 1-8,10-11,13-14 | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RJ45 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| RS232 All Pins | Overload | 19Vdc | -- | -- | -- | Open Voltage: 0 |
| **--** | **--** | **--** | **--** | **--** | **--** | **For Construction B with Main board C** |
| **USB1 Pin1** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 5.03V;<br>Maximum current: 1500mA** |
| **USB1 pin2-4** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **USB2 Pin5** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 5.03V;<br>Maximum current: 1500mA** |
| **USB2 pin6-8** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Mini USB Pin1** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 5.06V;<br>Maximum current: 1050mA** |
| **Mini USB pin2-4** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **VGA pin9** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 4.73V;<br>Maximum current: 1150mA** |
| **VGA pin1-8,10-15** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |

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|---|---|---|---|
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | | | | | |
|---|---|---|---|---|---|---|
| **RJ45 All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Red Audio All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Green Audio All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **RJ11 All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **CF socket All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **SIM card All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Com port All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Pcmcia socket pin1-3,5-65,67-68** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Pcmcia socket pin4** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 2.80V; Maximum current: 10mA** |
| **Pcmcia socket pin66** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 2.80V; Maximum current: 10mA** |
| **VGA pin1-8,10-15** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **RJ45 All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Red Audio All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Green Audio All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **RJ11 All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **CF socket All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **SIM card All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **RS232 All pins** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Pcmcia socket pin1-3,5-65,67-68** | **Overload** | **19Vdc** | **--** | **--** | **--** | **Open Voltage:0V** |
| **Pcmcia socket pin4** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 2.80V; Maximum current: 10mA** |

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| | | | | | | |
|---|---|---|---|---|---|---|
| **Pcmcia socket pin66** | **Overload** | **19Vdc** | **1hr** | **--** | **--** | **Open Voltage: 2.80V; Maximum current: 10mA** |

Supplementary information:
NB: No indication of dielectric breakdown;
NC: Cheesecloth remained intact;
NT: Tissue paper remained.
CT: Constant Temperature Obtained.

# National Differences

**Group**

* No National Differences Declared
** Only Group Difference

| **ATTACHMENT TO TEST REPORT IEC 60950-1**<br>**EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES**<br>Information technology equipment – Safety –<br>Part 1: General requirements |
|---|
| **Differences according to.....:** EN 60950-1:2006/A11:2009/A1:2010 |
| **Attachment Form No. .....:** EU_GD_IEC60950_1B<br>**Attachment Originator.....:** SGS Fimko Ltd<br>**Master Attachment.....:** Date (2010-04) |
|  |

**EN 60950-1:2006/A11:2009/A1:2010 – CENELEC COMMON MODIFICATIONS**

| **IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN)** | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| Contents | Add the following annexes:<br>Annex ZA (normative) Normative references to international publications with their corresponding European publications<br>Annex ZB (normative) Special national conditions | | Pass |
| General | Delete all the "country" notes in the reference document (IEC 60950-1:2005) according to the following list:<br>1.4.8 Note 2; 1.5.1 Note 2 & 3; 1.5.7.1 Note<br>1.5.8 Note 2; 1.5.9.4 Note; 1.7.2.1 Note 4, 5 & 6<br>2.2.3 Note; 2.2.4 Note; 2.3.2 Note<br>2.3.2.1 Note 2; 2.3.4 Note 2; 2.6.3.3 Note 2 & 3<br>2.7.1 Note; 2.10.3.2 Note 2; 2.10.5.13 Note 3<br>3.2.1.1 Note; 3.2.4 Note 3.; 2.5.1 Note 2<br>4.3.6 Note; 1 & 2 4.7 Note 4; 4.7.2.2 Note<br>4.7.3.1 Note 2; 5.1.7.1 Note 3 & 4; 5.3.7 Note 1<br>6 Note 2 & 5; 6.1.2.1 Note 2; 6.1.2.2 Note<br>6.2.2 Note; 6.2.2.1 Note 2; 6.2.2.2 Note<br>7.1 Note 3; 7.2 Note; 7.3 Note 1 & 2<br>G.2.1 Note 2; Annex H Note 2 | | Pass |
| General (A1:2010) | Delete all the "country" notes in the reference document (IEC 60950-1:2005/A1:2010) according to the following list:<br>1.5.7.1 Note; 6.1.2.1 Note 2<br>6.2.2.1 Note 2; EE.3 Note | | N/A |

| IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 1.3.Z1 | Add the following subclause:<br>1.3.Z1 Exposure to excessive sound pressure<br>The apparatus shall be so designed and constructed as to present no danger when used for its intended purpose, either in normal operating conditions or under fault conditions, particularly providing protection against exposure to excessive sound pressures from headphones or earphones.<br>NOTE Z1 A new method of measurement is described in EN 50332-1, Sound system equipment:<br>Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 1: General method for "one package equipment", and in EN 50332-2, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 2: Guidelines to associate sets with headphones coming from different manufacturers. | | N/A |
| 1.5.1 | Add the following NOTE:<br>NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2002/95/EC | | N/A |
| 1.7.2.1 (A1:2010) | In addition, for a PORTABLE SOUND SYSTEM, the instructions shall include a warning that excessive sound pressure from earphones and headphones can cause hearing loss. | | N/A |
| 2.7.1 | Replace the subclause as follows:<br>Basic requirements<br>To protect against excessive current, short-circuits and earth faults in PRIMARY CIRCUITS, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c):<br><br>except as detailed in b) and c), protective devices necessary to comply with the requirements of 5.3 shall be included as parts of the equipment;<br>b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation; | | N/A |

| IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| | c) it is permitted for PLUGGABLE EQUIPMENT TYPE B or PERMANENTLY CONNECTED EQUIPMENT, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.<br>If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for PLUGGABLE EQUIPMENT TYPE A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet. | | |
| 2.7.2 | This subclause has been declared 'void'. | | N/A |
| 3.2.3 | Delete the NOTE in Table 3A, and delete also in this table the conduit sizes in parentheses. | | N/A |
| 3.2.5.1 | Replace "60245 IEC 53" by "H05 RR-F";<br>"60227 IEC 52" by "H03 VV-F or H03 VVH2-F";<br>"60227 IEC 53" by "H05 VV-F or H05 VVH2-F2".<br>In Table 3B, replace the first four lines by the following:<br>Up to and including 6 \| 0,75 [a] \|<br>Over 6 up to and including 10\| (0,75) [b] 1,0 \|<br>Over 10 up to and including 16\| (1,0) [c] 1,5 \|<br>In the conditions applicable to Table 3B delete the words "in some countries" in condition [a].<br>In NOTE 1, applicable to Table 3B, delete the second sentence. | | N/A |
| 3.3.4 | In Table 3D, delete the fourth line: conductor sizes for 10 to 13 A, and replace with the following:<br>Over 10 up to and including 16 \| 1,5 to 2,5 \| 1,5 to 4 \|<br>Delete the fifth line: conductor sizes for 13 to 16 A | | N/A |

| IEC 60950-1, GROUP DIFFERENCES (CENELEC common modifications EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 4.3.13.6 (A1:2010) | Replace the existing NOTE by the following:<br>NOTE Z1 Attention is drawn to:<br>1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz, and<br>2006/25/EC: Directive on the minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artifical optical radiation).<br>Standards taking into account mentioned Recommendation and Directive which demonstrate compliance with the applicable EU Directive are indicated in the OJEC. | | N/A |
| Annex H | Replace the last paragraph of this annex by:<br>At any point 10 cm from the surface of the OPERATOR ACCESS AREA, the dose rate shall not exceed 1 µSv/h (0,1 mR/h) (see NOTE). Account is taken of the background level.<br>Replace the notes as follows:<br>NOTE These values appear in Directive 96/29/Euratom.<br>Delete NOTE 2. | | N/A |
| Bibliography | Additional EN standards. | | — |

| ZA | **NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS** | — |
|---|---|---|

| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 1.2.4.1 | In Denmark, certain types of Class I appliances (see 3.2.1.1) may be provided with a plug not establishing earthing conditions when inserted into Danish socket-outlets. | | N/A |
| 1.2.13.14 | In Norway and Sweden, for requirements see 1.7.2.1 and 7.3 of this annex. | | N/A |
| 1.5.7.1 | In Finland, Norway and Sweden, resistors bridging BASIC INSULATION in CLASS I PLUGGABLE EQUIPMENT TYPE A must comply with the requirements in 1.5.7.1. In addition when a single resistor is used, the resistor must withstand the resistor test in 1.5.7.2. | | N/A |

| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 1.5.8 | In Norway, due to the IT power system used (see annex V, Figure V.7), capacitors are required to be rated for the applicable line-to-line voltage (230 V). | | N/A |
| 1.5.9.4 | In Finland, Norway and Sweden, the third dashed sentence is applicable only to equipment as defined in 6.1.2.2 of this annex. | | N/A |
| 1.7.2.1 | In Finland, Norway and Sweden, CLASS I PLUGGABLE EQUIPMENT TYPE A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet.<br>The marking text in the applicable countries shall be as follows:<br>In Finland: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan"<br>In Norway: “Apparatet må tilkoples jordet stikkontakt”<br>In Sweden: “Apparaten skall anslutas till jordat uttag”<br>In Norway and Sweden, the screen of the cable distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation need to be isolated from the screen of a cable distribution system.<br>It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by e.g. a retailer. | | N/A |

| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| | The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:<br>"Equipment connected to the protective earthing of the building installation through the mains connection or through other equipment with a connection to protective earthing – and to a cable distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a cable distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)."<br>NOTE In Norway, due to regulation for installations of cable distribution systems, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min.<br>Translation to Norwegian (the Swedish text will also be accepted in Norway):<br>"Utstyr som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av utstyret til kabel-TV nettet installeres en galvanisk isolator mellom utstyret og kabel- TV nettet."<br>Translation to Swedish:<br>"Utrustning som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medföra risk för brand. För att undvika detta skall vid anslutning av utrustningen till kabel-TV nät galvanisk isolator finnas mellan utrustningen och kabel-TV nätet." | | N/A |
| 1.7.5 | In Denmark, socket-outlets for providing power to other equipment shall be in accordance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a, when used on Class I equipment. For STATIONARY EQUIPMENT the socket-outlet shall be in accordance with Standard Sheet DK 1-1b or DK 1-5a.<br>For CLASS II EQUIPMENT the socket outlet shall be in accordance with Standard Sheet DKA 1-4a. | | N/A |

| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 2.2.4 | In Norway, for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex. | | N/A |
| 2.3.2 | In Finland, Norway and Sweden there are additional requirements for the insulation. See 6.1.2.1 and 6.1.2.2 of this annex. | | N/A |
| 2.3.4 | In Norway, for requirements see 1.7.2.1, 6.1.2.1 and 6.1.2.2 of this annex. | | N/A |
| 2.6.3.3 | In the United Kingdom, the current rating of the circuit shall be taken as 13 A, not 16 A. | | N/A |
| 2.7.1 | In the United Kingdom, to protect against excessive currents and short-circuits in the PRIMARY CIRCUIT of DIRECT PLUG-IN EQUIPMENT, tests according to 5.3 shall be conducted, using an external protective device rated 30 A or 32 A. If these tests fail, suitable protective devices shall be included as integral parts of the DIRECT PLUG-IN EQUIPMENT, so that the requirements of 5.3 are met. | | N/A |
| 2.10.5.13 | In Finland, Norway and Sweden, there are additional requirements for the insulation, see 6.1.2.1 and 6.1.2.2 of this annex. | | N/A |
| 3.2.1.1 | In Switzerland, supply cords of equipment having a RATED CURRENT not exceeding 10 A shall be provided with a plug complying with SEV 1011 or IEC 60884-1 and one of the following dimension sheets:<br>SEV 6532-2.1991 Plug Type 15<br>3P+N+PE 250/400 V, 10 A<br>SEV 6533-2.1991 Plug Type 11 L+N<br>250 V, 10 A<br>SEV 6534-2.1991 Plug Type 12 L+N+PE<br>250 V, 10 A<br>In general, EN 60309 applies for plugs for currents exceeding 10 A. However, a 16 A plug and socket-outlet system is being introduced in Switzerland, the plugs of which are according to the following dimension sheets, published in February 1998:<br>SEV 5932-2.1998: Plug Type 25 , 3L+N+PE 230/400 V, 16 A<br>SEV 5933-2.1998:Plug Type 21, L+N, 250 V, 16A<br>SEV 5934-2.1998: Plug Type 23, L+N+PE 250 V, | | N/A |

| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 3.2.1.1 | In Denmark, supply cords of single-phase equipment having a rated current not exceeding13 A shall be provided with a plug according to the Heavy Current Regulations, Section 107-2-D1.<br>CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.<br>If poly-phase equipment and single-phase equipment having a RATED CURRENT exceeding 13 A is provided with a supply cord with a plug, this plug shall be in accordance with the Heavy Current Regulations, Section 107-2-D1 or EN 60309-2. | | N/A |
| 3.2.1.1 | In Spain, supply cords of single-phase equipment having a rated current not exceeding 10 A shall be provided with a plug according to UNE 20315:1994.<br>Supply cords of single-phase equipment having a rated current not exceeding 2,5 A shall be provided with a plug according to UNE-EN 50075:1993.<br>CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules, shall be provided with a plug in accordance with standard UNE 20315:1994.<br>If poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with UNE-EN 60309-2. | | N/A |
| 3.2.1.1 | In the United Kingdom, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord and plug, shall be fitted with a ‘standard plug’ in accordance with Statutory Instrument 1768:1994 - The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those regulations.<br>NOTE ‘Standard plug’ is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug. | | N/A |

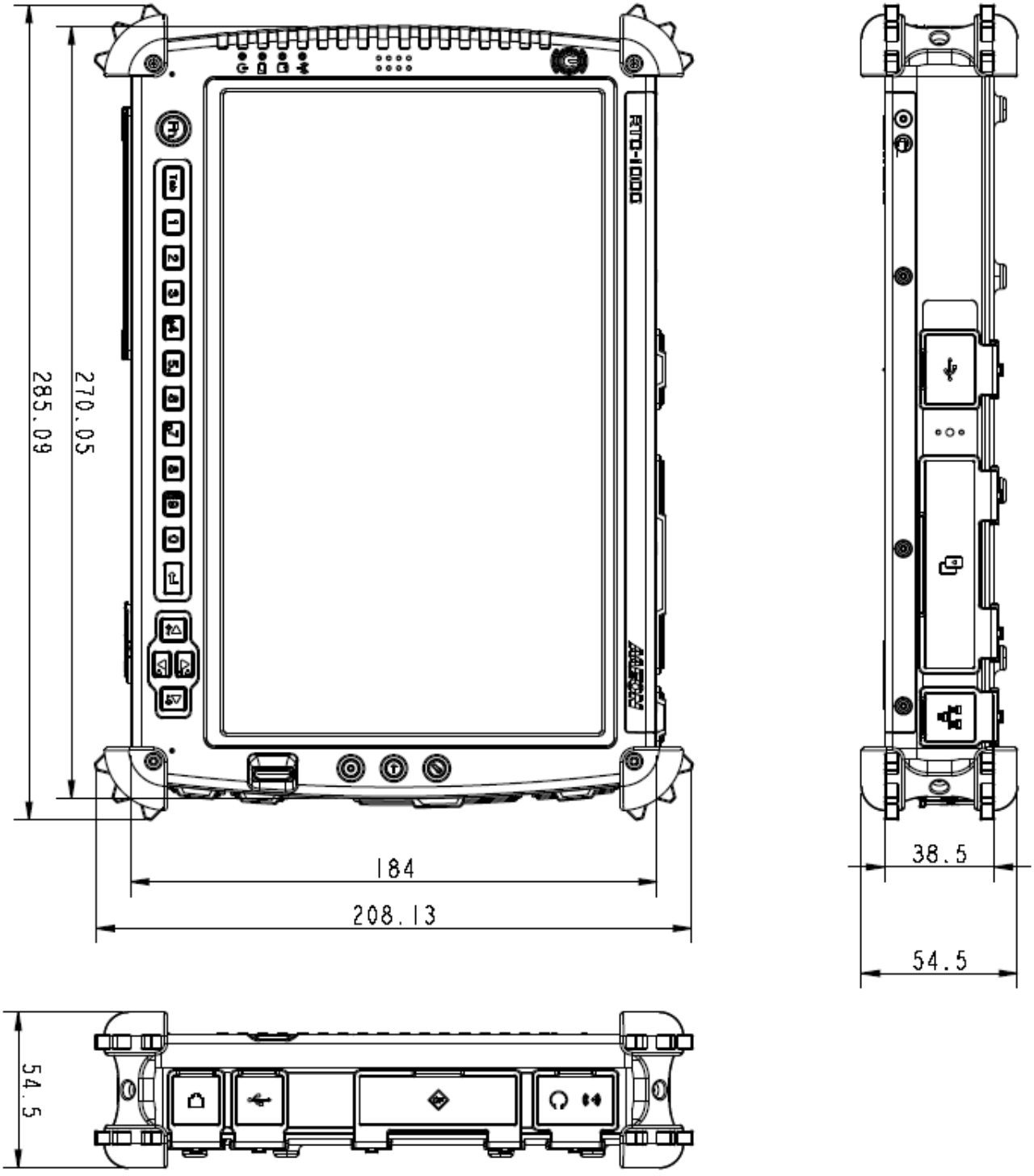
| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 3.2.1.1 | In Ireland, apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to I.S. 411 by means of that flexible cable or cord and plug, shall be fitted with a 13 A plug in accordance with Statutory Instrument 525:1997 - National Standards Authority of Ireland (section 28) (13 A Plugs and Conversion Adaptors for Domestic Use) Regulations 1997. | | N/A |
| 3.2.4 | In Switzerland, for requirements see 3.2.1.1 of this annex. | | N/A |
| 3.2.5.1 | In the United Kingdom, a power supply cord with conductor of 1,25 mm2 is allowed for equipment with a rated current over 10 A and up to and including 13 A. | | N/A |
| 3.3.4 | In the United Kingdom, the range of conductor sizes of flexible cords to be accepted by terminals for equipment with a RATED CURRENT of over 10 A up to and including 13 A is:<br>• 1,25 $mm^2$ to 1,5 $mm^2$ nominal cross-sectional area. | | N/A |
| 4.3.6 | In the United Kingdom, the torque test is performed using a socket outlet complying with BS 1363 part 1:1995, including Amendment 1:1997 and Amendment 2:2003 and the plug part of DIRECT PLUG-IN EQUIPMENT shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16 and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply. | | N/A |
| 4.3.6 | In Ireland, DIRECT PLUG-IN EQUIPMENT is known as plug similar devices. Such devices shall comply with Statutory Instrument 526:1997 - National Standards Authority of Ireland (Section 28) (Electrical plugs, plug similar devices and sockets for domestic use) Regulations, 1997. | | N/A |

| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 5.1.7.1 | In Finland, Norway and Sweden TOUCH CURRENT measurement results exceeding 3,5 mA r.m.s. are permitted only for the following equipment:<br>• STATIONARY PLUGGABLE EQUIPMENT TYPE A that<br>is intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, for example, in a telecommunication centre; and<br>has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR; and<br>is provided with instructions for the installation of that conductor by a SERVICE PERSON;<br>• STATIONARY PLUGGABLE EQUIPMENT TYPE B;<br>• STATIONARY PERMANENTLY CONNECTED EQUIPMENT. | | N/A |

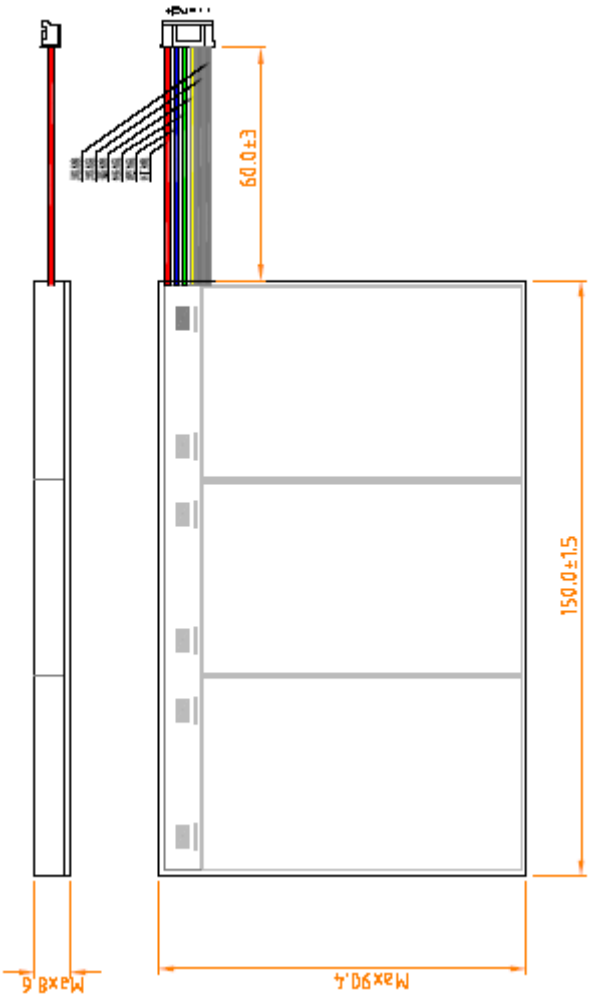
| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 6.1.2.1 (A1:2010) | In Finland, Norway and Sweden, add the following text between the first and second paragraph of the compliance clause:<br>If this insulation is solid, including insulation forming part of a component, it shall at least consist of either<br>- two layers of thin sheet material, each of which shall pass the electric strength test below, or<br>- one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.<br>Alternatively for components, there is no distance through insulation requirements for the insulation consisting of an insulating compound completely filling the casing, so that CLEARANCES and CREEPAGE DISTANCES do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition<br>- passes the tests and inspection criteria of 2.10.11 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of<br>2.10.10 shall be performed using 1,5 kV), and<br>- is subject to ROUTINE TESTING for electric strength during manufacturing, using a test voltage of 1,5 kV.<br>It is permitted to bridge this insulation with an optocoupler complying with 2.10.5.4 b).<br>It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2. | | N/A |

| ZB ANNEX (normative)<br>SPECIAL NATIONAL CONDITIONS (EN) | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| | A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:<br>- the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950-1:2006, 6.2.2.1;<br>- the additional testing shall be performed on all the test specimens as described in EN 60384-14;<br>- the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14. | | N/A |
| 6.1.2.2 | In Finland, Norway and Sweden, the exclusions are applicable for PERMANENTLY CONNECTED EQUIPMENT, PLUGGABLE EQUIPMENT TYPE B and equipment intended to be used in a RESTRICTED ACCESS LOCATION where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected PROTECTIVE EARTHING CONDUCTOR and is provided with instructions for the installation of that conductor by a SERVICE PERSON. | | N/A |
| 7.2 | In Finland, Norway and Sweden, for requirements see 6.1.2.1 and 6.1.2.2 of this annex.<br>The term TELECOMMUNICATION NETWORK in 6.1.2 being replaced by the term CABLE DISTRIBUTION SYSTEM. | | N/A |
| 7.3 | In Norway and Sweden, for requirements see 1.2.13.14 and 1.7.2.1 of this annex. | | N/A |
| 7.3 | In Norway, for installation conditions see EN 60728-11:2005. | | N/A |

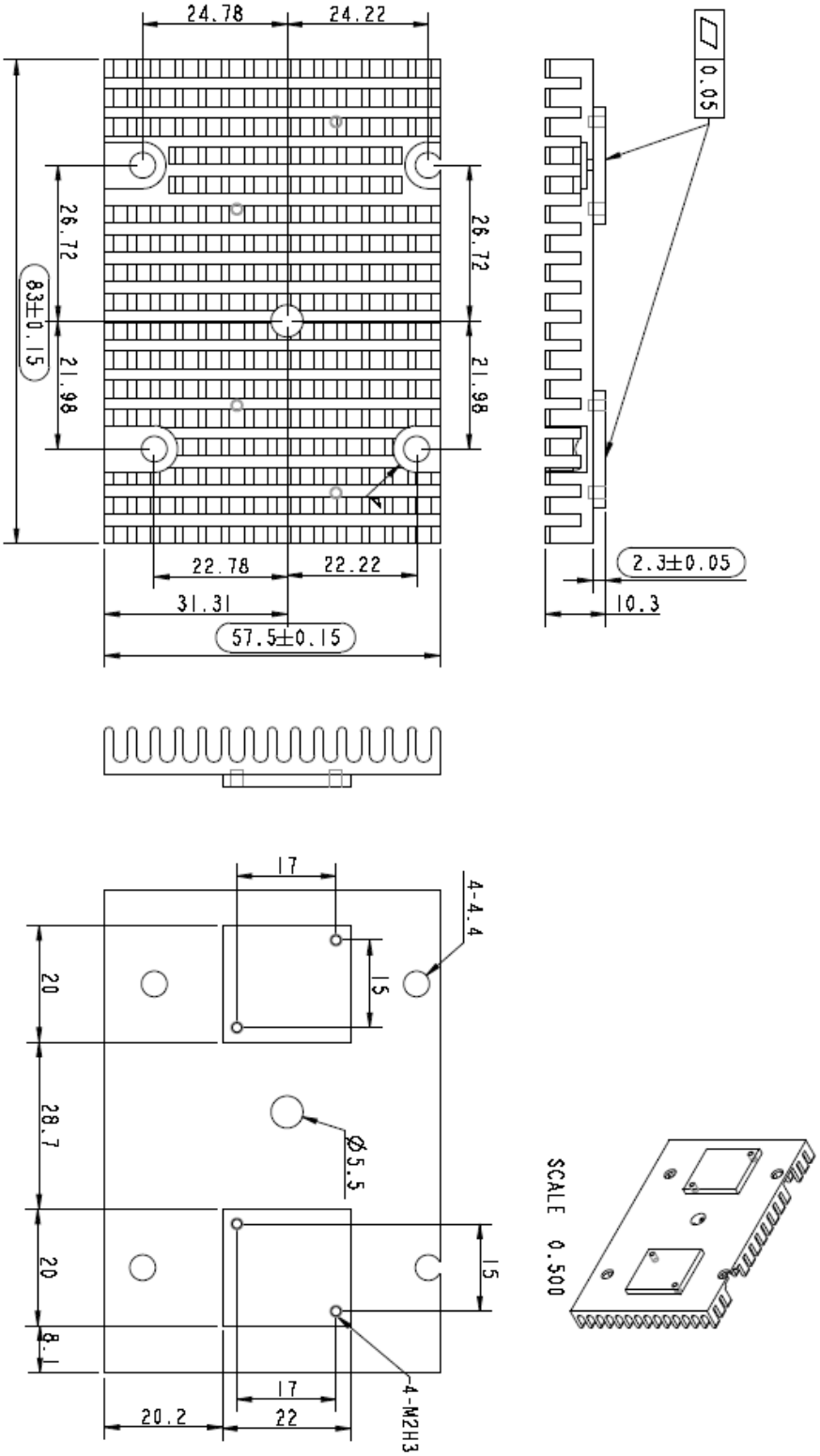
**Appendix**
**(Enclosure-1 for Construction A)**



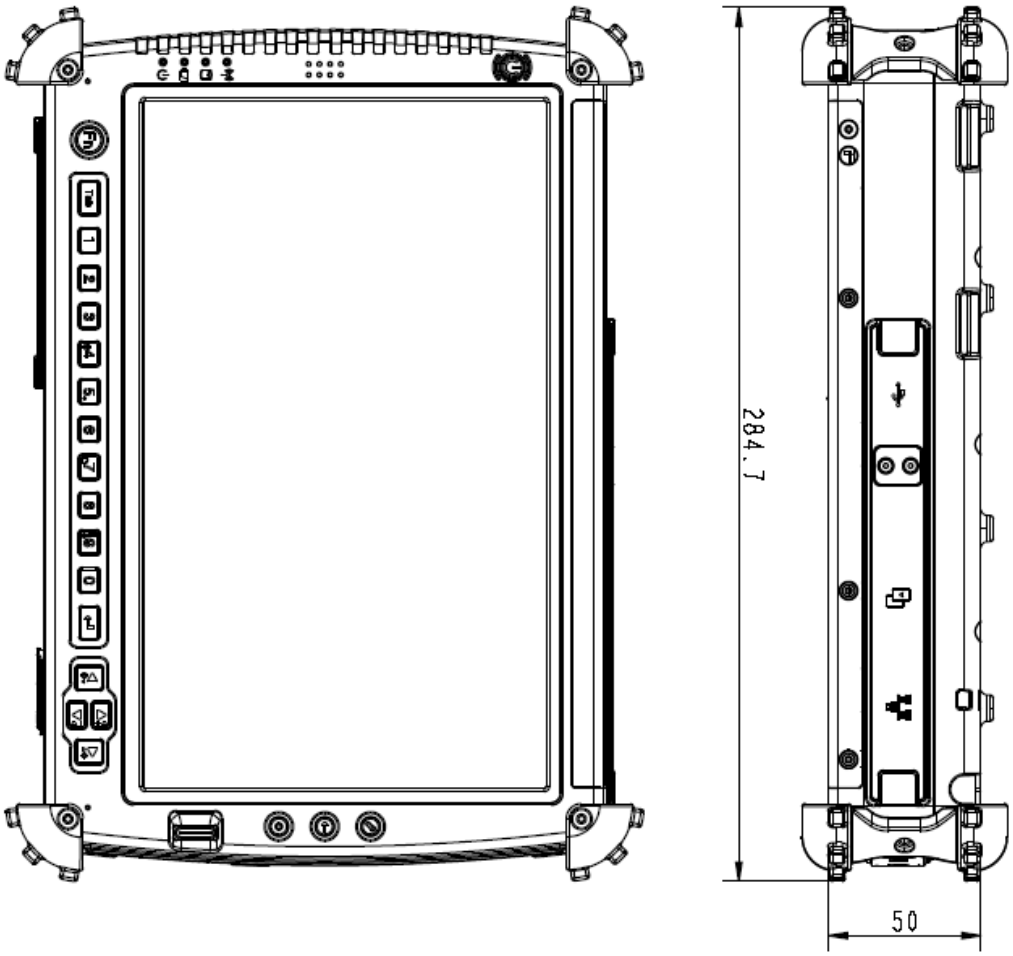
**Appendix**
**(Battery Pack(Formosan United Corporation / H705084) for Construction A)**

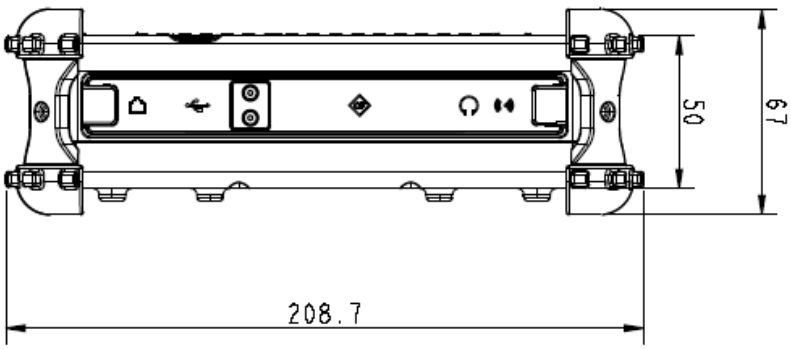


**Appendix**
**(CPU Heatsink for Construction A)**

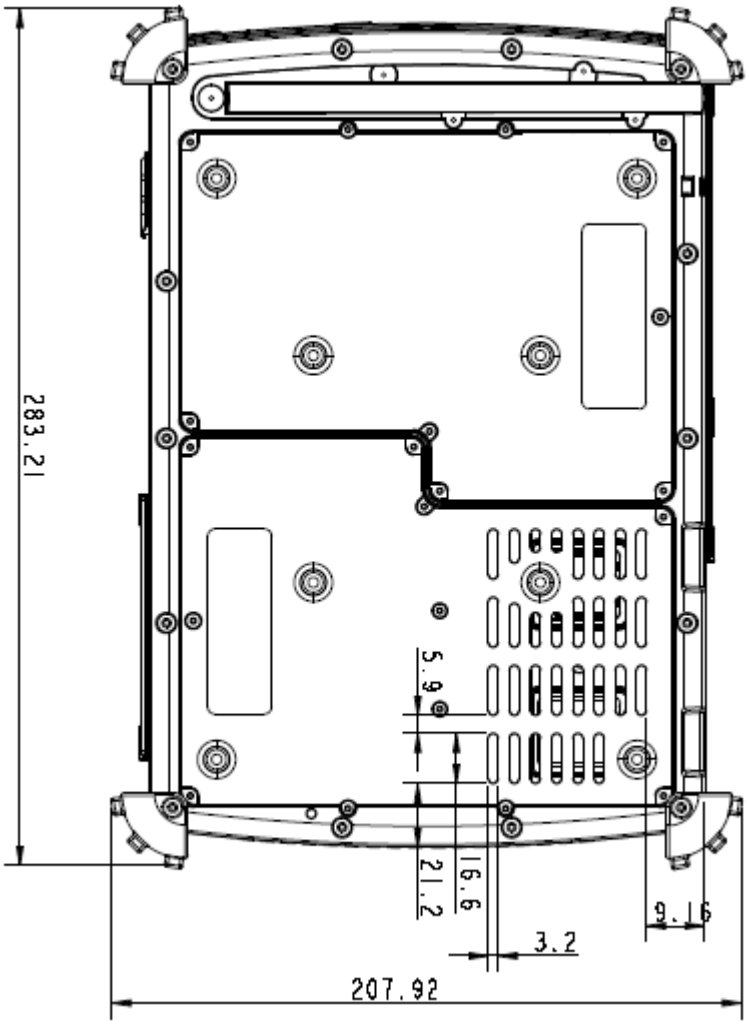


**Appendix**
**(Enclosure-1 for Construction B)**

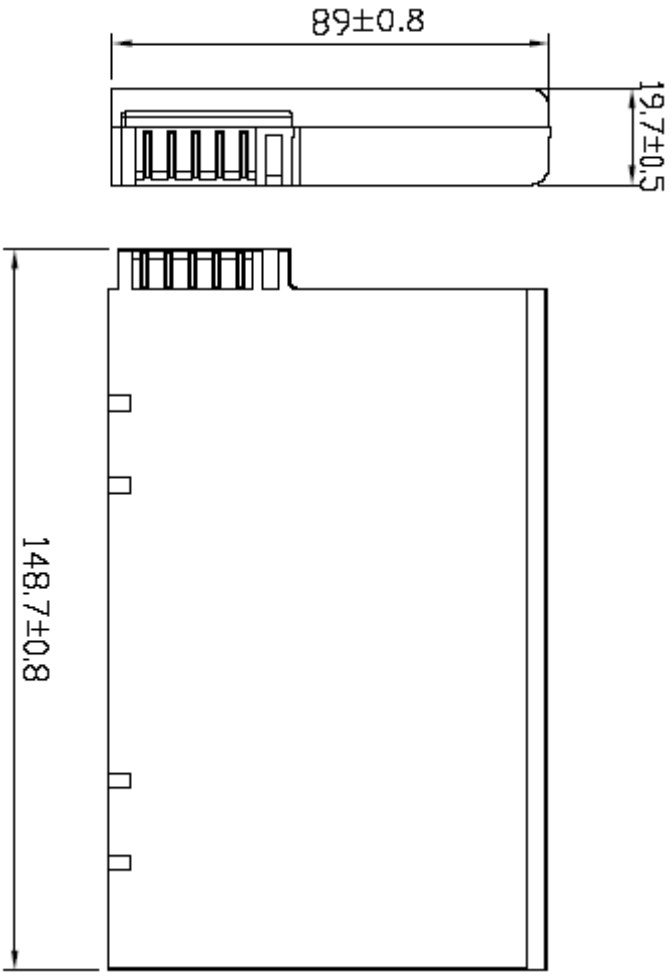


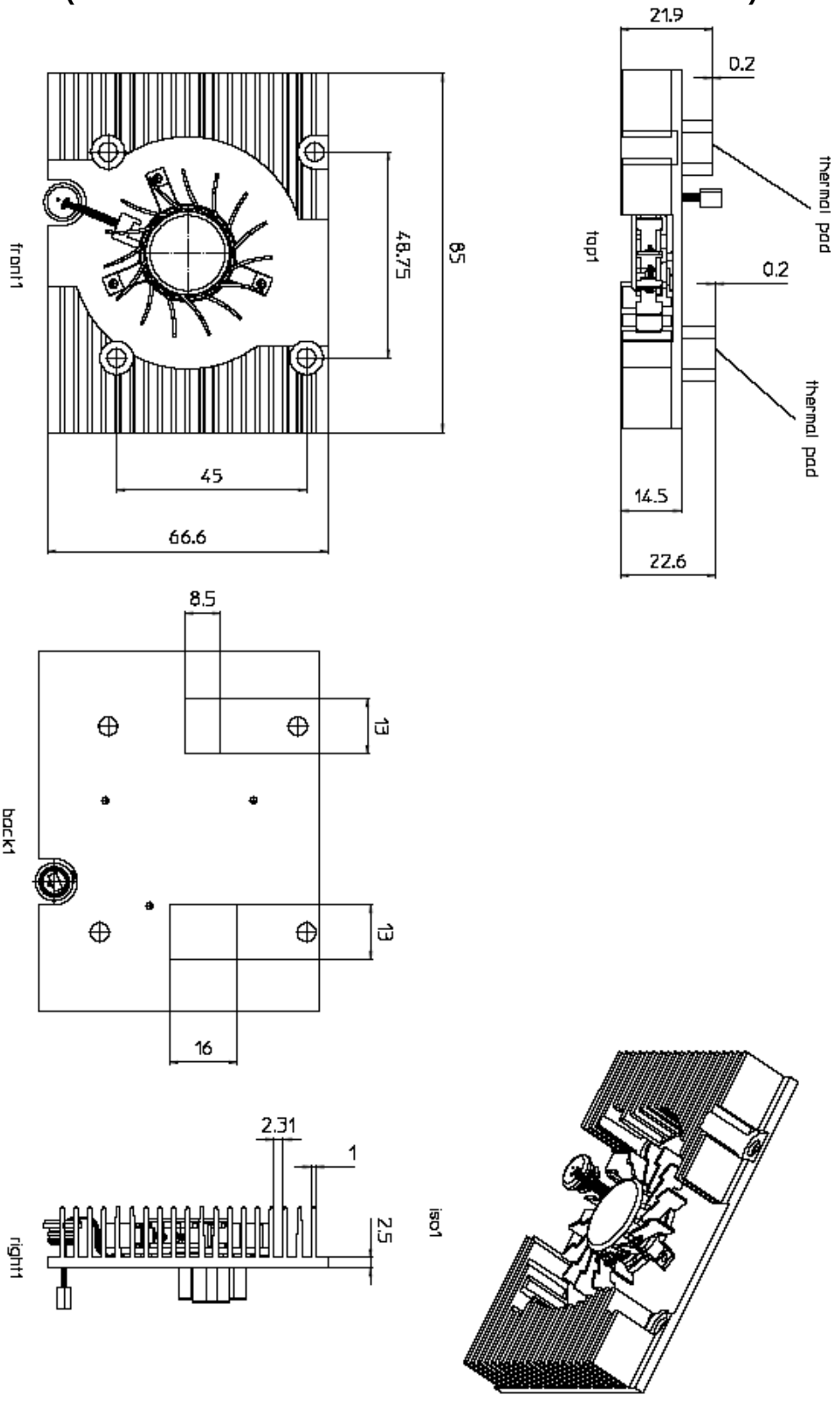
**Appendix**
**(Enclosure-2 for Construction B)**



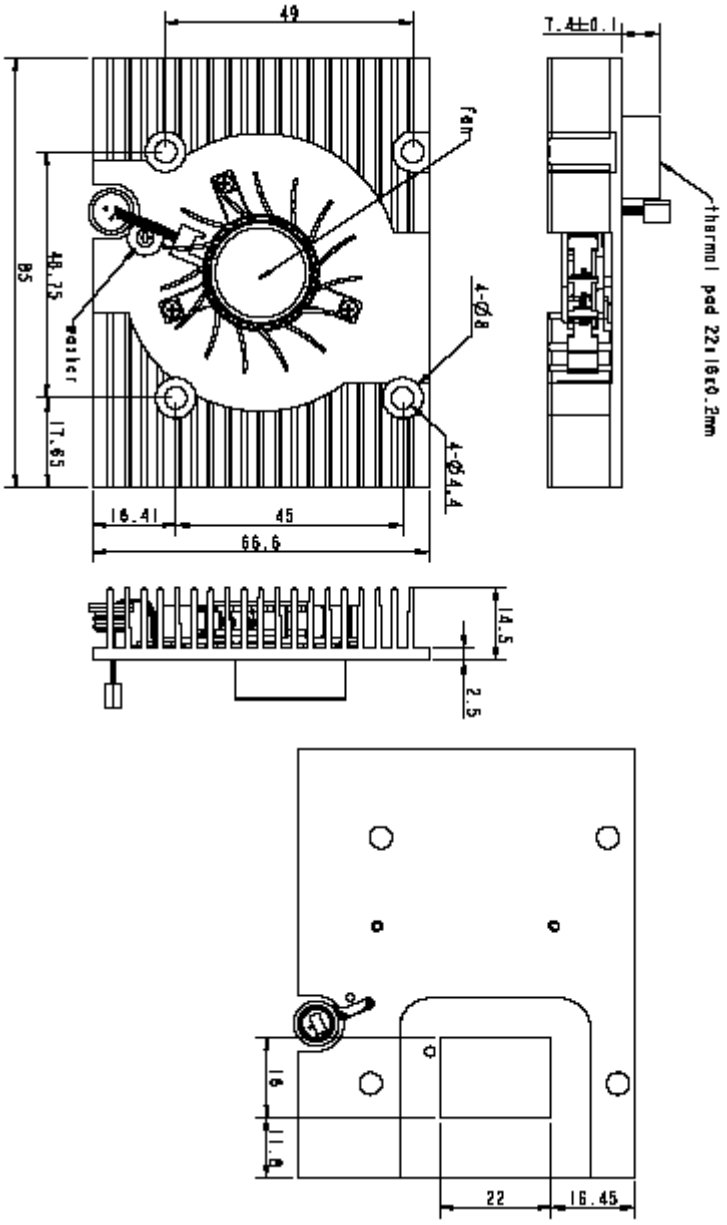
**Appendix**
**(Battery Pack(J.S Power Co., Ltd / DR202)for Construction B)**



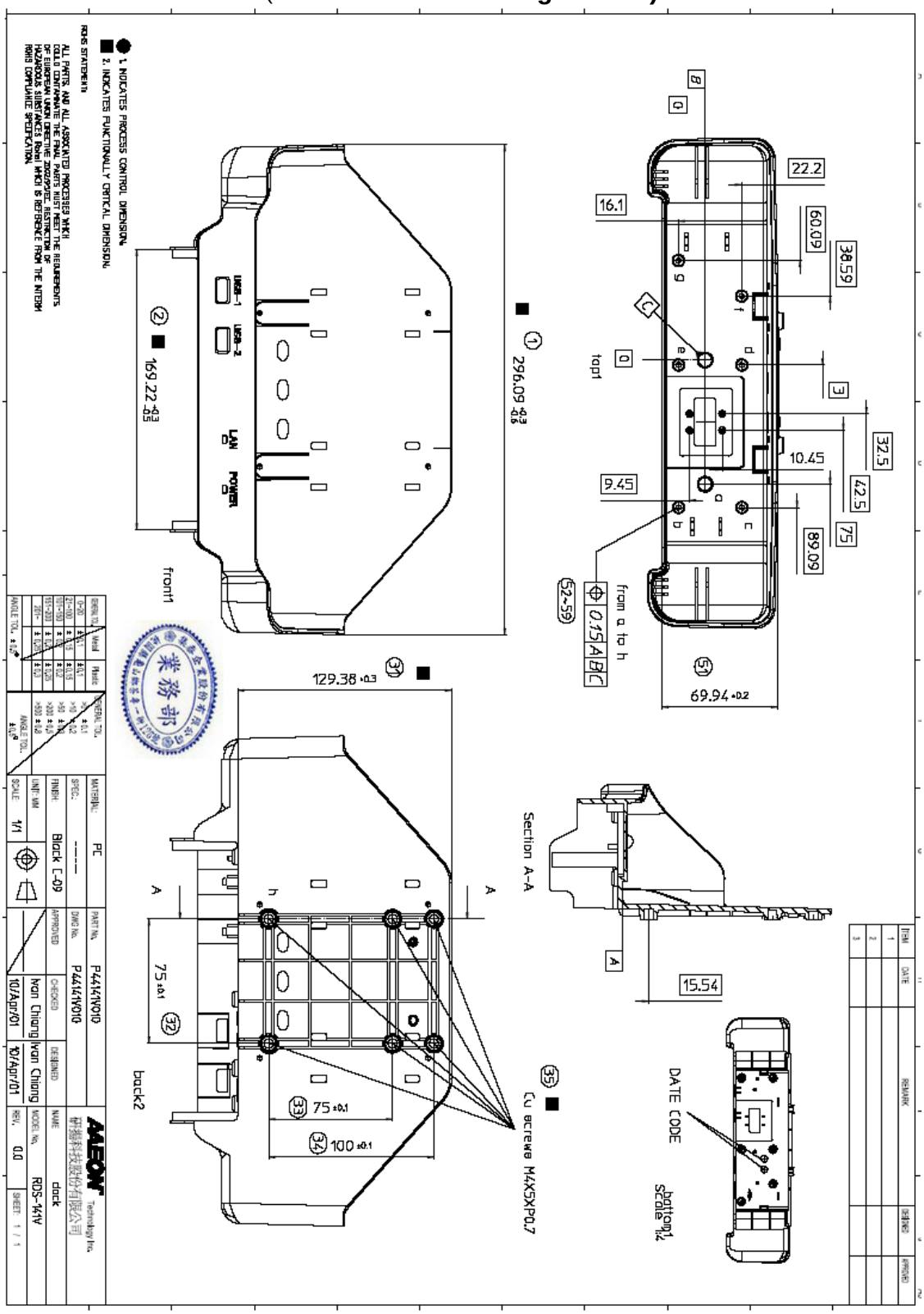
**Appendix**
**(CPU Heatsink for Construction B with Main board A)**



**Appendix**
**(CPU Heatsink for Construction B with Main board C)**



## Appendix
## (Enclosure for Docking Station)



## Appendix
## (Additional Table)

| **2.10.3 and 2.10.4** | **TABLE: clearance and creepage distance measurements** | | | | Pass | |
|---|---|---|---|---|---|---|
| Clearance (cl) and creepage distance (cr) at/of/between: | Upeak (V) | U r.m.s. (V) | Required cl (mm) | cl (mm) | Required cr (mm) | cr (mm) |
| FROM/TO | | | | | | |
| For **Construction** A with **Main board B** | | | | | | |
| GND-Q9 pin S | -- | 5.11Vdc | -- | -- | -- | -- |
| GND-Q9 pin D | -- | 5.09Vdc | -- | -- | -- | -- |
| For **Construction** B with **Main board A, C** | | | | | | |
| GND-Q22 pin S | -- | 5.05Vdc | -- | -- | -- | -- |
| GND-Q22 pin D | -- | 1.68Vdc | -- | -- | -- | -- |
| supplementary information:<br>The following terminals were connected to earth: secondary return | | | | | | |

| **4.3.8** | **TABLE: Lithium Battery Reverse Current Measurement Test** | | Pass |
|---|---|---|---|
| Battery Type | Normal Reverse Charging Current (mA) | Abnormal Condition | Abnormal Reverse Current (mA) |
| **For Construction A with Main board B** | | | |
| ML1220 | 0 | R217 short | 65 |
| **For Construction B with Main board A** | | | |
| ML1220 | 0 | R747 short | 80 |
| **For Construction B with Main board C** | | | |
| **ML1220(I)** | **0** | **D20 short** | **66** |
| **ML1220(I)** | **0** | **R395 short** | **65** |

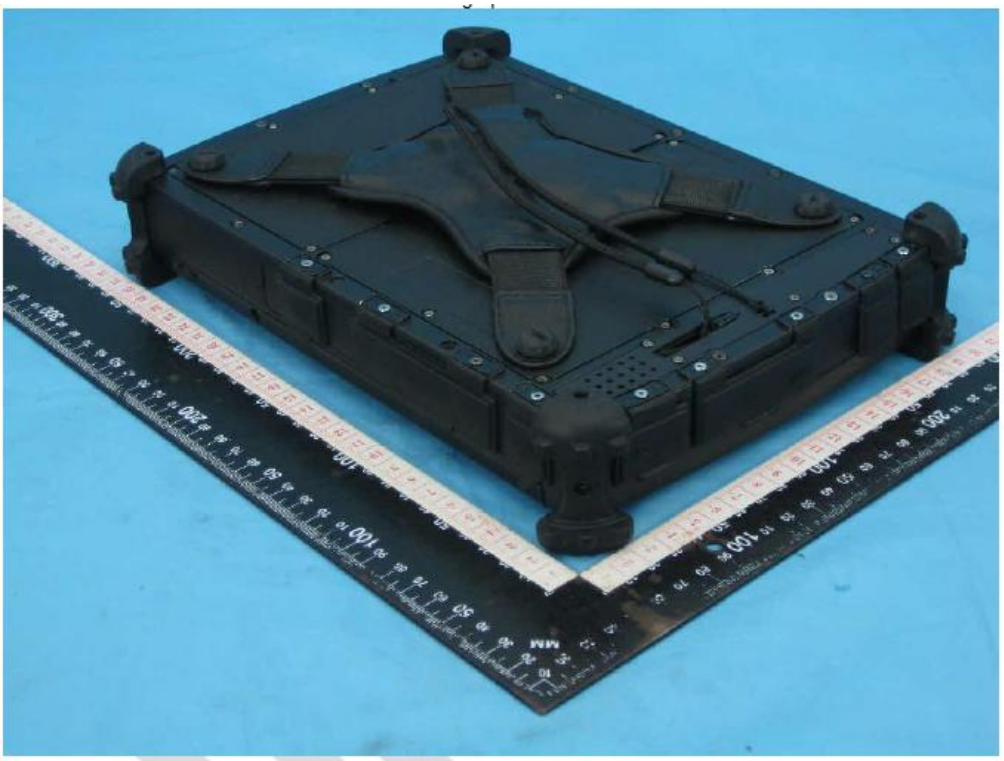
| **5.1.8.3** | **Table: LIMITATION OF TOUCH CURRENT DUE TO RINGING SIGNALS** | | | | Pass |
|---|---|---|---|---|---|
| Telecommunication Network Leads | Test Voltage | Touch Current (mA) from Telecommunication | | | |
| | | N/C/N | N/C/R | R/C/N | R/C/R |
| For Power Supply Adapter, FSP065-RAB, **Construction A** with **Main board B** | | | | | |
| Output connector | 120 | 0.035 | -- | -- | -- |
| Metel Enclosure | 120 | 0.001 | -- | -- | -- |
| For Power Supply Adapter, FSP065-RAB, **Construction B** with **Main board A** | | | | | |
| Output connector | 120 | 0.035 | -- | -- | -- |
| Metel Enclosure | 120 | 0.001 | -- | -- | -- |
| **For Power Supply Adapter, FSP065-RABXX, Construction B** with **Main board C** | | | | | |
| Output connector | 19 | 0.04 | -- | -- | -- |
| Metel Enclosure | 19 | 0.14 | -- | -- | -- |

**Appendix**
**(Additional Table)**

| **Construction A** | |
|---|---|
| Enclosure | See Appendix Enclosures-1 |
| Main board | B |
| Battery Pack | Formosan United Corporation / H705084 |
| **Construction B** | |
| Enclosure | See Appendix Enclosures-2 |
| Main board | A, C |
| Battery Pack | J.S Power Co., Ltd / DR202 |

**Photos for Construction A:**

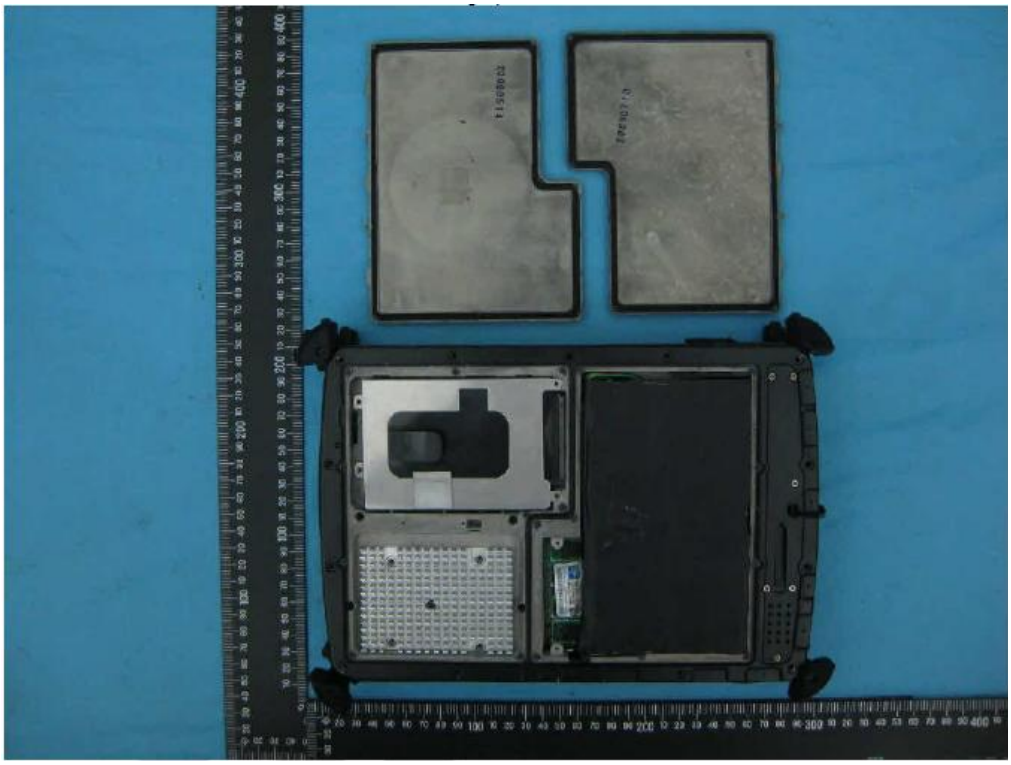
Overall views



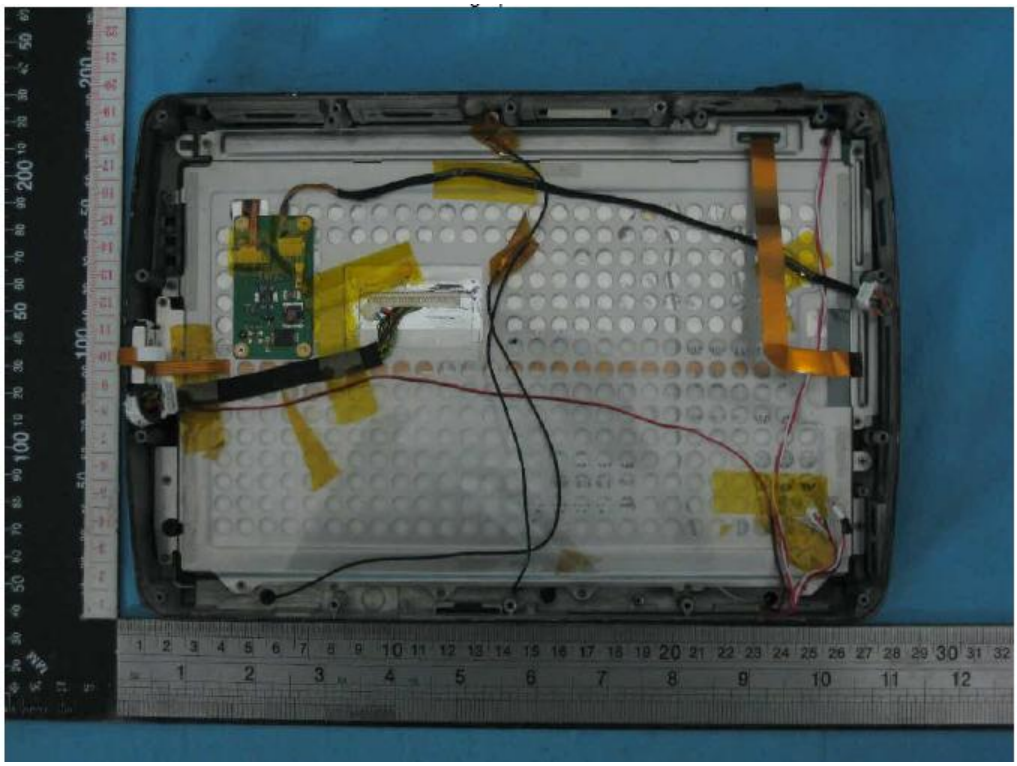
Connector views

Connector view

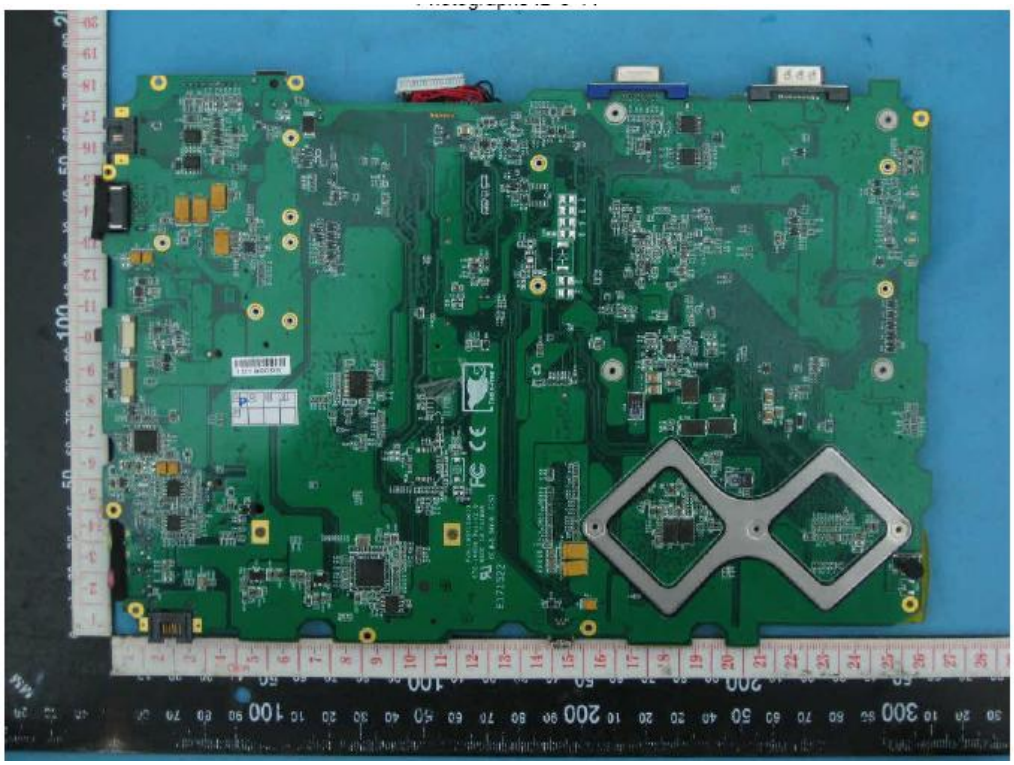
Internal Views



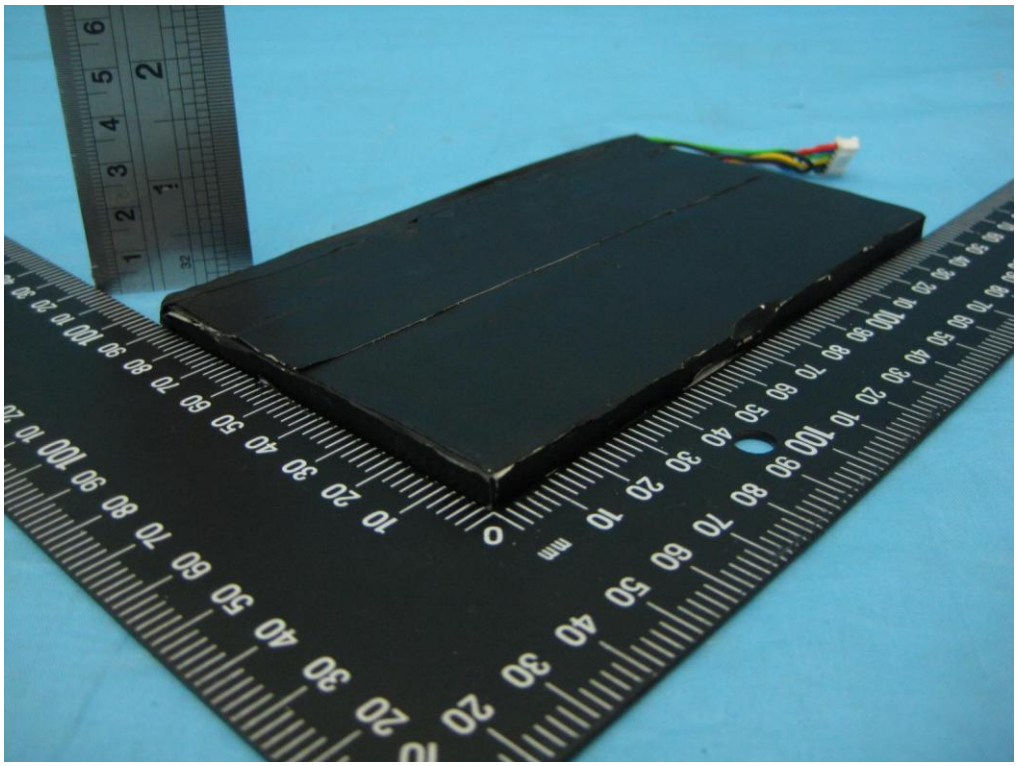
Internal Views



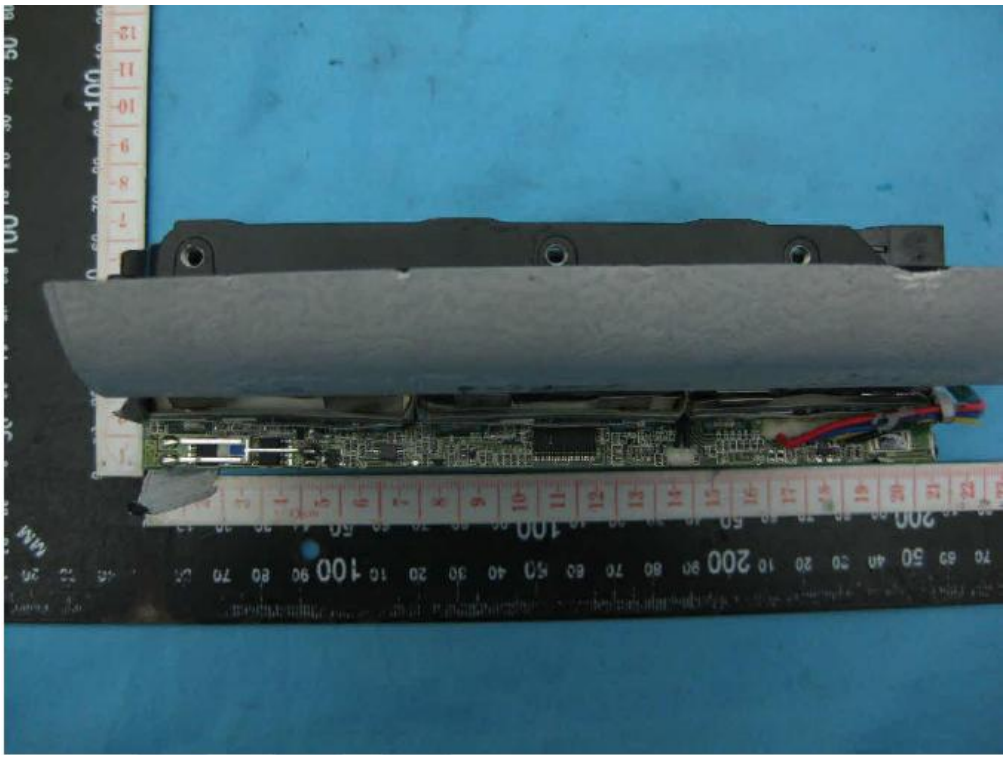
Main board B views

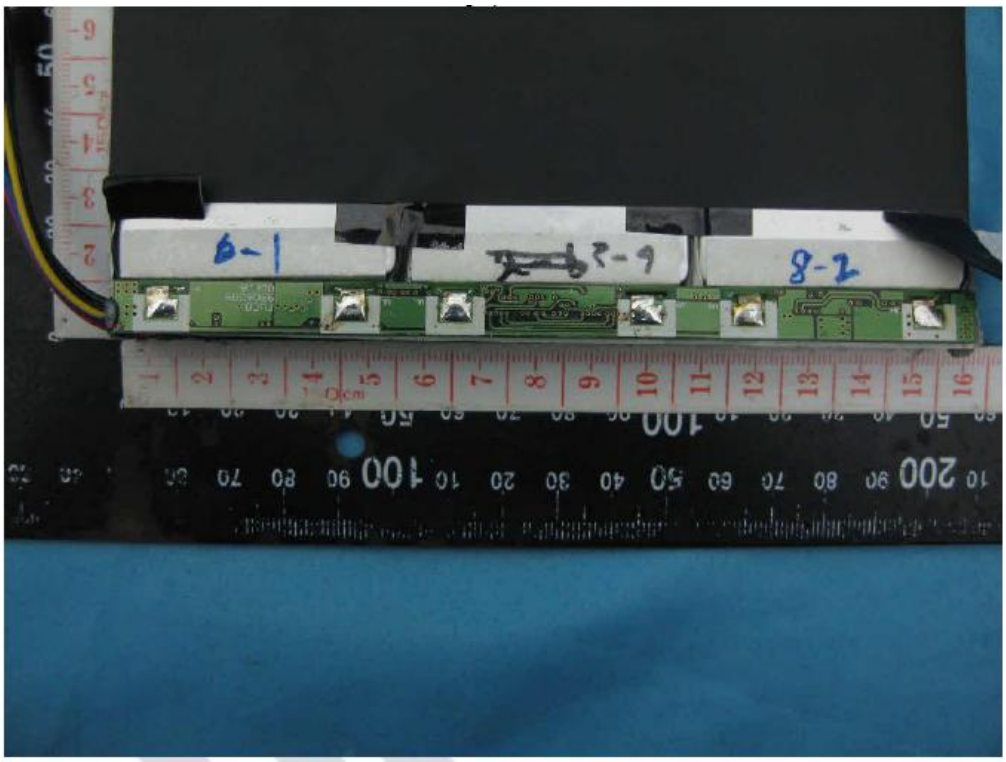


Overall views for Lithium ion polymer rechargeable battery pack
(Formosan United Corporation / H705084)

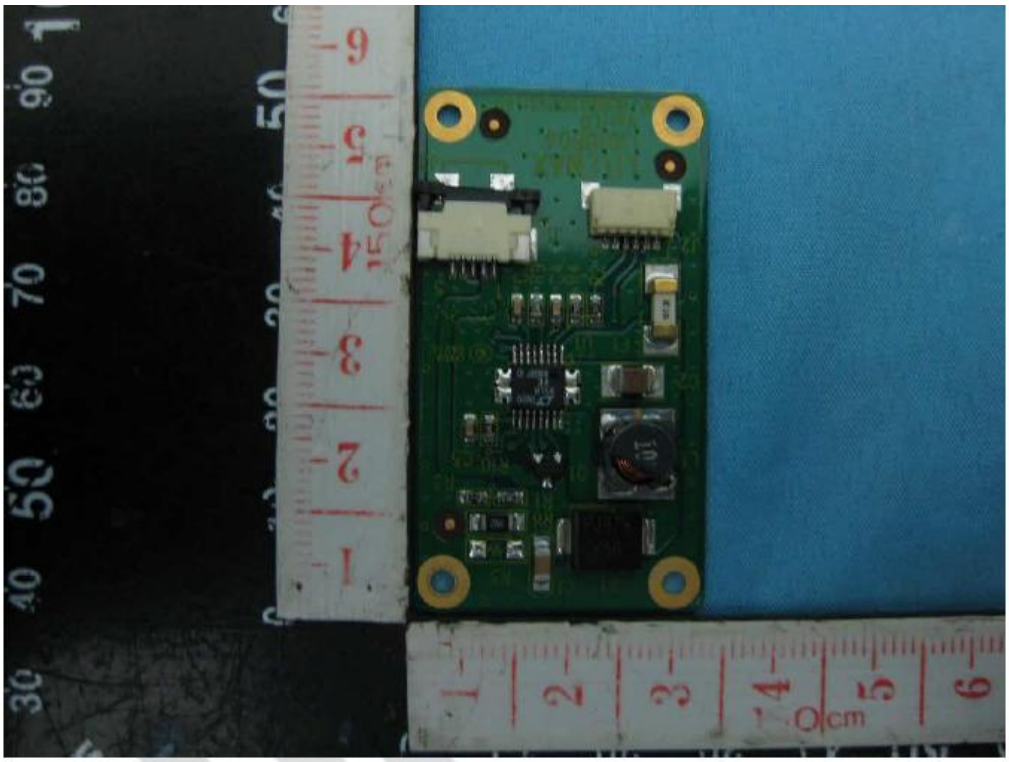


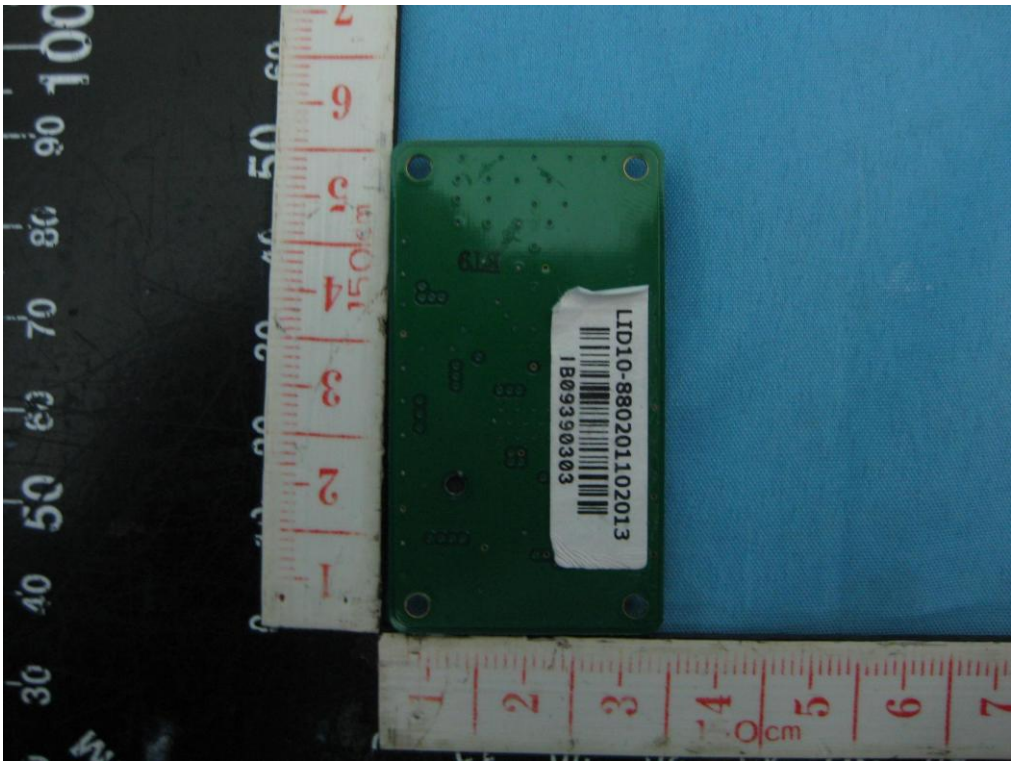
Internal views for Lithium ion polymer rechargeable battery pack
(Formosan United Corporation / H705084)





SELV board (DC/DC Converter) views





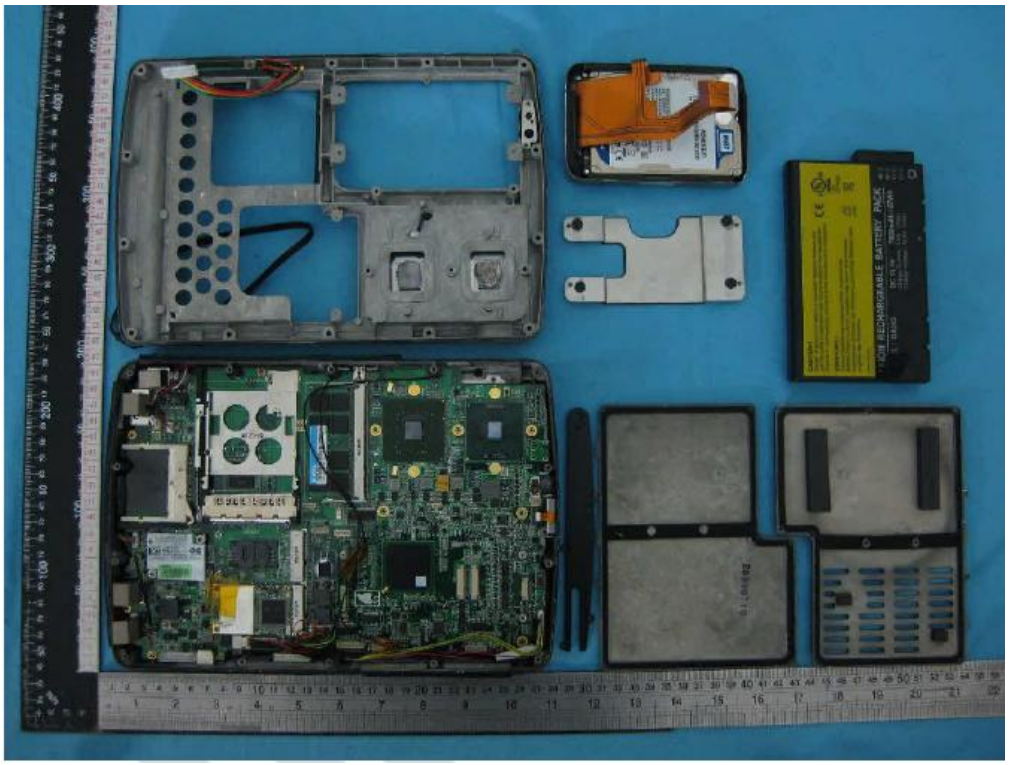
**Photos for Construction B:**

Overall views

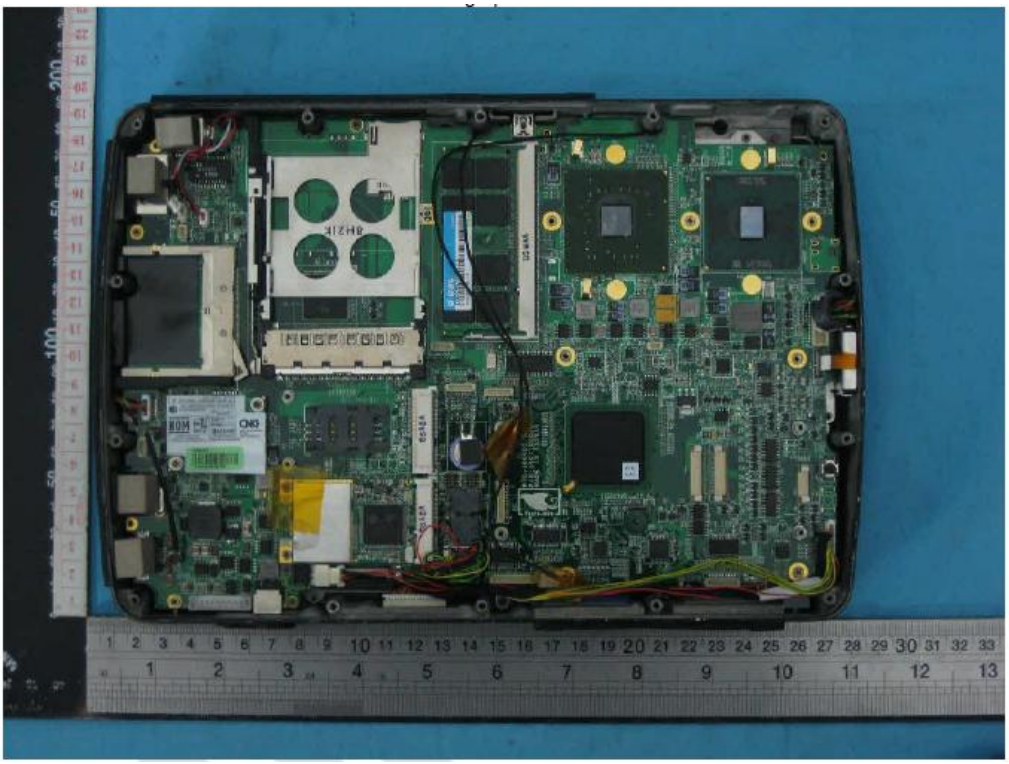
Connector views with Main board A

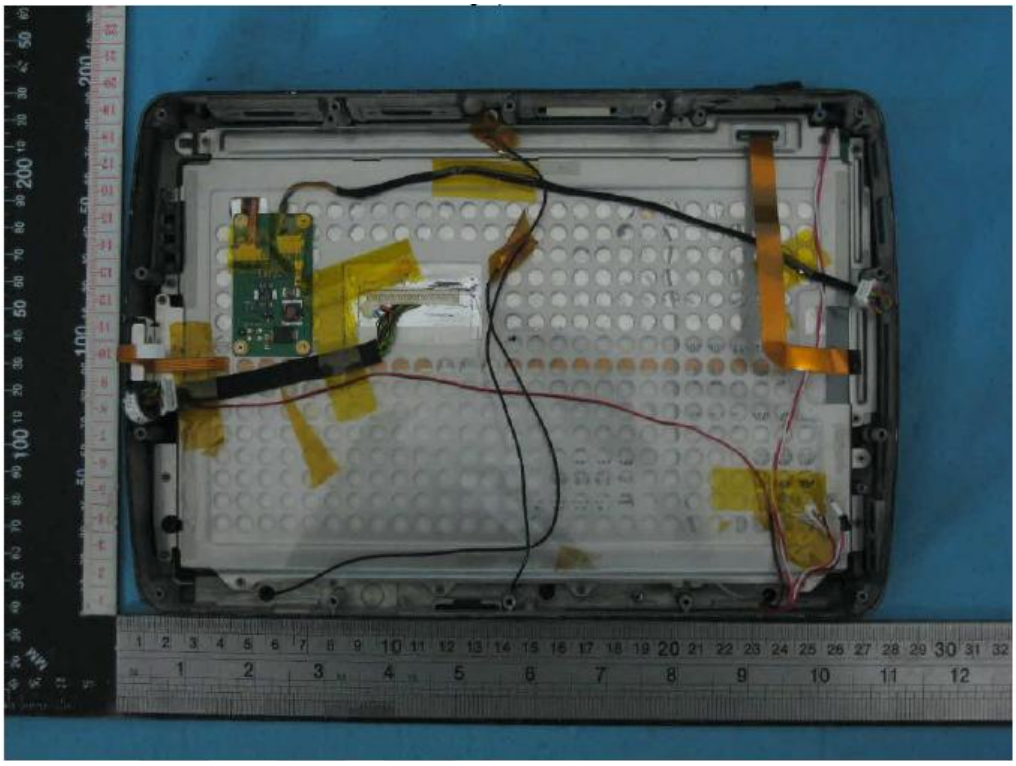
Connector view with Main board A

Internal Views with Main board A

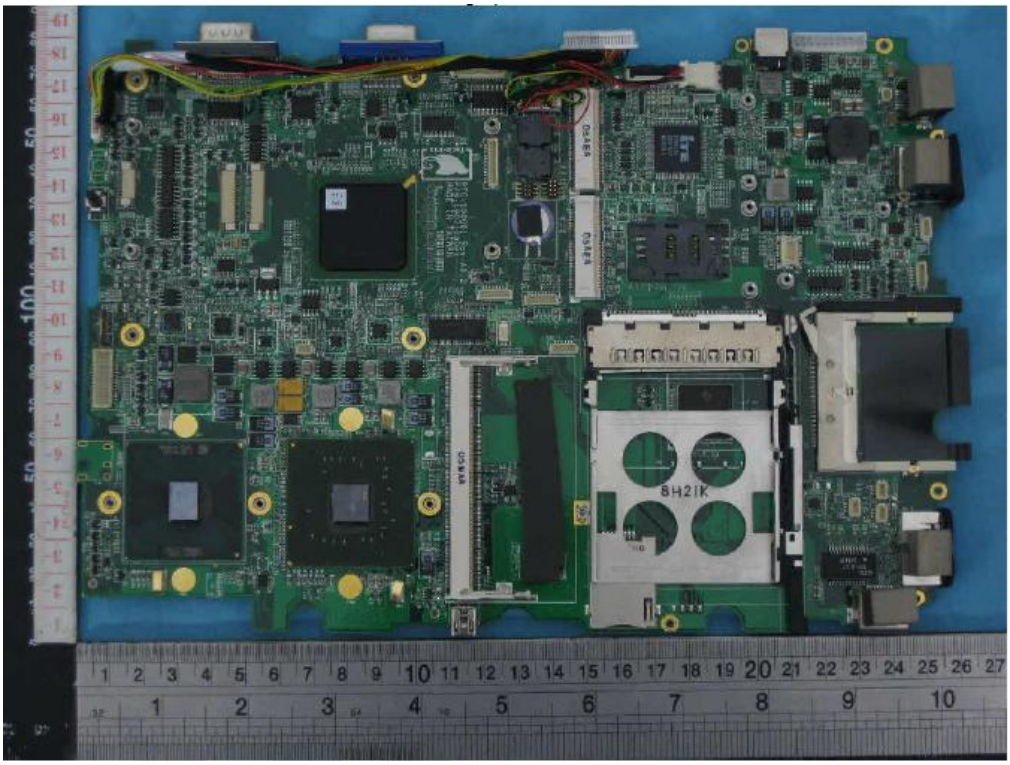



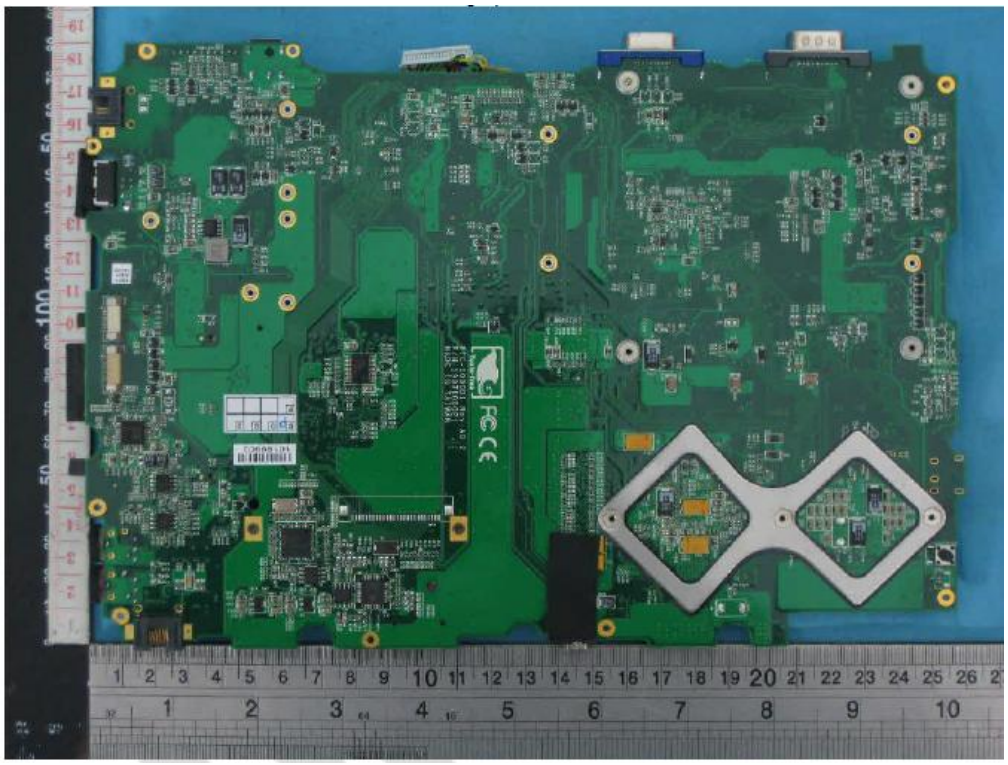
Internal Views with Main board A



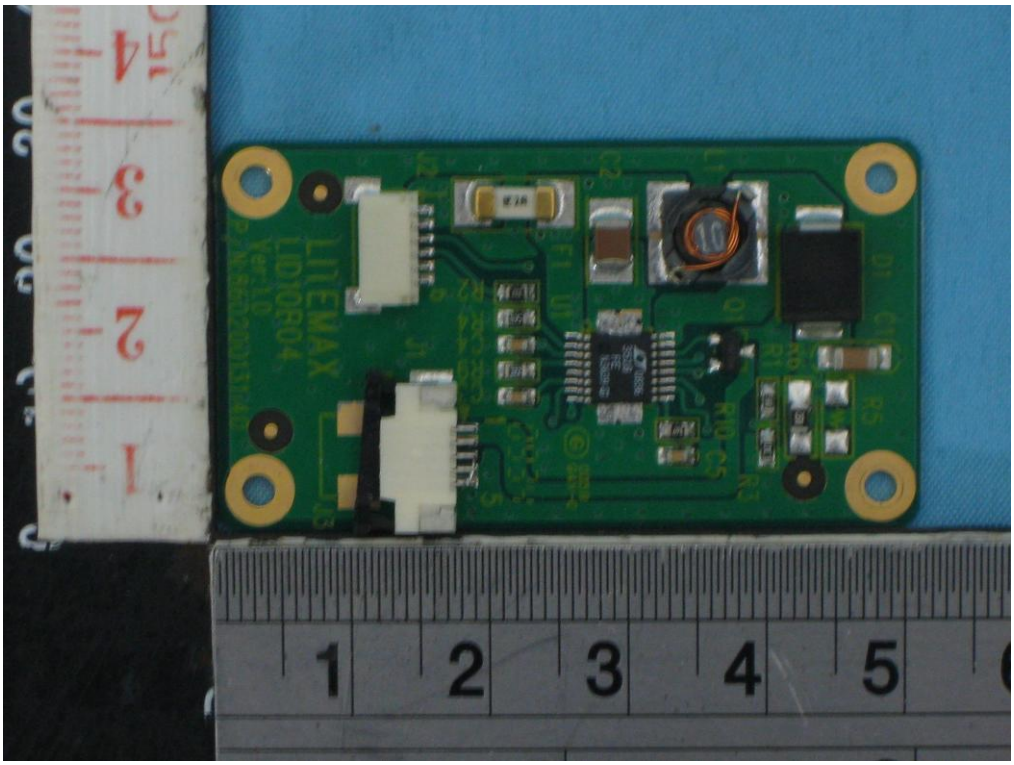


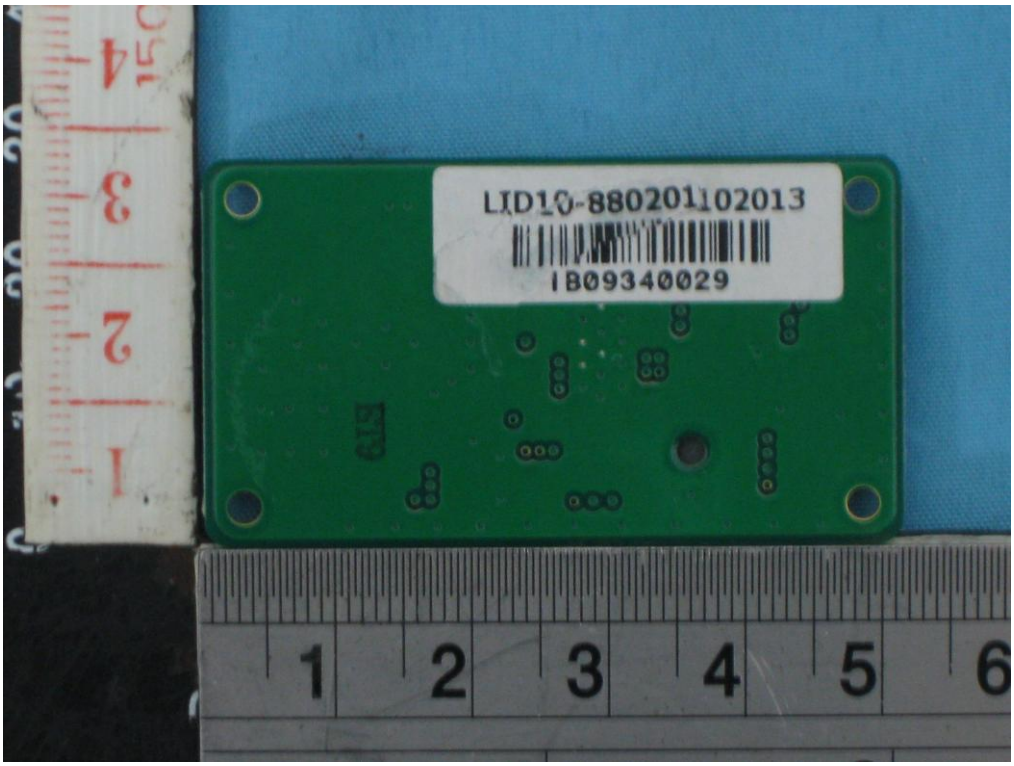
Main board A views





SELV board (DC/DC Converter) views

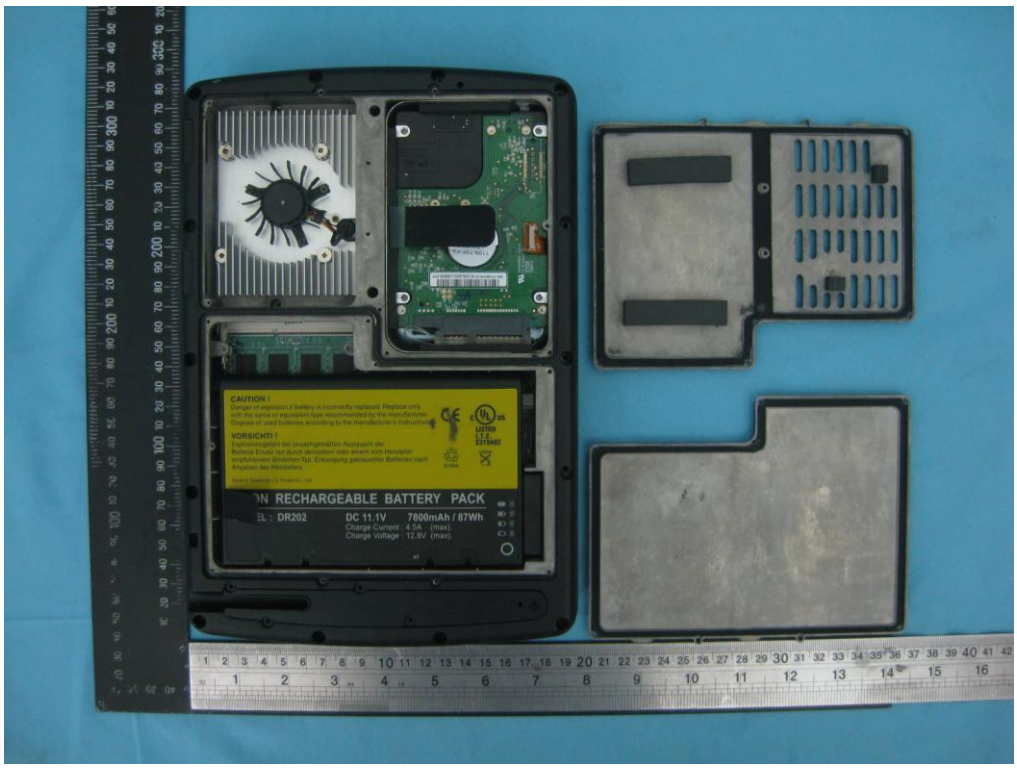


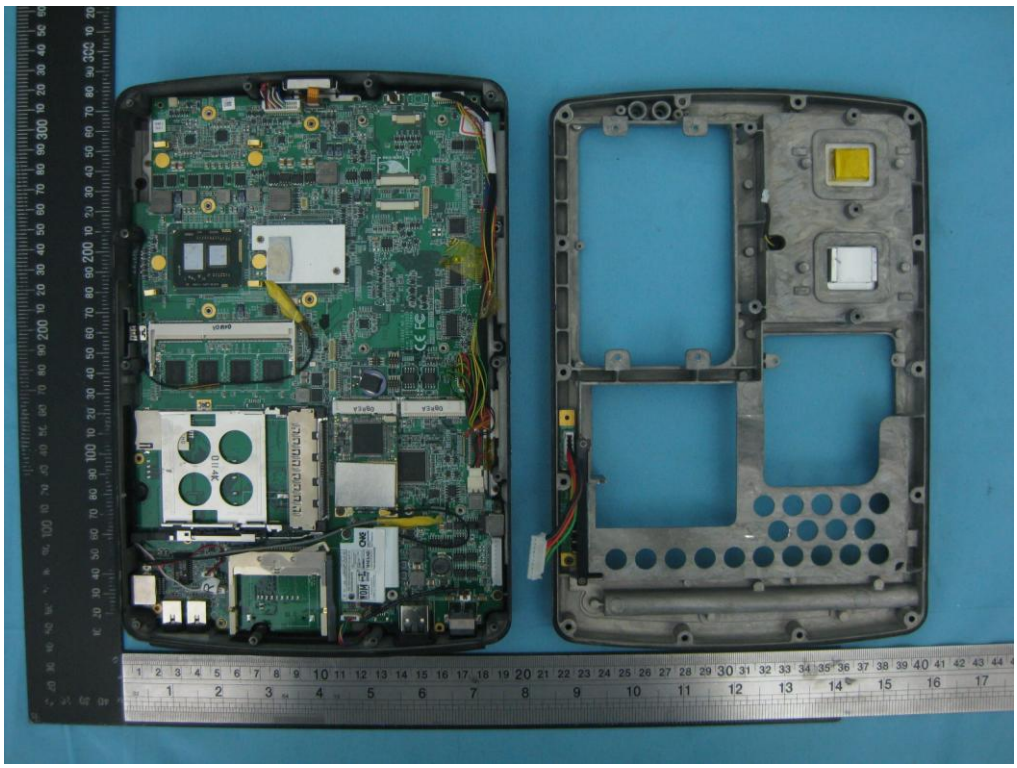
Connector views with Main board C

Connector view with Main board C

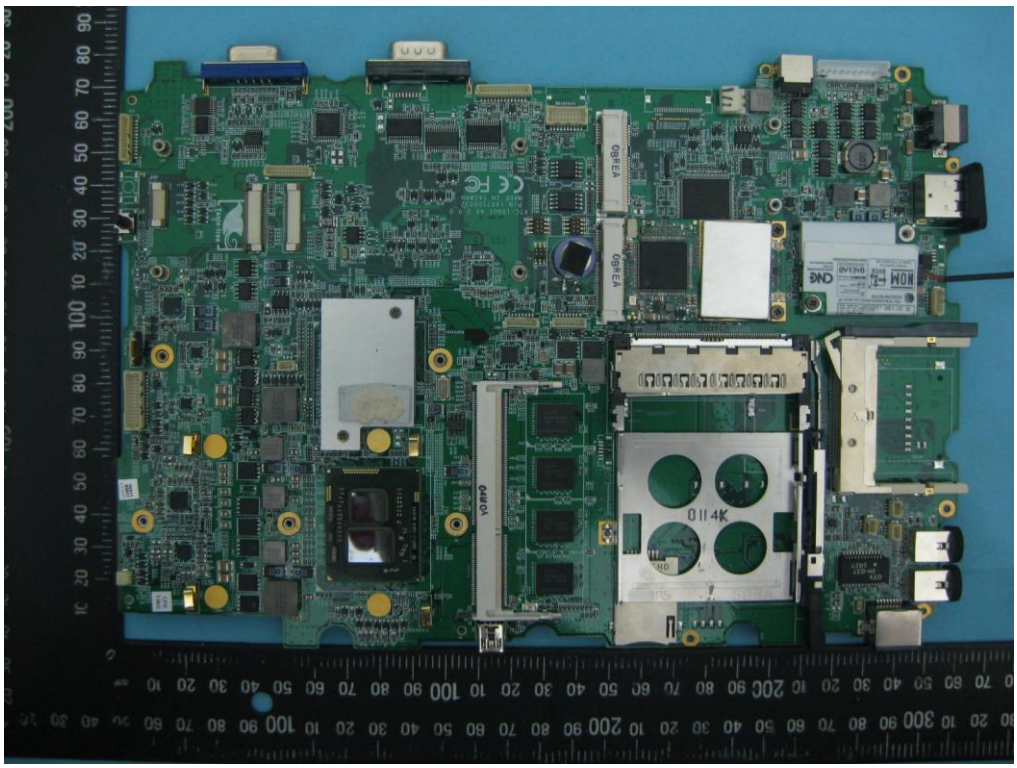
Internal Views with Main board C

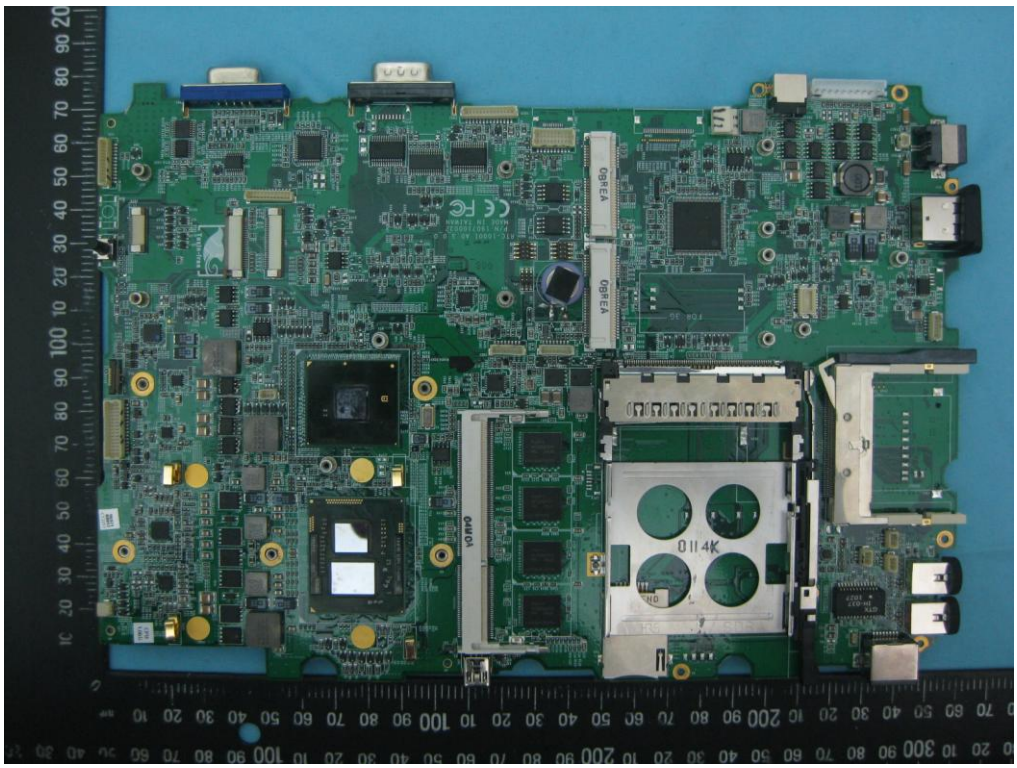



Internal View with Main board C

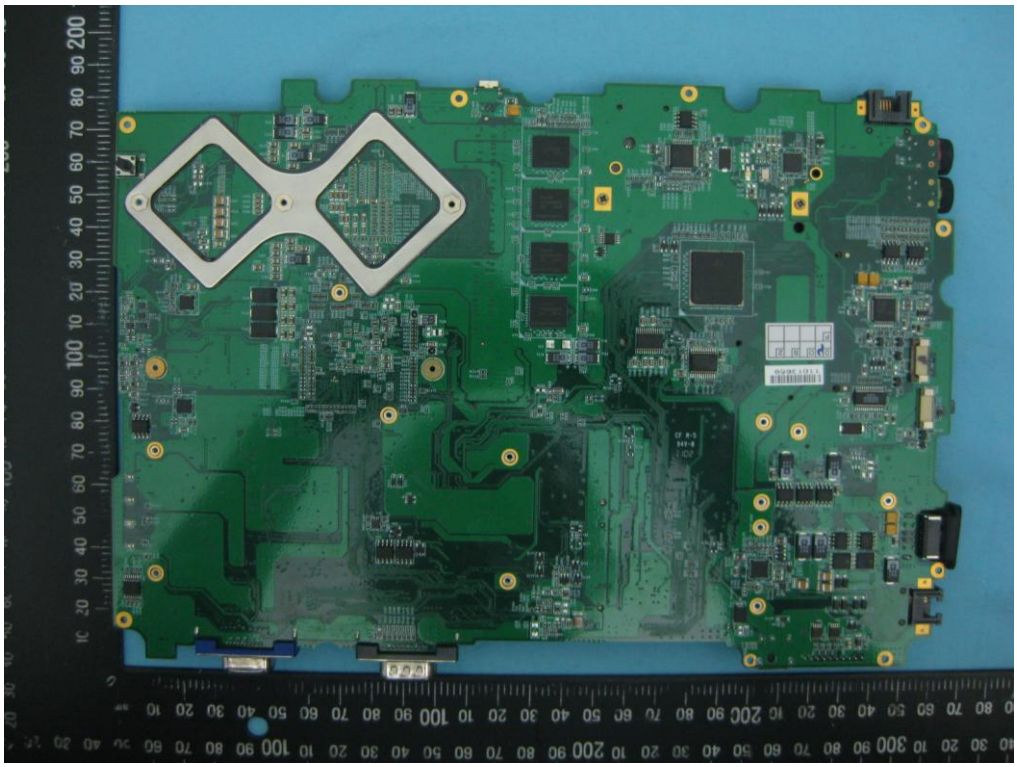


Main board C views

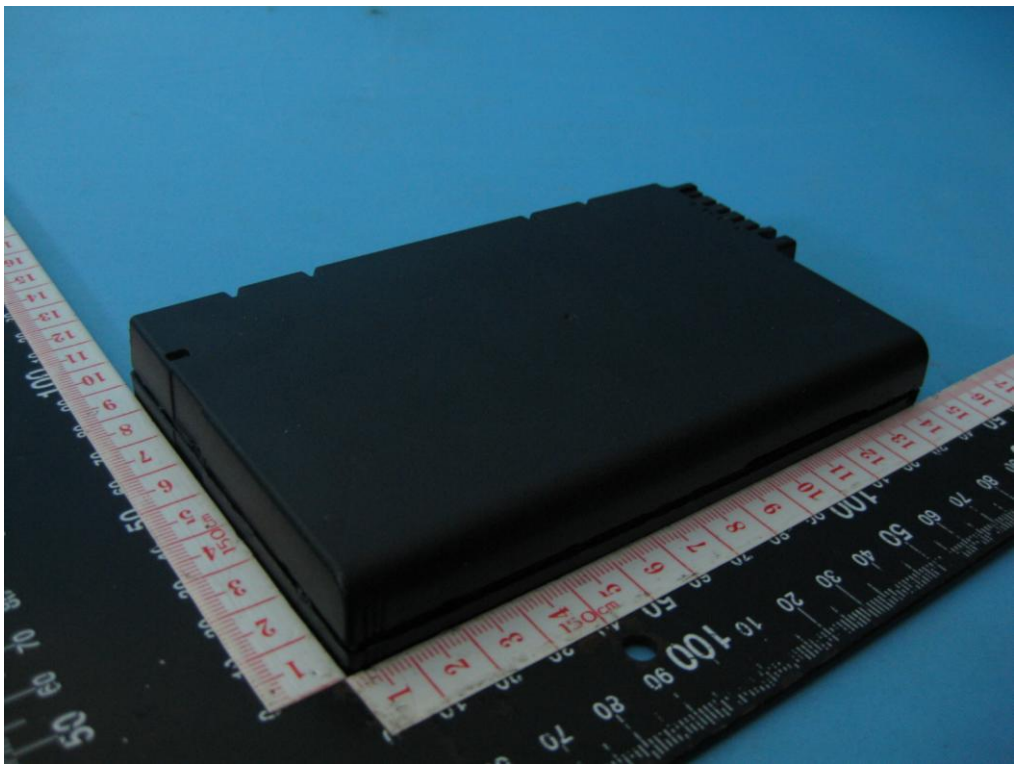




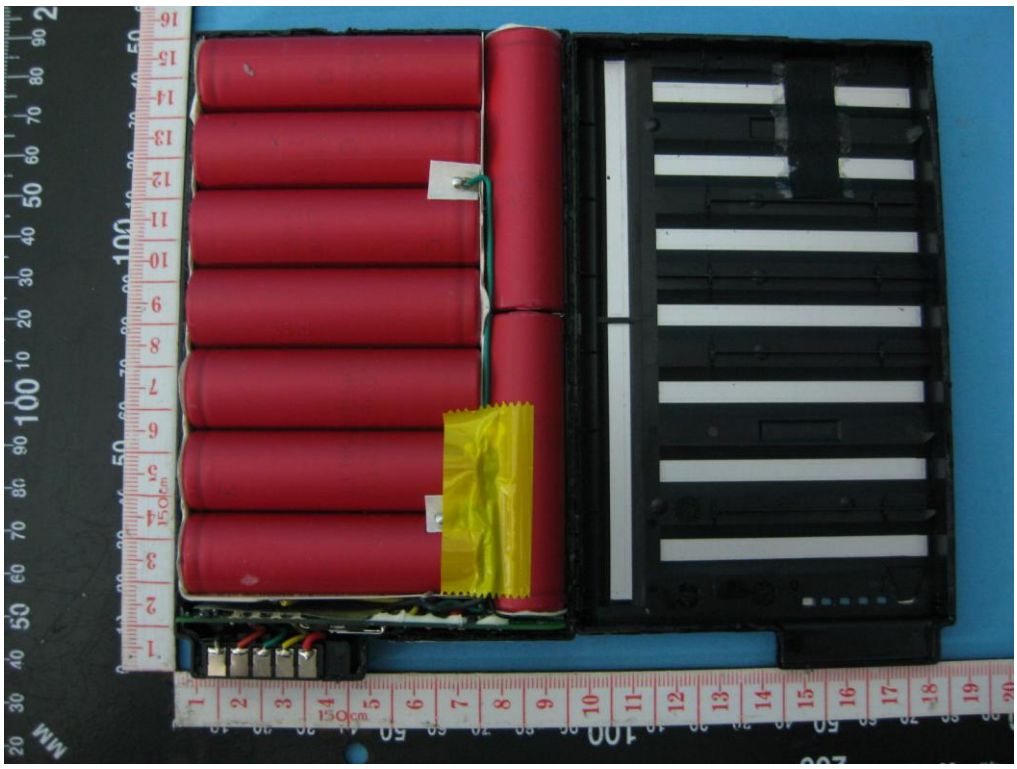
Main board C view



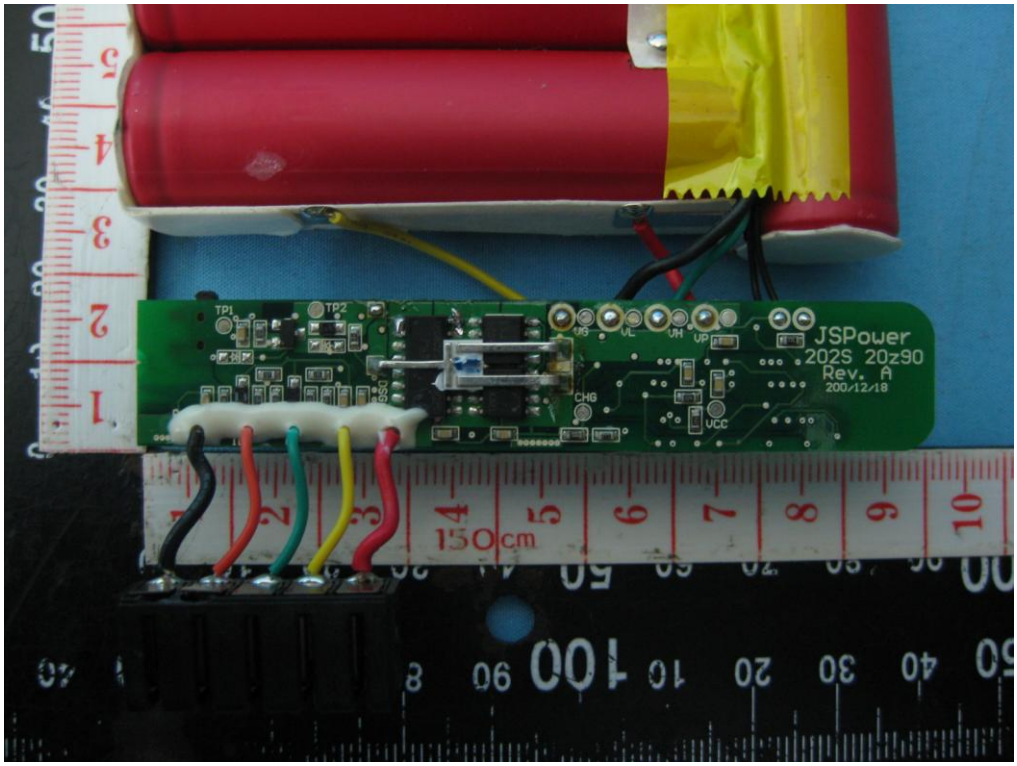
Overall views for Li-Ion Rechargeable battery pack (J.S Power Co., Ltd / DR202)

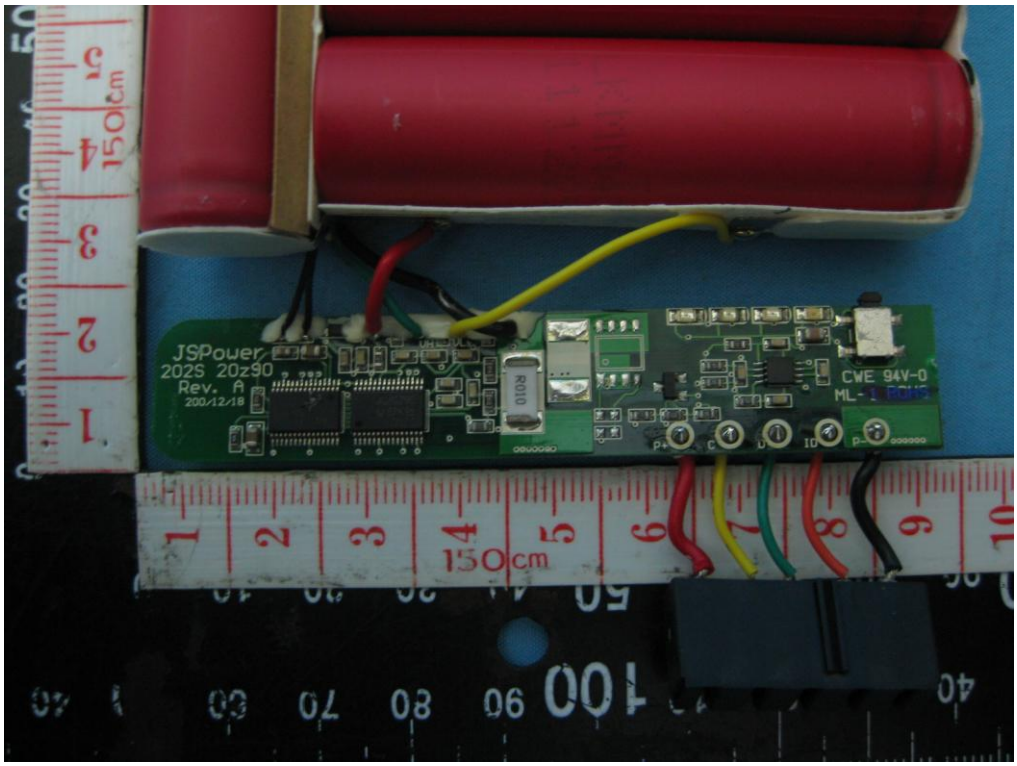


Internal Views of Li-Ion Rechargeable battery pack



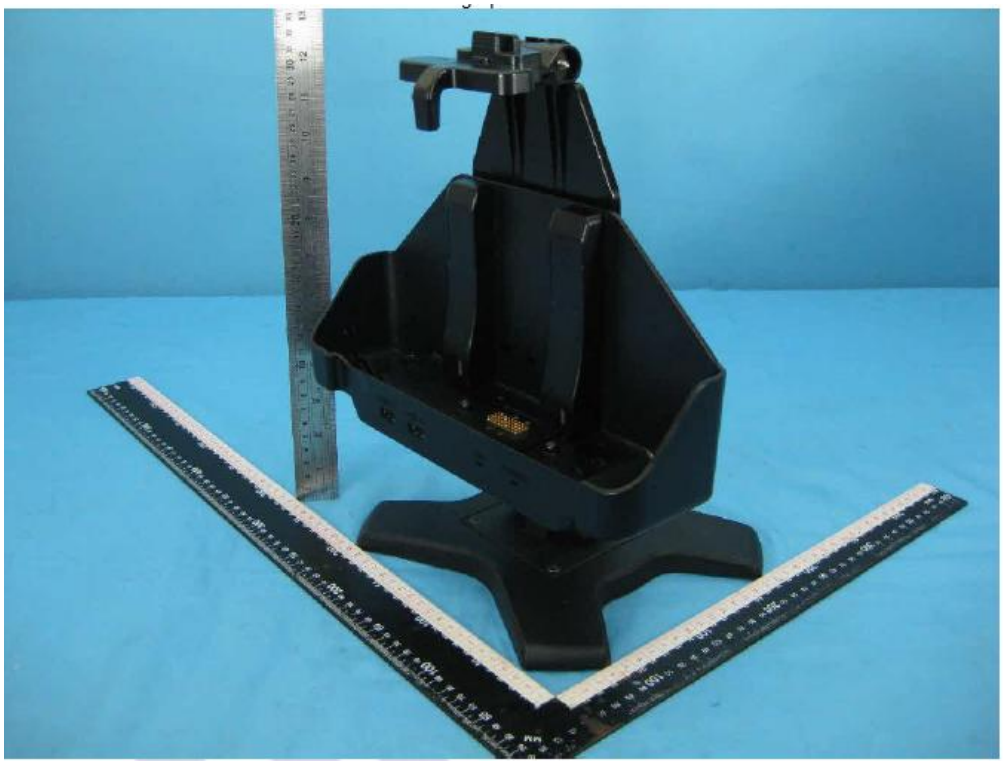
Internal Views of Li-Ion Rechargeable battery pack



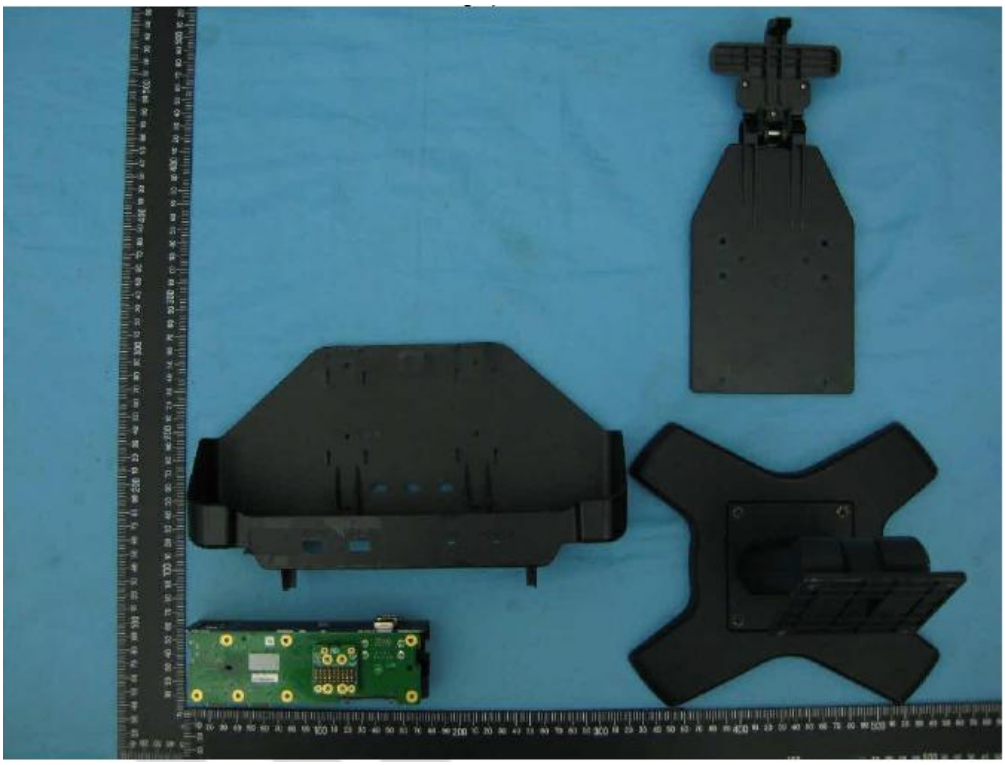
**Photos for Docking Station**

Overall views



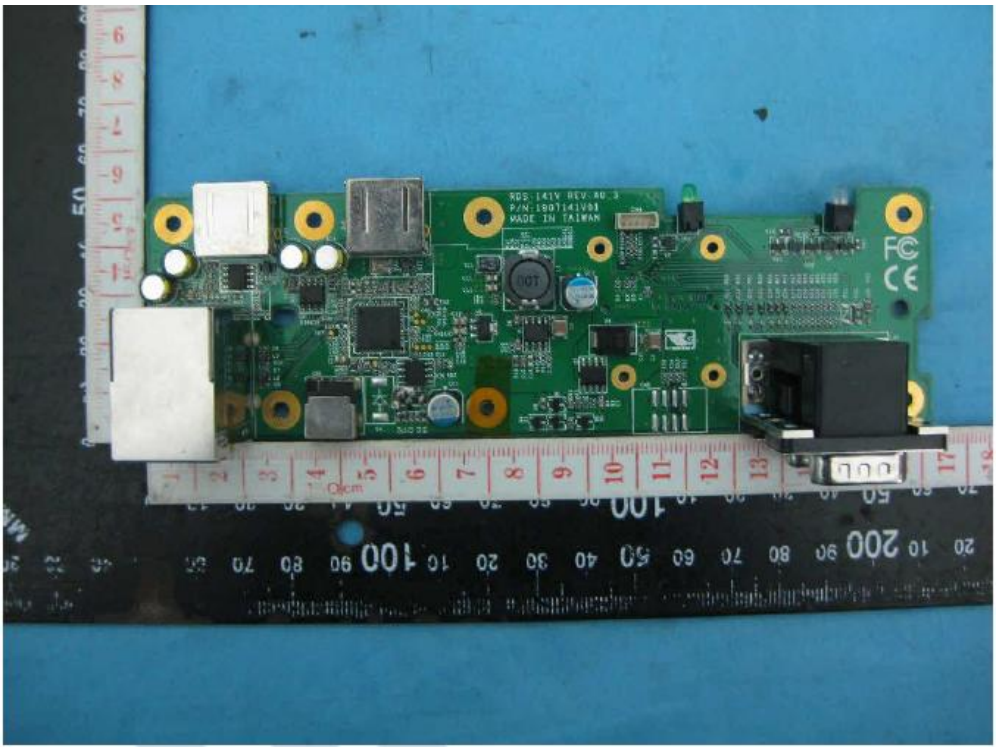
Overall view

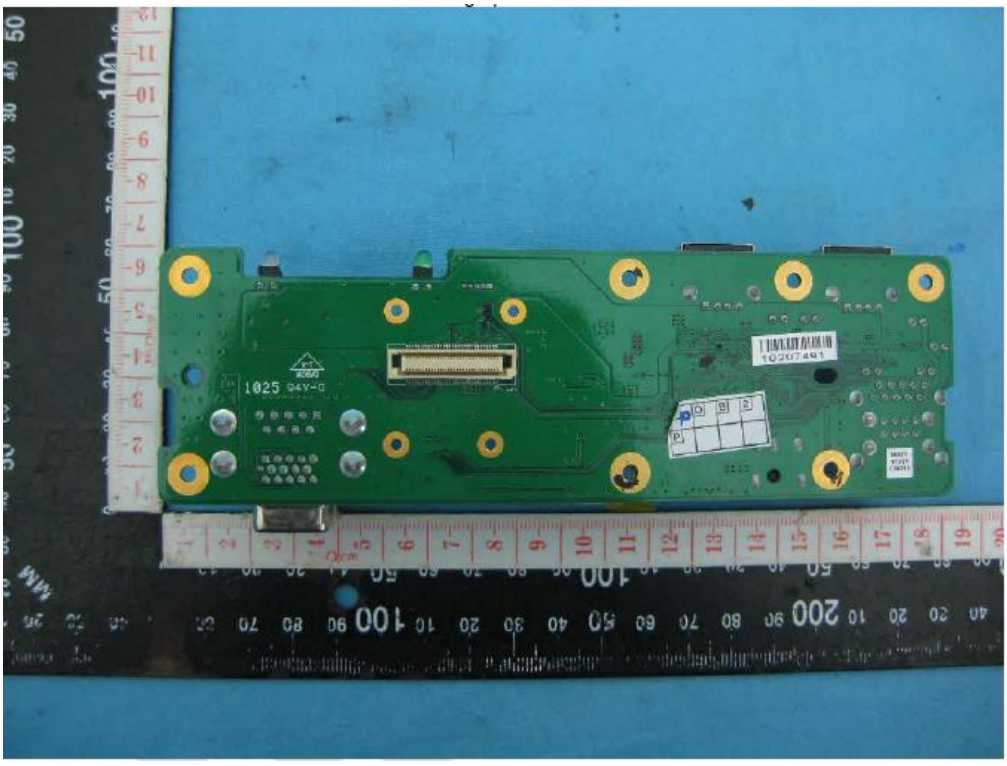
Internal view



Connector views

Mainboard views





SELV board views