
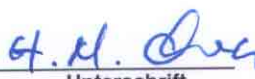


Prüfbericht - Nr.: 10012661 002		Seite 1 von 13 Page 1 of 13			
<i>Test Report No.:</i>					
Auftraggeber: <i>Client:</i>	Air2U Inc. 4F, No. 19 Industry E. Rd 4, Hsinchu Science Park, Hsin-Chu 300, Taiwan				
Gegenstand der Prüfung: <i>Test Item:</i>	SiW3500 UART/PCM RF module				
Bezeichnung: <i>Identification:</i>	BSM02B	Serien-Nr.: <i>Serial No.:</i>	n/a		
Wareneingangs-Nr.: <i>Receipt No.:</i>	TPE26495	Eingangsdatum: <i>Date of Receipt:</i>	02.08.2006		
Prüfört: <i>Testing Location:</i>	TÜV Rheinland Taiwan Ltd. 7F, No. 2, Min Chuan E. Rd., Sec. 3, Taipei 104, Taiwan, R.O.C.				
Prüfgrundlage: <i>Test Specification:</i>	Bluetooth RF Test Specification for Core and Host version 2.0+EDR (Please refer to clause 3.3 of the test report)				
Prüfergebnis: <i>Test Result:</i>	Der vorstehend beschriebene Prüfgegenstand wurde geprüft und entspricht oben genannter Prüfgrundlage. <i>The a. m. test item passed the test specification.</i>				
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland Taiwan Ltd.				
geprüft/ tested by:	kontrolliert/ checked by:				
16.08.2006	Arvin Ho		16.08.2006	H. M. Chen	
<i>Datum</i> Date	<i>Name</i> Name	<i>Unterschrift</i> Signature	<i>Datum</i> Date	<i>Name</i> Name	<i>Unterschrift</i> Signature
Sonstiges/ Other Aspects:					
<p>Abkürzungen: ok / P = entspricht Prüfgrundlage fail / F = entspricht nicht Prüfgrundlage n.a. / N = nicht anwendbar</p> <p>Abbreviations: ok / P = passed fail / F = failed n.a. / N = not applicable</p>					
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p><i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i></p>					

1 Administrative Data

1.1 Project Data

Project Responsible: Arvin Ho
Date of Test Report: 2006/08/16
Date of first test: 2006/08/02
Date of last test: 2006/08/04

1.2 Applicant Data

Company Name: Air2U Inc.
Street: 4F, No. 19 Industry E. Rd 4, Hsinchu Science Park,
City: 300 Hsin-Chu
Country: Taiwan

Contact Person: Mrs. Chun-Yi Chang
Phone: +886 3 567 8877 #3833
Fax: +886 3 563 2233

1.3 Test Laboratory Data

The following list shows all places and laboratories involved for test result generation:

TÜV Rheinland - Taiwan

Company Name : TÜV Rheinland Taiwan Ltd.
Street : 7F, No.2, Min Chuan East Road, section 3
City : 104 Taipei
Country : Taiwan
Contact Person : Mr. Dipl. Ing. Uwe Halstenbach
Phone : +886 2 2516 6040 #1096
Fax : +886 2 2509 7252

Laboratory Details

Lab ID	Identification	Responsible	Accreditation Info
Lab 1	Bluetooth Full Test Solution RF	Mr. Jan-Willem Vonk	DAR registration: DAT-P 070/97-12

1.4 Signature of the Testing Responsible



Arvin Ho
 responsible for tests performed in: Lab 1

1.5 Signature of the Accreditation Responsible



Dipl. Ing. Mr. Uwe Halstenbach
responsible for Lab 1

2 Test Object Data

2.1 General OUT Description

The following section lists all OUTs (Object's Under Test) involved during testing.

OUT: SiW3500 UART/PCM RF module BSM02B

Type / Model / Family: SiW3500 UART/PCM RF module
Model: BSM02B

Product Category: Others

Manufacturer:
Company Name: see Applicant

Parameter List:

Parameter name	Value
Prospective Date of Listing	31.12.2006

2.2 Detailed Description of OUT Samples

Sample : 26495

<i>OUT Identifier</i>	SiW3500 UART/PCM RF module BSM02B		
<i>Sample Description</i>	SiW3500 UART/PCM RF module		
<i>Serial No.</i>	n/a		
<i>HW Status</i>	B1103-2K_1A1		
<i>SW Status</i>	n/a		
<i>Date of Receipt</i>	2006/08/02	<i>Low Temp.</i>	-10.0 °C
		<i>High Temp.</i>	60.0 °C
<i>Nominal Voltage</i>	3.3 V	<i>Normal Temp.</i>	25.0 °C

Parameter List:

Parameter Description	Value
additional RF loss	0 (dB)
BD-ADDR	000000005aad
Host Connection Request	True
Max. Antenna gain	0 (dBi)
Power Class	2
unmodulated part before modulation	41.0 (us)

2.3 OUT Features

Features for OUT: SiW3500 UART/PCM RF module BSM02B

<i>Designation</i>	<i>Description</i>	<i>Allowed Values</i>	<i>Supported Value(s)</i>
Features for scope: Bluetooth_v1			
RF.1/1	Power Class (Value 2)	1, 2, 3	2
RF.1/2	Power Control		
RF.1/3	1-slot packets supported		
RF.1/4	3-slot packets supported		
RF.1/5	5-slot packets supported		
RF.1/6	79 Channels		
RF.1/7	Support for GFSK modulation		
Additional information for scope: Bluetooth_v1			
CatA	Bluetooth Category Selector: Selects Category A tests		
mandatory	Mandatory Bluetooth Feature		
RF	Bluetooth Part Selector: RF Conformance		
TH	Bluetooth Condition Selector: High Temperature		
TL	Bluetooth Condition Selector: Low Temperature		
VN	Bluetooth Condition Selector: Normal Voltage		

2.4 Setups used for Testing

For each setup a relation is given to determine if and which samples and auxiliary equipment is used. The left side list all OUT samples and the right side lists all auxiliary equipment for the given setup.

<i>Setup No.</i>	<i>List of OUT samples</i>	<i>List of auxiliary equipment</i>
<i>Sample No.</i>	<i>Sample Description</i>	<i>AE No. AE Description</i>
26495	(SiW3500 UART/PCM RF module BSM02B)	
Sample: 26495	SiW3500 UART/PCM RF module	

3 Results

3.1 General

Documentation of tested devices:

Available at the test laboratory.

Interpretation of the test results:

The results of the inspection are described on the following pages, where 'Conformity' or 'Passed' means that the certification criteria were verified and that the tested device is conform to the applied standard.

In cases where 'Declaration' is printed, the required documents are available in the manufacturers product documentation.

In cases where 'not applicable' is printed, the test case requirements are not relevant to the specific equipment implementation.

3.2 List of the Applicable Body

(Body for Scope: Bluetooth_v1)

<i>Designation</i>	<i>Description</i>
SIG TCRL 2.0 requirements	Test Case Reference List for Core and Host version 2.0 released 2005-05-01

3.3 List of Test Specification

Test Specification: **RF 2.0**
Date / Version 2004/11/10 Version: RF.TS/2.0.E.3
Title: Volume 2 Part A Radio Frequency
Description: RF Test Specification for Corespec 2.0

3.4 Summary

<i>Test Case Identifier / Name</i> <i>Test (condition)</i>	<i>Cat</i>	<i>Result</i>	<i>Date of Test</i>	<i>Lab</i> <i>Ref.</i>	<i>Setup</i>
RCV/CA/01/C Sensitivity – single slot packets					
RCV/CA/01/C: VN, TH, DH1, RX 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
RCV/CA/01/C: VN, TH, DH1, RX 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
RCV/CA/01/C: VN, TH, DH1, RX 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
RCV/CA/01/C: VN, TL, DH1, RX 2402, MaxPower	A	Passed	2006/08/03	Lab 1	26495
RCV/CA/01/C: VN, TL, DH1, RX 2441, MaxPower	A	Passed	2006/08/03	Lab 1	26495
RCV/CA/01/C: VN, TL, DH1, RX 2480, MaxPower	A	Passed	2006/08/03	Lab 1	26495
RCV/CA/02/C Sensitivity - multi-slot packets					
RCV/CA/02/C: VN, TH, LSP, RX 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
RCV/CA/02/C: VN, TH, LSP, RX 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
RCV/CA/02/C: VN, TH, LSP, RX 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
RCV/CA/02/C: VN, TL, LSP, RX 2402, MaxPower	A	Passed	2006/08/02	Lab 1	26495
RCV/CA/02/C: VN, TL, LSP, RX 2441, MaxPower	A	Passed	2006/08/02	Lab 1	26495
RCV/CA/02/C: VN, TL, LSP, RX 2480, MaxPower	A	Passed	2006/08/02	Lab 1	26495
TRM/CA/01/C Output Power					
TRM/CA/01/C: VN, TH, LSP, H1, MaxPower, ETS	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/01/C: VN, TL, LSP, H1, MaxPower, ETS	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/02/C Power Density					
TRM/CA/02/C: VN, TH, LSP, H1, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/02/C: VN, TL, LSP, H1, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/04/C TX Output Spectrum – Frequency range					
TRM/CA/04/C: VN, TH, LSP, MaxPower, ETS, 2402	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/04/C: VN, TH, LSP, MaxPower, ETS, 2480	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/04/C: VN, TL, LSP, MaxPower, ETS, 2402	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/04/C: VN, TL, LSP, MaxPower, ETS, 2480	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/05/C TX Output Spectrum – 20 dB Bandwidth					
TRM/CA/05/C: VN, TH, LSP, TX 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/05/C: VN, TH, LSP, TX 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/05/C: VN, TH, LSP, TX 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/05/C: VN, TL, LSP, TX 2402, MaxPower	A	Passed	2006/08/02	Lab 1	26495
TRM/CA/05/C: VN, TL, LSP, TX 2441, MaxPower	A	Passed	2006/08/02	Lab 1	26495
TRM/CA/05/C: VN, TL, LSP, TX 2480, MaxPower	A	Passed	2006/08/02	Lab 1	26495

<i>Test Case Identifier / Name</i>	<i>Cat</i>	<i>Result</i>	<i>Date of Test</i>	<i>Lab</i>	<i>Setup</i>
<i>Test (condition)</i>				<i>Ref.</i>	
TRM/CA/06/C TX Output Spectrum – Adjacent channel power					
TRM/CA/06/C: VN, TH, DH1, TX 2405, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/06/C: VN, TH, DH1, TX 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/06/C: VN, TH, DH1, TX 2477, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/06/C: VN, TL, DH1, TX 2405, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/06/C: VN, TL, DH1, TX 2441, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/06/C: VN, TL, DH1, TX 2477, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/07/C Modulation Characteristics					
TRM/CA/07/C: VN, TH, LSP, TX 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/07/C: VN, TH, LSP, TX 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/07/C: VN, TH, LSP, TX 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/07/C: VN, TL, LSP, TX 2402, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/07/C: VN, TL, LSP, TX 2441, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/07/C: VN, TL, LSP, TX 2480, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/08/C Initial Carrier Frequency Tolerance					
TRM/CA/08/C: VN, TH, DH1, H1, MF 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/08/C: VN, TH, DH1, H1, MF 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/08/C: VN, TH, DH1, H1, MF 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/08/C: VN, TL, DH1, H1, MF 2402, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/08/C: VN, TL, DH1, H1, MF 2441, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/08/C: VN, TL, DH1, H1, MF 2480, MaxPower	A	Passed	2006/08/03	Lab 1	26495

<i>Test Case Identifier / Name</i>	<i>Cat</i>	<i>Result</i>	<i>Date of Test</i>	<i>Lab</i>	<i>Setup</i>
<i>Test (condition)</i>				<i>Ref.</i>	
TRM/CA/09/C Carrier Frequency Drift					
TRM/CA/09/C: VN, TH, DH1, H1, MF 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH1, H1, MF 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH1, H1, MF 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH3, H1, MF 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH3, H1, MF 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH3, H1, MF 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH5, H1, MF 2402, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH5, H1, MF 2441, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TH, DH5, H1, MF 2480, MaxPower	A	Passed	2006/08/04	Lab 1	26495
TRM/CA/09/C: VN, TL, DH1, H1, MF 2402, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH1, H1, MF 2441, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH1, H1, MF 2480, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH3, H1, MF 2402, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH3, H1, MF 2441, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH3, H1, MF 2480, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH5, H1, MF 2402, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH5, H1, MF 2441, MaxPower	A	Passed	2006/08/03	Lab 1	26495
TRM/CA/09/C: VN, TL, DH5, H1, MF 2480, MaxPower	A	Passed	2006/08/03	Lab 1	26495

4 Test Equipment Details

4.1 List of Used Test Equipment

The hardware and software status are shown for the testing period.

Test Equipment Bluetooth HF test system

Lab ID:	Lab 1
<i>Manufacturer:</i>	Rohde & Schwarz GmbH & Co. KG
<i>Description:</i>	Radio conformance tester
<i>Type:</i>	TS8960
<i>Serial Number:</i>	338951/101

Single Devices for Bluetooth HF test system

<i>Single Device Name</i>	<i>Type</i>	<i>Serial Number</i>	<i>Manufacturer</i>	<i>Date of Start</i>	<i>Date of End</i>
Dual Channel Power Meter	NRVD	100439	Rohde & Schwarz GmbH & Co. KG		
Industrial controller	PSM12	835259/017	Rohde & Schwarz GmbH & Co. KG		
	<i>HW/SW Status</i>				
				2004/09/09	
IUT cable 2 meter	Sucoflex 104	188211/4	Suhner		
IUT cable 4 meter	Sucoflex 104		Rosenberg		
Line distributor	CS-LDE with EMI filter		Rohde & Schwarz GmbH & Co. KG		
Management station	PC	1	7 layers AG		
	<i>HW/SW Status</i>				
				2005/12/07	
	Interlab Server: 1.5 build 10				
	Interlab Client: 1.5 build 10				
	Interlab report 1.5 build 6				
Power Sensor 50 Ohm	NRV-Z1	100013	Rohde & Schwarz GmbH & Co. KG		
Power Sensor 50 Ohm	NRV-Z1	836219/007	Rohde & Schwarz GmbH & Co. KG		
Power Supply SSCU	Build inside TS8960	100014	Rohde & Schwarz GmbH & Co. KG		
RF distribution unit	6502	24006121	Datum-Beverly		
RF step attenuator	RSP	100029	Rohde & Schwarz GmbH & Co. KG		
Signal Generator A	SMIQ03B	835742/061	Rohde & Schwarz GmbH & Co. KG		
Signal Generator B	SMIQ03B	100213	Rohde & Schwarz GmbH & Co. KG		
Signal Generator C	SMR27	100007	Rohde & Schwarz GmbH & Co. KG		
Signaling Unit	PTW60	835483/011	Rohde & Schwarz GmbH & Co. KG		
	<i>HW/SW Status</i>				
				2004/04/09	
	Signaling software 5.90				
Spectrum Analyzer	FSP30	837866/009	Rohde & Schwarz GmbH & Co. KG		
Temperature Chamber	GCT-099-40S	MAF0103-007	Giant Force Instrument Enterprise Co. Ltd.		

Single Devices for Bluetooth HF test system (continued)

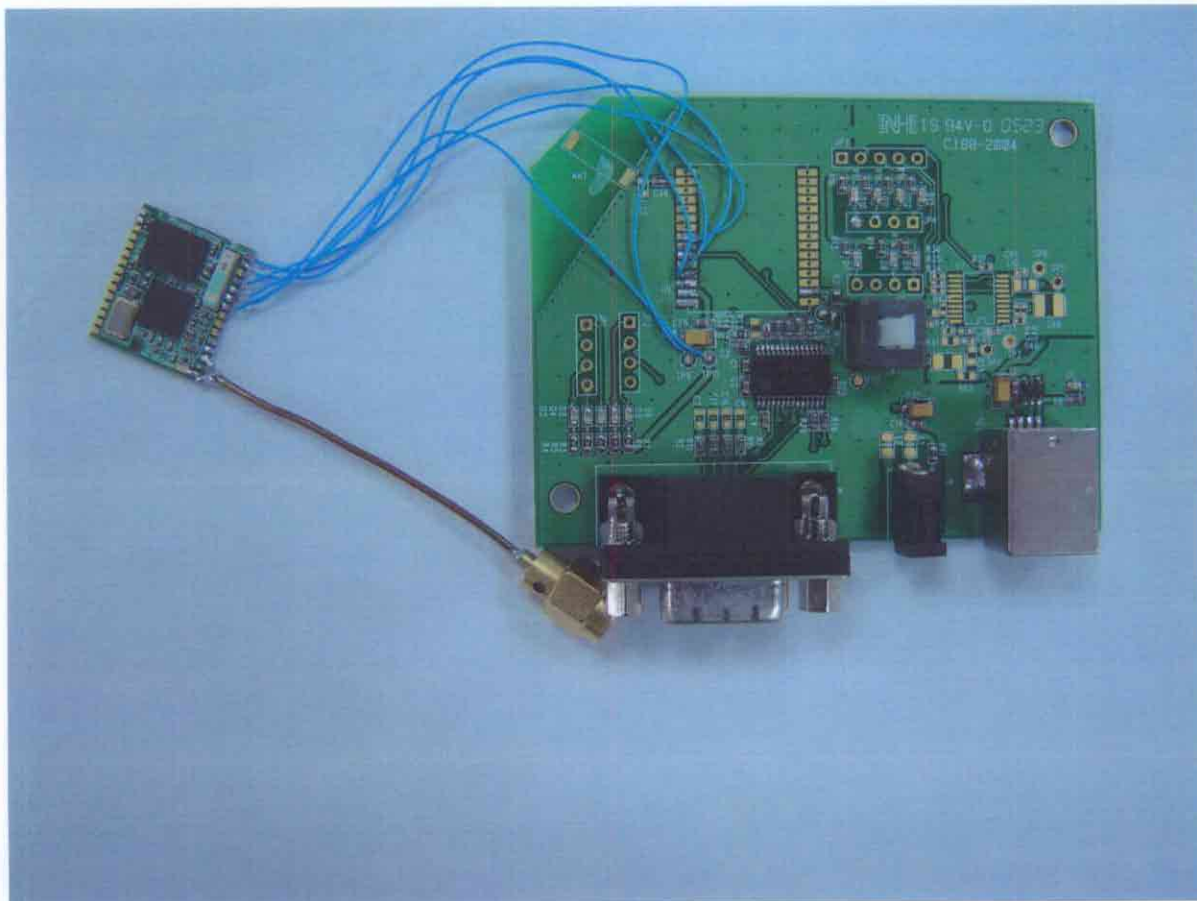
<i>Single Device Name</i>	<i>Type</i>	<i>Serial Number</i>	<i>Manufacturer</i>
Thermo Hydrograph	SK-L200TH	8449508	
UPS	C-3000s 3KVA	0211830027	Phoenixtec

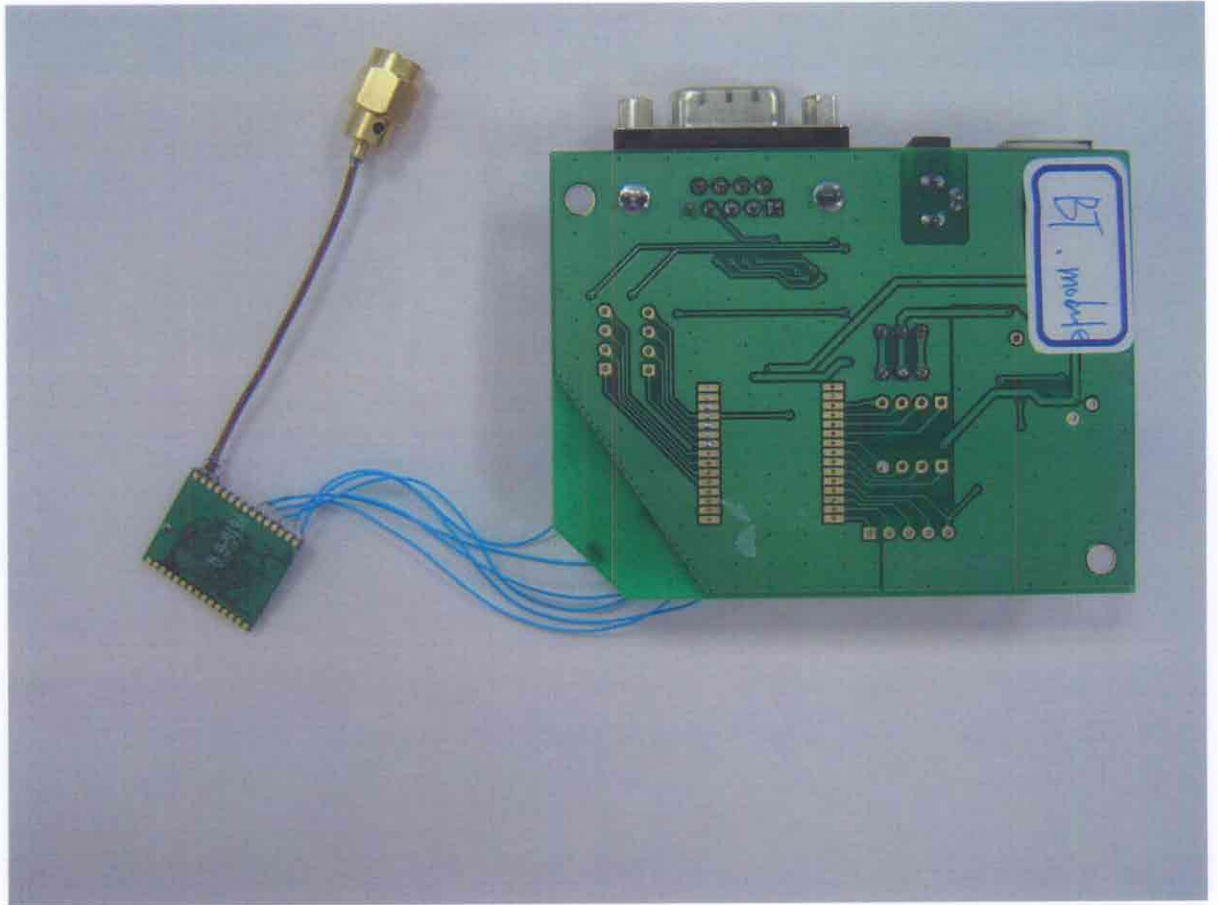
4.2 Laboratory Environmental Conditions

<i>Laboratory</i>	<i>Date</i>	<i>Temperature</i>	<i>Humidity</i>	<i>Air Pressure</i>
Lab 1	2006/08/02	26 °C	32 %	1006 hPa
	2006/08/03	26 °C	32 %	1006 hPa
	2006/08/04	26 °C	34 %	1009 hPa

5 Annex

5.1 Additional Information for Sample Description





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