Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655 Report No.: SHEM111000139005

ee.shang@sgs.com

Page: 1 of 9

# TEST REPORT

**Application No.:** SHEM111000139005

Applicant: HANSON TECHNOLOGY LIMITED

**Equipment under Test (EUT)** 

NOTE: The following sample(s) submitted was/were identified on behalf of the client as

EUT Name: Magic Touchpad

Brand Name: Feltouch

Model No: MAGIC 100

Standards: EN 62479 (2010-09)

Date of Receipt: Oct. 18, 2011

Date of Test: Oct. 20, 2011 to Nov 09, 2011

Date of Issue: Nov 18, 2011

Test Result : PASS \*

\* 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.

E&E Section Head SGS-CSTC(Shanghai) Co., Ltd. CE

Zenger Zhang

E&E EMC Engineer

SGS-CSTC(Shanghai) Co., Ltd.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_edocument.htm">www.sgs.com/terms\_edocument.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to thesample(s) tested and such sample(s) are retained for 90 days only



# SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

588 West Jindu Road, Songjiang District, Shanghai, China

Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655 Report No.: SHEM111000139005

ee.shanghai@sgs.com

Page: 2 of 9

1 Change History

Version	Change Contents	Author	Date
V1.0	First Edition	Zenger zhang	18-Nov-2011



# SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

588 West Jindu Road, Songjiang District, Shanghai, China

Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655

ee.shanghai@sgs.com

Report No.: SHEM111000139005

1

Page: 3 of 9

#### 2 Contents

C	OVE	Pag IR PAGE	
1		CHANGE HISTORY	
2	(	CONTENTS	.3
3	(	GENERAL INFORMATION	.4
	3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8	CLIENT INFORMATION.  GENERAL DESCRIPTION OF E.U.T.  DETAILS OF E.U.T.  MEDIUM ACCESS PROTOCOL  DESCRIPTION OF SUPPORT UNITS  STANDARDS APPLICABLE FOR TESTING.  TEST LOCATION.  TEST FACILITY	.4 .4 .4 .4 .5
4	E	EN 62479 REQUIREMENT	.6
	4.1 4.2 4.3	HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS  COMPLIANCE ASSESSMENT PROCEDURE AND LIMIT	.6
5	,	APPENDIX A: INSTRUMENTS USED DURING TEST	.9



Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655 Report No.: SHEM111000139005

ee.shanghai@sgs.com

Page: 4 of 9

#### 3 General Information

#### 3.1 Client Information

Applicant: HANSON TECHNOLOGY LIMITED

Address of Applicant: Rm 1503, Kun Yang Building, No. 798, Zhao Jia Bang Road,

Shanghai, China

Manufacturer: HANSON TECHNOLOGY LIMITED

Address of Manufacturer: Rm 1503, Kun Yang Building, No. 798, Zhao Jia Bang Road,

Shanghai, China

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

EUT Name: Magic Touchpad

Brand Name: Feltouch

Model No: MAGIC 100

Supported Frequency Bands: 2.402GHz to 2.480GHz Test Frequency Bands: 2.402GHz to 2.480GHz

#### 3.3 Details of E.U.T.

Bluetooth Version: V3.0

AC Adaptor : No Adaptor Battery: Fix Battery

#### 3.4 Medium Access Protocol

The medium access protocol can be implemented by the equipment, declared by the manufacturer.

### 3.5 Description of Support Units

The EUT has been tested independently.

### 3.6 Standards Applicable for Testing

The applicant requested (R&TTE) RSM part tests for the EUT.

The standards used were EN 62479:2010

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to thesample(s) tested and such sample(s) are retained for 90 days only"



Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655 Report No.: SHEM111000139005

ee.shanghai@sgs.com

Page: 5 of 9

#### 3.7 Test Location

Tests were performed at:

SGS-CSTC EMC Laboratory, No.588 West Jindu Road, Songjiang District, Shanghai, China Tel:+86 21 6191 5666 Fax:+86 21 6191 5655

#### 3.8 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### • CNAS (No. CNAS L0599)

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2014-07-26.

#### • FCC – Registration No.: 402683

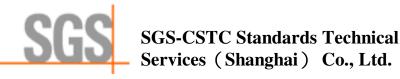
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2012-03-17.

#### • Industry Canada (IC) – IC Assigned Code: 8617A

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A. Expiry Date: 2014-09-20.

#### • VCCI (Member No.: 3061)

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3172 and C-3514 respectively. Date of Registration: 2009-11-30. Date of Expiry: 2012-03-17.



Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655 Report No.: SHEM111000139005

ee.shanghai@sgs.com

Page: 6 of 9

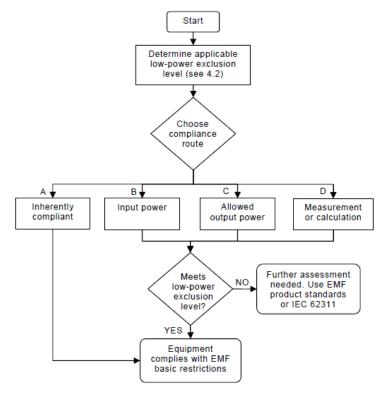
#### 4 EN 62479 REQUIREMENT

#### 4.1 Human exposure to the Electromagnetic fields

EN 62479:2010 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

The object of this standard is to demonstrate the compliance of such apparatus with the basic restrictions or reference levels on exposure of the general public related to electric, magnetic, electromagnetic fields as well as induced and contact current.

#### 4.2 Compliance Assessment Procedure and Limit





# **SGS-CSTC Standards Technical** Services (Shanghai) Co., Ltd.

588 West Jindu Road, Songjiang District, Shanghai, China

+86 (0) 21 6191 5666 Telephone: Report No.: SHEM111000139005 +86 (0) 21 6191 5655 Fax: Page: 7 of 9

ee.shanghai@sgs.com

# Table A.1 – Example values of SAR-based $P_{\rm max}$ for some cases described by ICNIRP, IEEE Std C95.1-1999 and IEEE Std C95.1-2005

Guideline / Standard	SAR limit, SAR <sub>max</sub>	Averaging mass, m	$P_{max}$	Exposure tier <sup>a</sup>	Region of body <sup>a</sup>
	W/kg	g	mW		
	2	10	20	General public	Head and trunk
ICNIRP [1]	4	10	40	General public	Limbs
IONIKI [I]	10	10	100	Occupational	Head and trunk
	20	10	200	Occupational	Limbs
	1,6	1	1,6	Uncontrolled environment	Head, trunk, arms, legs
IEEE Std C95.1-1999 [2]	4	10	40	Uncontrolled environment	Hands, wrists, feet and ankles
000.1 1000 [2]	8	1	8	Controlled environment	Head, trunk, arms, legs
	20	10	200	Controlled environment	Hands, wrists, feet and ankles
	2	10	20	Action level	Body except extremities and pinnae
IEEE Std C95.1-2005 [3]	4	10	40	Action level	Extremities and pinnae
	10	10	100	Controlled environment	Body except extremities and pinnae
	20	10	200	Controlled environment	Extremities and pinnae



# SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

588 West Jindu Road, Songjiang District, Shanghai, China

Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655

ee.shanghai@sgs.com

Page: 8 of 9

#### 4.3 Max Power Output

Test Date: Nov 03, 2011

Test Requirement: EN 62479 clause 4.2
Test Method: IEEE Std C95.1-2005

EUT Operation:: Test in fixing frequency operating mode at lowest, middle and highest

frequency.

Test Configuration:

EUT cable Spectrum
(Antenna Port Analyzer

#### Measurement Record:

Frequency (MHz)	Reading Peak Power(dBm)	Antenna Gain(dBi)	Cable Loss (dB)	Output Peak Power (dBm)	P <sub>Max</sub> (mW)	Limit (mW)	Result
2402	-3.84	0.6	0.9	-2.34	0.583	20	PASS
2441	-3.49	0.6	0.9	-1.99	0.632	20	PASS
2480	-3.17	0.6	0.9	-1.67	0.681	20	PASS



Telephone: +86 (0) 21 6191 5666 Fax: +86 (0) 21 6191 5655

ee.shanghai@sgs.com

#### Report No.: SHEM111000139005

Page: 9 of 9

## 5 Appendix A: Instruments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due date
1	Spectrum Analyzer	Rohde & Schwarz	FSP-30	100324	2011-04-19	2012-04-17
2	EMI test receiver	Rohde & Schwarz	ESU40	100109	2011-06-04	2012-06-03
3	Low nosie amplifier	TESEQ	LNA6900	70133	2011-07-06	2012-07-05
4	Ultra broadband antenna	Rohde & Schwarz	HL562	100227	2010-12-09	2011-12-08
5	Horn Antenna	Rohde & Schwarz	HF906	100284	2011-03-12	2012-03-10
6	ANTENNA	SCHWARZBECK	VULB9168	9168-313	2011-06-04	2012-06-03
7	Atmosphere pressure meter	Shanghai ZhongXuan Electronic Co;Ltd	BY-2003P		2011-10-15	2012-10-14
8	CLAMP METER	FLUKE	316	86080010	2011-04-22	2012-4-20
9	Thermo-Hygrometer	ZHICHEN	ZC1-2	01050033	2011-10-15	2012-10-14
10	TEMPERATURE& HUMIDITY BOX	KSON	THS-D2C-100	K40723	2011-01-22	2012-01-21
11	High-low temperature cabinet	Shanghai YuanZhen	GW2050		2011-06-17	2012-06-16
12	DC power	KIKUSUI	PMC35-3	NF100260	2011-01-16	2012-01-15
13	High pass Filter	FSCW	HP 12/2800- 5AA2	19A45-02	2011-04-08	2012-04-07

### The end of report