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## VERIFICATION OF EMC COMPLIANCE

Verification No.: GLEMR070200302ITEV  
Applicant: ISS MANUFACTURING LTD.  
Address of Applicant: UNIT 604-606, 6/F., PHASE II, CHAI WAN  
INDUSTRIAL CITY, 70 WING TAI ROAD, CHAI WAN,  
HONGKONG  
Product Description: USB PHONE  
Model No: STX-5013 / STY-5015  
Sufficient samples of the product have been tested and found to be in conformity with  
EN 55022 : 1998+A1:2000+A2:2003  
EN 55024 :1998+A1: 2001+A2:2003  
Test Standard: EN 61000-3-2:2000 +A2:2005  
EN 61000-3-3 : 1995 + A1: 2001  
As shown in the  
Test Report Number(s): GLEMR070200302ITE

This verification of EMC Compliance has been granted to the applicant based on the results of the tests, performed by laboratory of SGS-CSTC Standards Technical Services Co., Ltd. on the sample of the above-mentioned product in accordance with the provisions of the relevant specific standards and Directive 2004/108/EC as last amended by Directive 93/68/EEC. The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives. The affixing of the CE marking presumes in addition that the conditions in annexes III and V of the Directive are fulfilled.



Date: 14 March 2007

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Member of the SGS Group (SGS SA)

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Report No.: GLEMR070200302ITE  
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### TEST REPORT

**Application No.:** GLEMR070200302IT  
**Applicant:** ISS MANUFACTURING LTD.  
**Equipment Under Test (EUT):**  
**EUT Name:** USB PHONE  
**Item No.:** STX-5013 / STY-5015\*  
**Serial No.:** Not supplied by client

\* Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.

**Standards:** EN 55022 : 1998+A1:2000+A2:2003  
EN 55024 :1998+A1: 2001+A2:2003  
EN 61000-3-2:2000 +A2:2005  
EN 61000-3-3 : 1995 + A1: 2001

**Date of Receipt:** 05 February 2007  
**Date of Test:** 08 February to 12 March 2007  
**Date of Issue:** 14 March 2007

|                      |              |
|----------------------|--------------|
| <b>Test Result :</b> | <b>PASS*</b> |
|----------------------|--------------|

\* In the configuration tested, the EUT complied with the standards specified above.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives.



This report refers to the General Conditions for Inspection and Testing Services, printed overleaf.  
This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the SGS PRODUCT CERTIFICATION MARK. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.  
This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.  
The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.  
All test results in this report can be traceable to National or International Standards.

## 2 Test Summary

| The EUT has been tested with a USB PHONE. |                                      |   |  |        |
|---|--------------------------------------|---|--|--------|
| Test                                      | Test Requirement                     | Test Method                             | Class / Severity   | Result |
| Radiated Emission, 30MHz to 1GHz          | EN 55022 :1998<br>+ A1:2000+A2:2003  | EN 55022 :1998<br>+ A1:2000+A2:2003     | Class B  | PASS   |
| Conducted Emission (150KHz to 30MHz)      | EN 55022 :1998<br>+ A1:2000+A2:2003  | EN 55022 :1998<br>+ A1:2000+A2:2003     | Class B  | PASS   |
| Harmonic Emission on AC, 50Hz             | EN 61000-3-2:2000<br>+A2:2005        | EN 61000-3-2:2000<br>+A2:2005           | N/A  | N/A    |
| Flicker Emission on AC                    | EN 61000-3-3 :1995<br>+ A1:2001      | EN 61000-3-3 :1995<br>+ A1:2001         | N/A  | N/A    |
| ESD                                       | EN 55024 :1998<br>+ A1:2001+A2:2003  | EN 61000-4-2 :1995<br>+ A1:1998+A2:2001 | Contact ±4 kV<br>Air ±8 kV   | PASS①  |
| Radiated Immunity, 80MHz to 1 GHz         | EN 55024 :1998<br>+ A1:2001+A2:2003  | EN 61000-4-3 :2002<br>+ A1:2002         | 3V/m<br>80%, 1kHz, AM  | PASS   |
| Electrical Fast Transients (EFT) on AC    | EN 55024 :1998<br>+ A1:2001+A2:2003  | EN 61000-4-4 :1995<br>+ A1:2001+A2:2001 | AC ± 1.0kV   | PASS ② |
| Surge Immunity on AC                      | EN 55024 :1998<br>+ A1:2001+A2:2003  | EN 61000-4-5 :1995<br>+ A1:2001         | ±1kV D.M. †<br>±2kV C.M. ‡   | PASS   |
| Injected Currents on AC, 150kHz to 80MHz  | EN 55024 :1998<br>+ A1:2001+A2:2003  | EN 61000-4-6 :1996<br>+ A1:2001         | 3Vrms (emf), 80%,<br>1kHz Amp. Mod.  | PASS   |
| Voltage Dips and Interruptions on AC      | EN 55024 :1998<br>+ A1: 2001+A2:2003 | EN 61000-4-11 :1994<br>+ A1:2001        | 0 % $U_T^*$ for 0.5per<br>0 % $U_T^*$ for 250per<br>70 % $U_T^*$ for 25per | PASS   |

\*  $U_T$  is the nominal supply voltage

† D.M. – Differential Mode

‡ C.M. – Common Mode

N/A: not applicable. Please refer to Section 6.3 & Section 6.4 for further details.

Remark:

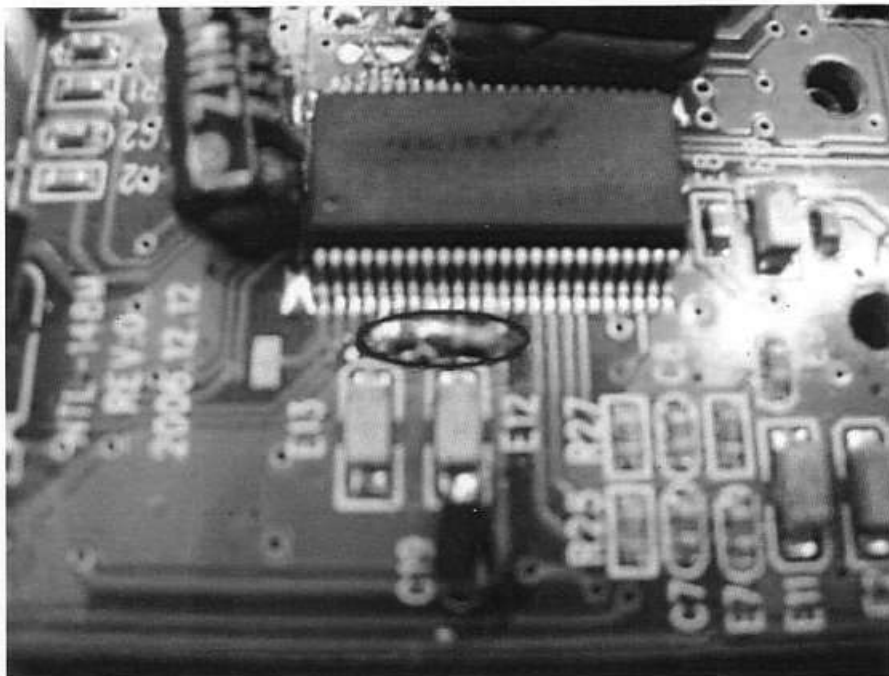
♣:Item number: STX-5013 / STY-5015

According to the confirmation from the applicant, all models were electrical circuit design, layout, components used and internal wiring were identical for the above items, only difference being the model STX-5015 with LCD, but model STX-5013 without LCD. Therefore only one item STY-5015 was tested in this report.



①-②: The EUT passed the ESD and EFT tests after modifications as shown as below:

1. Replace the Capacitor C12 with an Electrolytic capacitor which is 4.7 $\mu$ F/10V.
2. Add two Capacitors parallel connected with E13 and C19 as the photos shown:



3. Replace the Capacitor E3 and E5 with new ones which are 100 $\mu$ F/10V.

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## 4 General Information

### 4.1 Client Information

Applicant: ISS MANUFACTURING LTD.  
 Address of Applicant: UNIT 604-606, 6/F., PHASE II, CHAI WAN INDUSTRIAL CITY, 70 WING TAI ROAD, CHAI WAN, HONGKONG

### 4.2 General Description of E.U.T.

EUT Name: USB PHONE  
 Item No.: STX-5013 / STY-5015  
 Serial No.: Not supplied by client

### 4.3 Details of E.U.T.

Power Supply: Supply by PC USB port  
 Power Cord: 2m unscreened with ferrite USB cable

### 4.4 Description of Support Units

The EUT has been tested with PC system.

| Description       | Manufacturer     | Model No. | Common                |
|-------------------|------------------|-----------|-----------------------|
| Personal Computer | IBM              | P7314A    | EMC0035               |
| 15" Monitor       | DELL             | E551C     | LO206HIOIA1           |
| Mouse             | IBM              | MU29J     |                       |
| Keyboard          | IBM              | SK-8820   |                       |
| ROM Programmer    | DASI Electronics | EMP-100A  |                       |
| Printer           | Hewlett-Packard  | C5884A    | DeskJet 670C          |
| NoteBook          | IBM              | T40       | EMC0034               |
| NoteBook          | IBM              | X22       | Just for CE test only |

### 4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory, No.198 Kezhu Road, Science Town Economic & Technology Development District Guangzhou, China 510663

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No tests were sub-contracted.