



Sporton International Inc.



INITIAL CERTIFICATION TEST REPORT

Module Integration

Test of:

Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P

To:

Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

Test Report Serial No: GC380123

Test Report Version: Rev. 01

Request Number: 37913

Issue Date: 08 November 2013

Declaration by Test Laboratory

The PCS1900 and GSM850 testing performed and shown in this report by Sporton International Inc. was conducted as per the requirements of the PCS Type Certification Review board.

The E-GSM900 and DCS1800 testing performed and shown in this report by Sporton International Inc. was conducted as per the requirements of the GCF.

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Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P

To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

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Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P
To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

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Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P
To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

1 Details of Test

1.1 Client

Address:	Beijing InHand Networks Technology Co., Ltd 101, West Wing, 11th Floor, No.101, Lize central Park, Wangjing, Chaoyang District, Beijing, 100102, P.R.China
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1.2 Manufacturer

Address:	Beijing InHand Networks Technology Co., Ltd North Gate of Heat Center, Jixiang Village, Houshayu County, Shunyi District, Beijing, China
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1.3 Location of Test

1.3.1 Sporton International Inc. – Location 1

Address:	Sporton International Inc. No. 52, Hwa Ya 1st Rd., Hwa Ya Technology, Kwei-Shan Hsiang, Taoyuan Hsien, Taiwan, R.O.C.
Contact Name:	Mr. Hendry Yang, Laboratory Manager

1.3.2 Sporton International Inc. – Location 2

Address:	Sporton International Inc. (Shenzhen) NO. 101, Complex buiding C, Guanlong Village, Xili Town, Nanshan District, Shenzhen, Guangdong, P.R.China
Contact Name:	Mr. Michael Lin, Laboratory Manager

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1.4 Test Environment

Testing Start Date:	12 August 2013
Testing End Date:	08 October 2013

Environmental Data:	Temperature (°C)	Humidity (%)
Ambient Condition	15 ~ 35	25 ~ 75
Maximum Extreme	+55	N.A
Minimum Extreme	-10	N.A

Normal Supply Voltage (V d.c.):	12.0
Maximum Extreme Supply Voltage (V d.c.):	48.0
Minimum Extreme Supply Voltage (V d.c.):	12.0

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2 Details of Equipment under Test

2.1 Final Equipment Build Status

The following is the build status for which compliance has been demonstrated by test and declaration

2.1.1 Product Build Status

Manufacturer Name:	Beijing InHand Networks Technology Co., Ltd
Brand Name:	Inhand
Model Name:	IR915P, IR905P
Product type:	Industrial Cellular Router
GSM Operating Band(s):	E-GSM900/DCS1800/PCS1900/GSM850
UMTS Operating Band(s):	FDDI/FDDII/FDDV/FDDVIII
Software Version Number:	09
Software Revision:	1.0.0
Hardware Revision:	IR900-P-MB-V12

2.1.2 Module Build Status

Manufacturer Name:	Gemalto M2M
Marketing Name:	PHS8-P
GSM Operating bands:	E-GSM900/DCS1800/PCS1900/GSM850
UMTS Operating bands:	FDDI/FDDII/FDDV/FDDVIII
Software Version Number:	09
Software Revision:	Revision: 03.001
Hardware Revision:	B1

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2.1.3 Key Features Supported

The following Table defines the key features supported in the device.

Feature	Supported	Release/Comments
GSM	Y	E-GSM900/DCS1800/PCS1900/GSM850
UMTS	Y	FDDI/FDDII/FDDV/FDDVIII
LTE	N	Not Supported
CDMA2000	N	Not Supported
GPRS	Y	Release99
GPRS Multi-Slot	Y	GPRS Multi-Slot Class 12
EGPRS	Y	Release 99
EGPRS Multi-Slot	Y	EGPRS Multi-Slot Class 12
UMTS Release	Y	Release 4
HSDPA	Y	Supported
HSUPA	Y	Supported
TTY	Y	Supported
DARP	Y	Phase1

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2.2 Identification of Samples Tested

The following summary may be used to identify the samples referenced in the test summary and any declared hardware or software modifications. Where modifications have been made, conformance has been demonstrated by regression testing declared by the manufacturer.

Sample Reference	IMEI	Software Revision	Hardware Revision	Date of Receipt	Note
01.01.01	359998041175631	1.0.0	IR900-P-MB-V12	12-Aug-13	—
01.02.01	359998041175631	1.0.0	IR900-P-MB-V12	23-Aug-13	—

Description of Sporton Reference sample number

E.g. 01.01.01

01 – Sample Identification	01 - Hardware Revision	01 - Software Revision
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2.3 Description of Product

The product is a Industrial Cellular Router, operating in E-GSM900/DCS1800/PCS1900/GSM850 and UMTS FDDI/FDDII/FDDV/FDDVIII bands. The Product supports GPRS Multi-Slot Class 12 and EGPRS Multi-Slot Class 12.

2.4 Generation of Conformance Test Plan

The following route has been chosen by the manufacturer to demonstrate compliance.

2.4.1 Module Integration Certification

Testing based on and according to the information supplied within the device integration information to:

NAPRD03 V5.12

GCF-CC V3.47.0

Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P
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2.5 Support Equipment

The following support equipment was used to exercise the EUT during testing.

Description	Power Supply
Manufacturer Name	None stated
Model Name or Number	None stated
Serial Number	None stated

Description	RF Cable
Manufacturer Name	None stated
Model Name or Number	None stated
Serial Number	None stated

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To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

3 Reference Documents

Testing was performed according to the following reference documents and standards.

Document	Version	Applicable	Title
NAPRD03	V5.12	Y	Overview of PCS Type certification review board (PTCRB) Mobile Equipment Type Certification and IMEI control
GCF-CC	V3.47.0	Y	GSM Certification Forum - Certification Criteria
3GPP TS 51.010-1	V11.2.0	Y	3rd Generation Partnership Project; Technical Specification Group GSM/EDGE Radio Access Network; Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification; Part 1: Conformance specification
3GPP TS 34.108	V11.7.0	Y	3rd Generation Partnership Project; Technical Specification Group Terminals; Common test environments for User Equipment (UE); Conformance testing
ETSI TS 102 230	V9.0.0	Y	Smart cards; UICC-Terminal interface; Physical, electrical and logical test specification

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To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

4 Test Results

4.1 Result Summary

The following table summarises the test results obtained. A definition of the result categories may be found at the end of the result tables.

TOTAL RELEVANT TEST CASES PERFORMED	70
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	GERAN	UMTS
PASS	44	26
FAIL	0	0
Failed in Category E	0	0
Total	44	26

4.2 Tests Performed

The following tables reflect the requirements of the relevant specification and show the tests performed. Result files verifying these verdicts are available for inspection at Sporton International Inc.

Where subcontracting has been performed these results are not covered by Sporton International Inc.'s accreditation.

Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P
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4.2.1 Test Results for GERAN

Test_Spec	Identifier	Name	Condition_Designation	Category	Band	Verdict	Sample	Notes
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 1800, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 1900, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 850, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 900, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 1800, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 1900, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 850, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 900, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 1800, VL	A	All	N.A.	—	1
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 1900, VL	A	All	N.A.	—	1
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 850, VL	A	All	N.A.	—	1
51.010-1	12.2.1	Radiated spurious emissions, MS allocated a channel	12.2.1; Frequency Band = 900, VL	A	All	N.A.	—	1
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 1800, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 1900, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 850, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 900, VN	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 1800, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 1900, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 850, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 900, VH	A	All	Pass	01.02.01	—
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 1800, VL	A	All	N.A.	—	1
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 1900, VL	A	All	N.A.	—	1
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 850, VL	A	All	N.A.	—	1

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Test_Spec	Identifier	Name	Condition_Designation	Category	Band	Verdict	Sample	Notes
51.010-1	12.2.2	Radiated spurious emissions, MS in idle mode	12.2.2; Frequency Band = 900, VL	A	All	N.A.	—	1
51.010-1	26.6.8.5	Ciphering mode / IMEISV request	26.6.8.5; Frequency Band = 1900	A	Single	Pass	01.01.01	—
51.010-1	26.7.3.1-1	General Identification	26.7.3.1-1; Frequency Band = 1900	A	Single	Pass	01.01.01	—
51.010-1	26.7.3.1-2	General Identification	26.7.3.1-2; Frequency Band = 1900	A	Single	Pass	01.01.01	—
51.010-1	27.17.1.1	Electrical tests - Phase preceding ME power on	27.17.1.1	A	Single	Pass	01.02.01	—
51.010-1	27.17.1.2-5.1	Electrical tests - Phase during SIM power on - 1,8V/3V SIM interface	27.17.1.2-5.1; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.1.2-5.2	Electrical tests - Phase during SIM power on - 1,8V/3V SIM interface	27.17.1.2-5.2; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.1.4-5.1	Phase during ME power off with clock stop allowed - 1,8V/3V SIM interface, soft power down	27.17.1.4-5.1; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.1.4-5.2	Phase during ME power off with clock stop allowed - 1,8V/3V SIM interface, soft power down	27.17.1.4-5.2; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.1.5.7	Reaction of 1,8V technology MEs on type recognition of 3V technology SIMs	27.17.1.5.7; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.1.5.8	Reaction of 1,8V technology MEs on type recognition of 1,8V technology SIMs	27.17.1.5.8; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.1-5.1	Electrical tests on contact C1, Test 1 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.1.1-5.1; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.1-5.2	Electrical tests on contact C1, Test 1 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.1.1-5.2; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.1	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.1.2-5.1; (1) 1.8V-3V (3V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.1	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.1.2-5.1; (2) 1.8V-3V (3V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.1	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.1.2-5.1; (3) 1.8V-3V (3V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.1	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.1.2-5.1; (4) 1.8V-3V (3V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.1	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.1.2-5.1; (5) 1.8V-3V (3V mode)	A	Single	Pass	01.02.01	—

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To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

Test_Spec	Identifier	Name	Condition_Designation	Category	Band	Verdict	Sample	Notes
51.010-1	27.17.2.1.2-5.1	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.1.2-5.1; (6) 1.8V-3V (3V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.2	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.1.2-5.2; (1) 1.8V-3V (1.8V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.2	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.1.2-5.2; (2) 1.8V-3V (1.8V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.2	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.1.2-5.2; (3) 1.8V-3V (1.8V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.2	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.1.2-5.2; (4) 1.8V-3V (1.8V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.2	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.1.2-5.2; (5) 1.8V-3V (1.8V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.1.2-5.2	Electrical tests on contact C1, Test 2 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.1.2-5.2; (6) 1.8V-3V (1.8V mode)	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.2-5.1	Electrical tests on contact C2 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.2-5.1; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.2-5.2	Electrical tests on contact C2 - 1,8V/3V SIM interface, 1,8V operation mode	27.17.2.2-5.2; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.3-5	Electrical tests on contact C3 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.3-5; 1.8V-3V	A	Single	Pass	01.02.01	—
51.010-1	27.17.2.5-5	Electrical tests on contact C7 - 1,8V/3V SIM interface, 3V operation mode	27.17.2.5-5; 1.8V-3V	A	Single	Pass	01.02.01	—

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4.2.2 Test Results for ETSI TS 102 230

Test_Spec	Identifier	Name	Condition_Designation	Category	Band	Verdict	Sample	Notes
ETSI TS 102 230	5.1.1	Phase preceding Terminal power on	5.1.1; TN, VN	A	Single	Pass	01.02.01	—
ETSI TS 102 230	5.1.2	Phase during UICC power on	5.1.2 b); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.1.3	Phase during Terminal power off	5.1.3 b); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.1.5.3	Reaction of 1,8 V technology Terminals on type recognition of 1,8 V technology UICCs	5.1.5.3; TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.1.5.4	Reaction of 1,8 V technology Terminals on type recognition of 3V technology UICCs	5.1.5.4; TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.1.5.6	Reaction of a Terminals receiving no ATR	5.1.5.6; TN, VN, 1.8V-3V	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.1	Electrical tests on contact C1, Test 1	5.2.2.1 b-1); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.1	Electrical tests on contact C1, Test 1	5.2.2.1 b-2); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-1); TN, VN, (1)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-1); TN, VN, (2)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-1); TN, VN, (3)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-1); TN, VN, (4)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-1); TN, VN, (5)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-1); TN, VN, (6)	B	Single	Pass	01.02.01	—

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Test_Spec	Identifier	Name	Condition_Designation	Category	Band	Verdict	Sample	Notes
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-2); TN, VN, (1)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-2); TN, VN, (2)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-2); TN, VN, (3)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-2); TN, VN, (4)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-2); TN, VN, (5)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.2.2	Electrical tests on contact C1, Test 2	5.2.2.2 b-2); TN, VN, (6)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.3	Electrical tests on contact C2	5.2.3 b-1); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.3	Electrical tests on contact C2	5.2.3 b-2); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.4	Electrical tests on contact C3	5.2.4 b-1) - b-4); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.4	Electrical tests on contact C3	5.2.4 b-5) - b-8); TN, VN	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.5.1	Electrical tests on contact C7, Test 1	5.2.5.1 b-1) - b-4)	B	Single	Pass	01.02.01	—
ETSI TS 102 230	5.2.5.1	Electrical tests on contact C7, Test 1	5.2.5.1 b-5) - b-8)	B	Single	Pass	01.02.01	—

Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P
To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

4.3 Key to Result Codes

The following codes are used in the table of results.

Code	Meaning
PASS	Test result shows that the requirements of the relevant specification have been met.
FAIL	Test result shows that the requirements of the relevant specification have not been met.
NA	Test is either not required/not applicable in the specified frequency band or is not applicable according to the specific PICS/PIXIT for the equipment under test.

4.4 Key to Tested Bands Code

The following codes are used in the table of results.

Code	Meaning
Single	Test case is required to be completed in one of the supported frequency bands.
All	Test case is required to be completed in all supported frequency bands.
Network Independent	A test case which is validated without the use of a radio access bearer
Bearer Agnostic	A test case which is independent of the radio access bearer or frequency band used during the test
I-RAT Single	An InterRAT test case that should be tested in a single band combination.
multi	indicates that a band combination is required, e.g. GSM1900/850 MHz bands.
Blank	indicates that the test does not require a bearer

4.5 Key to Notes

The following table describes the special notes, which are relevant to each test.

Note	Meaning
1	Test condition not required due to low voltage the same as normal voltage.

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5 Test Equipment

Conformance testing was performed using test equipment calibrated in accordance with Taiwan Accreditation Foundation accreditation requirements. Calibration, configuration records and equipment details used for conformance testing are available in Annex A.

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6 People performing Accredited Testing

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Annex A – Test Equipment Configuration Information

The following information details the configuration of the test equipment used in assessing the conformance of this product.

1 Test Equipment

Conformance testing was performed using test equipment calibrated in accordance with TAF accreditation requirements. Calibration, configuration records and equipment details used for conformance testing are available for inspection at Sporton International Inc., if required.

1.1 TP09 - Rohde & Schwarz CRTU-G/CRTU-S–(Shenzhen)

Test Platform Info	TP009 - R&S CRTU-G * n				
Hardware Info	Equipment List				
<u>Manufacturer</u>	<u>Model Info</u>	<u>Description</u>	<u>Serial Number</u>	<u>Calibration Due Date</u>	
Rohde & Schwarz	CRTU-G CRTU-RU	Universal Protocol Tester	100409 100777	30 Jun. 2015	
Rohde & Schwarz	CRTU-S CRTU-RU	Universal Protocol Tester	100836 100436	05 Mar. 2014	
Rohde & Schwarz	CRTU-S CRTU-RU	Universal Protocol Tester	100162 100521	31 Jan. 2015	
Rohde & Schwarz	CRTU-S CRTU-RU	Universal Protocol Tester	100403 100762	14 Apr. 2015	
Software version	<i>CRTU-G CRTU-RU</i>	<u>Operation System</u>			
		Windows 2000 Professional SP4			
	<u>Operational Software</u>	<u>Version</u>			
	MDDB	v20.09.1.74			
	MCT-LicProxy	v5.63.7.83			
	MCT MDDB GSM ALL	v25.06.0.5			
	CR02P2P BP	v1.50			
	CR02P2P EP	v3.5			
	CR02P2P ASP	2.00/2.04/2.05/2.06/2.10/2.11/2.12/2.13/2.20/2.24/2.25/2.30/2.31/2.32/2.40/2.41/2.43/2.45/2.46/2.48/2.50/2.55/2.60/2.63/2.64/2.95/2.96/3.00/3.02/3.10/3.1950/3.2951/3.2952/3.2953/3.2954/3.30/3.31/3.33/3.34/3.35/3.36/3.37/3.38/3.4350/3.44/3.50/3.51/3.52/3.5951/3.5952/3.5953/3.5954/3.60/3.61/4.00/4.01/4.02/4.04/4.0751/4.08/4.0850/4.09/4.0951/4.0953/4.10/4.1051/4.1052/4.11/4.12/4.13/4.16//4.1650/4.1950/4.1951/4.1990/4.1991/4.20/4.21/4.2450/4.30/4.40/4.41/4.45/4.50/4.5051/4.51/4.5953/4.60/4.61/4.6150/4.6251/4.63/4.64/4.66/4.6650/4.67/4.68/4.69/4.70/4.71/4.72/4.73/4.7350/4.74/4.75/4.7550/4.76/4.80/4.90/4.9950/5.0/5.10/5.19/5.21/5.25/5.26/5.27/5.28/5.30/5.40/5.50/5.61			
	ApplicsCommonCode	1.70/1.74/3.00/3.10/3.05/3.06/3.15/3.20/3.30/3.35/3.40/3.50/3.60/3.70/3.75/3.80/3.90/3.91/3.91/3.93/4.00/4.10/4.11/4.12/4.20/4.21/4.22/4.30/4.32/4.33/4.21/4.23/4.31/4.40/4.42/4.43/4.42/4.43/4.45/4.46/4.43/4.44/4.60/4.61/4.60/4.61/4.60/4.63/4.70/4.71/4.80/4.81/4.82/5.00/5.10/5.11/5.12/5.13/5.14/5.12/5.20/5.12/5.20/5.10/5.20/4.49/5.20/5.40/5.41/5.50/5.5001/5.41/5.50/5.51/5.50/5.53/5.50/5.53/5.55/5.54/6.00/6.10/6.11/6.12/6.14/6.13/6.50/6.51/6.52/6.60/6.61/6.62/6.70/6.71/6.72/6.73/6.74/6.75/6.80/6.82/6.83/7.01/7.10/7.11/7.12/7.13/7.14/7.15/7.20/7.21/7.22/7.23/7.30/7.31/7.40/7.43/7.50			
		<u>Testcase Software</u>	<u>Version</u>		
		CRTKLU1	v3.10		
	CRTKSS1	v2.40			
	CRTKSS2	v2.0.0			

	CRTKSS3	v1.90
	CRTKSS5	v2.10
	CRTKSS6	v1.91
	CRTU-GC02	v2.40
	CRTU-GC03	v2.00
	CRTU-GC04	v1.81
	CRTU-GC05	v2.00
	CRTU-GC06	v1.90
	CRTU-GC07	v2.00
	CRTU-GC08	v1.90
	CRTU-GC09	v4.40
	CRTU-GC10	v1.60
	CRTU-GC12	v1.60
	CRTU-GC16	v1.60
	CRTU-GC18	v4.80
	CRTU-GC19	v2.10
	CRTU-GC20	v1.90
	CRTU-GC21	v1.50
	CRTU-GC22	v1.90
	CRTU-GC23	v1.80
	CRTU-GC24	v2.01
	CRTU-GC28	v1.40
	CRTU-GC29	v1.60
	CRTU-GC31	v4.60
	CRTU-GC32	v4.40
	CRTU-GC33	v4.61
	CRTU-GC34	v4.80
	CRTU-GC35	v4.70
	CRTU-GC36	v4.60
	CRTU-GC37	v4.60
	CRTU-GC38	v4.50
	CRTU-GC39	v4.60
	CRTU-GC41	v4.80
	CRTU-GC61	v4.60
	CRTU-GC62	v4.40
	CRTU-GC63	v4.50
	CRTU-GC64	v4.70
	CRTU-GC65	v4.50
	CRTU-GC68	v4.60
	CRTU-GC69	v4.70
	CRTU-GC70	v4.60

CRTU-GC71	v4.40
CRTU-GC72	v4.60
CRTU-GC73	v4.52
CRTU-GC74	v4.50
CRTU-GC75	v4.70
CRTU-GC76	v4.60
CRTU-GC77	v4.61
CRTU-GC78	v4.50
CRTU-GC79	v4.60
CRTU-GC80	v4.50
CRTU-GC81	v4.60
CRTU-GC82	v4.40
CRTU-GC83	v4.50
CRTU-GC84	v4.70
CRTU-GC85	v4.70
CRTU-GC86	v4.60
CRTU-GC87	v4.60
CRTU-GC88	v4.70
CRTU-GC90	v4.71
CRTU-GC91	v4.50
CRTU-GC92	v1.50
CU-GC01	v2.10
CRTU-GC52	v1.20
CRTU-GC53	v1.60
CRTU-GC54	v1.30
CRTU-GC55	v1.40
CRTU-GC56	v1.50
CRTU-GC89	v4.60
CRTU—GF02	v1.20
TC12-2	v1.30
CRTKEGS-900	v3.10
CRTKLU1-1900	v1.70
CRTKLU1-850	v1.70
CRTPK1	v3.30
CRTPK2	v3.20
CRTPK3	v3.30
CRTPK4	v3.41
CRTPK51-900	v2.21
CRTPK52-900	v2.31
CRTPK53-900	v2.21
CRTPK54-900	v2.24

	CRTPK56-900	v2.25
	CRTPK58-900	v2.10
	CRTPK59-900	v2.21
	CRTPK5B-900	v2.11
	CRTPK6	v3.10
	CRTPK61-1800	v2.21
	CRTPK62-1800	v2.31
	CRTPK63-1800	v2.21
	CRTPK64-1800	v2.24
	CRTPK66-1800	v2.25
	CRTPK68-1800	v2.10
	CRTPK69-1800	v2.21
	CRTPK6B-1800	v2.11
	CRTPK71-1900	v2.21
	CRTPK71-850	v2.21
	CRTPK72-1900	v2.31
	CRTPK72-850	v2.31
	CRTPK73-1900	v2.21
	CRTPK73-850	v2.21
	CRTPK74-1900	v2.24
	CRTPK74-850	v2.24
	CRTPK76-1900	v2.25
	CRTPK76-850	v2.25
	CRTPK78-1900	v2.10
	CRTPK78-850	v2.10
	CRTPK79-1900	v2.21
	CRTPK79-850	v2.21
	CRTPK7B-1900	v2.11
	CRTPK7B-850	v2.11
	CRTPK8	v3.20
	CRTPK9	v3.30
	CRTPKB	v3.20
	AP2PWS	v3.90

1.2 TP12/13 - COMPRION UICC/USIM/USAT Simulator IT3 & InterLab – (Shenzhen)

Test Platform Info		TP012 - COMPRION IT3 SIM Simulator TP013 - COMPRION IT3 USIM Simulator		
		TP031 - InterLab® USIM Test Solution TP077 - InterLab® USAT Test Solution		
Hardware Info	IT ³ SIM Simulator v1.0			
	Equipment List			
<u>Manufacturer</u>	<u>Model Info</u>	<u>Description</u>	<u>Serial Number</u>	<u>Calibration Due Date</u>
Comprion	IT ³ Test System	Control PC	B2004-50143	NCR
Comprion	IT ³ Analog Probe	IT ³ APR v1.2	50143	11 Nov. 2013
Software Version	<i>IT³ Test System</i>	<u>Operation System</u>		
		Windows 2000 Professional SP4		
	<u>Platform Software</u>			<u>Version</u>
	IT ³ Test Platform			v4.10.2
	Network Simulation Controller			v4.10.2
	<u>Software Modules</u>			<u>Version</u>
	3GPP TS 31.121 (digital)			v4.10.2
	3GPP TS 31.124 Stage 1			v4.10.2
	3GPP TS 31.124 Stage 2			v4.10.2
	3GPP TS 31.124 Stage 3			v4.10.2
	3GPP TS 51.010-1 (analog) 850/1900			v4.10.2
	3GPP TS 51.010-1 (analog) 900/1800			v4.10.2
	3GPP TS 51.010-1 (digital) 850/1900			v4.10.2
	3GPP TS 51.010-1 (digital) 900/1800			v4.10.2
	3GPP TS 51.010-4 SAT Rel.99 Stage 1 850/1900			v4.10.2
	3GPP TS 51.010-4 SAT Rel.99 Stage 1 900/1800			v4.10.2
	3GPP TS 51.010-4 SAT Rel.99 Stage 2 850/1900			v4.10.2
	3GPP TS 51.010-4 SAT Rel.99 Stage 2 900/1800			v4.10.2
	ETSI TS 102 230 (analog)			v4.10.2
	ETSI TS 102 230 (digital)			v4.10.2
3GPP TS 31.124 USAT USS Set 1			v4.10.2	
3GPP TS 31.121 USIM USS Set 1			v4.10.2	
3GPP TS 51.010-1 SIM SS Set 1			v4.10.2	
3GPP TS 51.010-4 SAT SS Set 1			v4.10.2	

1.3 Radiated Spurious Emission –(Shenzhen)

NO.	Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date
1	Spectrum Analyzer	R&S	FSP30	101362	9kHz~30GHz	2013/10/10	2014/10/9
2	System Simulator	Agilent	E5515C	MY50264168	GSM/WCDMA /CDMA2000	2013/10/10	2014/10/9
3	Bilog Antenna	TESEQ	CBL6112D	23188	25MHz~2GHz	2012/10/12	2013/11/12
4	Double Ridge Horn Antenna	COM-POWER	AH-118	701030	1GHz~18GHz	2012/11/27	2013/11/26
5	Amplifier	EM Electronics	EM330	060433	100KHz~3GHz	2012/10/13	2013/11/12
6	Amplifier	Agilent	8449B	3008A02575	1GHz~26.5GHz	2012/10/11	2013/11/10
7	Controller	MF	3000	MF780208143	N/A	N/A	N/A
8	Turn Table	MF	MF7802	N/A	0 ~ 360 degree	N/A	N/A
9	Antenna Mast	MF	MF7802	N/A	1 m - 4 m	N/A	N/A
10	AC Power Source	APC	AFC-110009	F104090004	N/A	N/A	N/A
11	High Pass Filter	Microwave Circuits	WHKX3.0/18G-10SS	97	3G-18G	Calibrated as part of system*	Calibrated as part of system*
12	High Pass Filter	Wainwright Instruments Gmbh	WHKX1.0/15G-10SS	10	1.5G-10G	Calibrated as part of system*	Calibrated as part of system*
13	High Pass Filter	Wainwright Instruments Gmbh	WHKX2.0/18G-12SS	19	2G-13G	Calibrated as part of system*	Calibrated as part of system*
14	Low Pass Filter	Wainwright Instruments Gmbh	WLKS 1200-8SS	5	DC-1.22G	Calibrated as part of system*	Calibrated as part of system*
15	Turnable Notch Filter	Wainwright Instruments Gmbh	WRCT800/960-0.2/40-8SS	35	1850-2170 Notch	Calibrated as part of system*	Calibrated as part of system*
16	Notch Filter	Wainwright Instruments Gmbh	WRCD1747.5	N/A	1747.5MHz Notch	Calibrated as part of system*	Calibrated as part of system*
17	Notch Filter	Wainwright Instruments Gmbh	WRCT902.5	N/A	902.5MHz Notch	Calibrated as part of system*	Calibrated as part of system*
18	Notch Filter	Wainwright Instruments Gmbh	WRCD1700/2000-0.2/40-10SS	N/A	1700~2000MHz Tunable Notch	Calibrated as part of system*	Calibrated as part of system*
19	Notch Filter	Wainwright Instruments Gmbh	WRCT800/960-0.2/40-8SS	N/A	800~960MHz Tunable Notch	Calibrated as part of system*	Calibrated as part of system*
20	Notch Filter	Wainwright Instruments Gmbh	SN4	N/A	1850~2170 MHz Tunable Notch	Calibrated as part of system*	Calibrated as part of system*
21	RF Cable-HF	Woken	sms-mf141-sms	CB002	N/A	2013/02/15	2014/02/15

22	Fully Anechoic Chamber	TDK	ETS1-3M	8861004	N/A	2011/01/22	N/A
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Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P
To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

Annex B – Product Equality Declaration

Declaration

We, Beijing Inhand Networks Technology Co., Ltd. declare that:

Our product IR905P/915P apply for PTCRB certification are the same in hardware and software, only different in their model name.

Should there be any question, please feel free to contact us.

Sincerely

Signature: 王标

Name:

Title: Certification engineer

Test of: Beijing InHand Networks Technology Co., Ltd – IR915P, IR905P
To: Conformance Test Cases (NAPRD03 V5.12 and GCF-CC V3.47.0)

Annex C – DUT Photographs



