

Notified Body Number 1177



NOTIFIED BODY STATEMENT OF OPINION

R&TTE DIRECTIVE 1999/5/EC Conformity assessment procedure Article 10(5) and Annex IV

DESCRIPTION OF THE PRODUCT

Manufacturer : SENA TECHNOLOGIES, INC.
Address : 210 YANGJAE-DONG SEOCHO-GU
SEOUL, 137-130 KOREA
Phone number : +82-2-571-8283
Product description : BLUETOOTH SERIAL ADAPTER (Module)
Intended use : SRD – WIDEBAND DATA TRANSMISSION SYSTEM
RF output power : 19.1dBm EIRP
Frequency band : 2402-2480MHz, 79 Channels
Modulation : GFSK, Pi/4 DQPSK, 8DPSK (78%)
Brand : SENA
Type/Model number : PARANI-ESD1000

TECHNICAL CONSTRUCTION FILE

Issued by : SENA TECHNOLOGIES, INC.
Address : 210 YANGJAE-DONG SEOCHO-GU
SEOUL, 137-130 KOREA
Phone / Fax number : +82-2-571-8283 / +82-2-573-7710
Signed by : SEUNG-HYUN KIM, Associate Research Engineer
Date : August 13, 2007
File Number : RTTE-S0708A

TIMCO NOTIFIED BODY STATEMENT OF OPINION

Issued by : Notified Body 1177, TIMCO Engineering, Inc.
Date : August 24, 2007
Opinion number : TCF-2906KC7
On behalf of : The President of TIMCO Engineering, Inc.
Signature : *Bruno Clavier* (signed)
Name : Bruno Clavier

The device shall be marked as follows:



THIS STATEMENT OF OPINION HAS NO ADDENDUM.

Based on the evidence presented in the Technical Construction File, TIMCO Engineering, Inc., as appointed Notified Body (number 1177), has given a positive opinion that the product described is in conformity with the essential requirements Article 3.2 of R&TTE Directive 1999/5/EC.

TIMCO ENGINEERING, INC.
P.O. BOX 370
NEWBERRY, FLORIDA 32669
Tel.: 1-888-472-2424
Fax: 1-352-472-2030
E-mail: TEI@TIMCOengr.com

Designated as a U.S.
CAB by **NIST**
**National Institute of
Standards and
Technology**
An agency of the U.S.
Commerce Department

This Opinion is issued under the provision that TIMCO Engineering Inc. nor its subsidiary companies accept any liability concerning the contents of this document other than forced by law.
Reproduction of the Opinion (with addendum) in full is allowed. Reproduction of parts of this certificate may only be allowed by written permission of TIMCO Engineering, Inc.

Declaration of Conformity

We, Sena Technologies, Inc.

210 Yangjae-dong, Seocho-gu, Seoul, 137-130 Korea

TEL. +82-2-571-8283 / Fax. +82-2-573-7710

Declare under our own responsibility that the product

Bluetooth Serial Adaptor

Brand name: SENA

Model No.: Parani-ESD1000

To which this declaration refers conforms with the relevant standards or other standardizing documents

Art.3.1.a) **EN 60950-1: 2001**

Art.3.1.b) **ETSI EN 301 489-1 V1.6.1**

ETSI EN 301 489-17 V.1.2.1

Art.3.2) **ETSI EN 300 328 V1.6.1**

According to the regulations in **Directive 1999/5/EC.**

Technical Documentation kept at: Sena Technologies, Inc.

Technical Construction File No.: RTTE-S0708A

[Place, date]

[Name and signature of person responsible]

EU

August 13, 2007



Seung - Hyun Kim
Associate Research Engineer

TCB

**GRANT OF EQUIPMENT
AUTHORIZATION**

TCB

Certification

**Issued Under the Authority of the
Federal Communications Commission**

By:

**Timco Engineering, Inc.
849 NW State Road 45
P.O. Box 370,
Newberry, FL 32669**

Date of Grant: 08/27/2007

Application Dated: 08/24/2007

**Sena Technologies, Inc.
210 Yangjae-dong Seocho-gu
Seoul, 137-130
South Korea**

Attention: YOUNGSAM KIM , Vice President

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: S7APARANIESD1000
Name of Grantee: Sena Technologies, Inc.
Equipment Class: Part 15 Spread Spectrum Transmitter
Notes: BLUETOOTH SERIAL ADAPTOR

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
	15C	2402.0 - 2480.0	0.029		

Power output is conducted and measured at the antenna terminal. This is an OEM transmitter module approved for use in products operating as a mobile transmitting device with respect to 2.1091. MPE compliance was demonstrated with a typical antenna(s) gain as shown in the filing. Products operating with this module are required to provide a minimum separation distance of 20cm. Grantee must coordinate with OEM integrators to ensure the end-users of products operating with this module are provided with operating instructions to satisfy RF exposure requirements. Separate approval is required for all other operating configurations, including portable configurations with respect to 2.1093 and different antenna configurations.



정보통신기기인증서

Certificate of Information and Communication Equipment

인증의 종류: 형식등록(Type Registration)
Certification Type

상호 또는 성명: (주)세나테크놀로지
Trade Name or Applicant

기기의 명칭: 특정소출력무선기기(무선데이터통신시스템및무선LAN용)
Equipment Name

기본 모델명: Parani-ESD1000
Basic Model Number of Equipment

파생 모델명:
Series Model Number of Equipment

인증번호: SNA-Parani-ESD1000
Certification No

제조사 및 제조국가: (주)세나테크놀로지/한국
Manufacturer and Country of Origin

형식기호: LARN8-IO2S2402/2480TR0.0004F1DG1D79
Type Identification

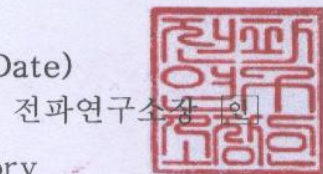
인증연월일: 2007년(Year) 10월(Month) 09일(Date)
Date of Certification

기타:
Others

위 기기는 정보통신기기 인증규칙에 의해 인증되었음을 증명합니다.

It is certified that foregoing equipment has been certificated under the provisions of the Regulations on Certification of Information and Communication Equipment.

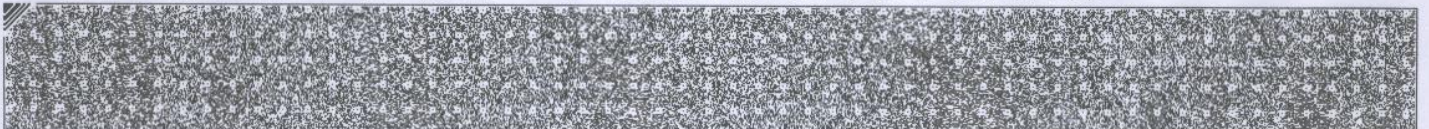
2007년(Year) 10월(Month) 09일(Date)



Director General of Radio Research Laboratory
Ministry of Information and Communication Republic of Korea

* 진위여부는 www.emic.go.kr에서 확인할 수 있습니다.

* 복사본은 상단 복사방지마크의 '원' 또는 '본' 글자가 사라집니다.



Type Certification

To: SENA TECHNOLOGIES Inc.

We hereby certify that the equipment has been granted Certification for Construction Design as described above based on regulations in Radio Law Article 38, Section 24.

Items	Specifications
Type of specified radio equipment	Radio equipment in Certification Ordinance Article 2, Section 1, No.19
Model, frequency and antenna power of radio wave	F1D 2402MHz~2480MHz(1MHz Separation 79ch) 0.00016W/MHz G1D 2402MHz~2480MHz(1MHz Separation 79ch) 0.00006W/MHz
Model or name of specified radio equipment	Parani-ESD1000
Name of manufacturer of specified radio equipment	SENA TECHNOLOGIES Inc.
Construction Design Certification No.	006WWC0013
Construction Design Certification certified date	30th October 2007
Remark	

Date: 30th October 2007

RF Technologies Ltd.



TIMCO ENGINEERING INC.

849 NW State Road 45
Newberry, Florida 32669
<http://www.timcoengr.com>
888.472.2424 F 352.472.2030 email: tei@timcoengr.com

NOVEMBER 9, 2009

Our File: 2671IC9
Radio Cert. No.: IC: 8154A-ESD1000

SENA TECHNOLOGIES, INC.
210 YANGJAE-DONG
SEOCHO-GU
SEOUL, 137-130
SOUTH KOREA

Attention: SEUNG-HYUN KIM

Dear Sir/Madame:

I have reviewed the test report and related documents, and am pleased to advise that this device meets our procedural and specification requirements for certification. The field offices have been notified.

The assigned certification number and the model number must be shown on each equipment model. This certification identification information may be shown on the equipment model identification plate or on a separate label that shall be indelible and tamper proof. The certification number shall be prefixed with the letters "IC:." Radio equipment is certified as described on the attached certification certificate.

Certificate(s) are attached for the following model(s):
PARANI-ESD1000

Please check the certification & the REL web site to insure that everything is correct.
A website has been established which includes the status of applications.
The address is <http://strategis.ic.gc.ca/app/sitt/reltel/search/newRadioSearch.do?language=eng>

Sincerely,

Timco Engineering Inc.

Canadian Certification

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TIMCO ENGINEERING INC.

849 NW State Road 45
Newberry, Florida 32669
<http://www.timcoengr.com>
888.472.2424 F 352.472.2030 email: tei@timcoengr.com

No. ➤ 2671IC9

TECHNICAL ACCEPTANCE CERTIFICATE

CERTIFICAT D' ACCEPTABILITÉ TECHNIQUE

CERTIFICATION No.
No. DE CERTIFICATION

➤ IC: 8154A-ESD1000

ISSUED TO
DÉLIVRÉ A ➤ SENA TECHNOLOGIES, INC.
210 YANGJAE-DONG
SEOCHO-GU
SEOUL, 137-130
SOUTH KOREA

TESTED BY
TESTÉ A ➤ LTA CO., LTD.
Company No: 5799
243, JUBUG-RI, YANGJI-MYEON
YONGIN-SI, GYEONGGI-DO
, 449-822
SOUTH KOREA
+82-31-323-6008; +82-31-323-6010
klee@lta.com; chahn@lta.com

TYPE OF EQUIPMENT
GENRE DE MATÉRIEL

➤ BLUETOOTH SERIAL MODULE

TRADENAME AND MODEL
MARQUE ET MODELE

➤ PARANI-ESD1000

FREQUENCY RANGE BANDE DE FRÉQUENCES	EMISSION TYPE GENRE D'ÉMISSION	R.F. POWER PUISSANCE H.F.	ANTENNA INFO INFO SUR L'ANTENNE	SPECIFICATION/ ISSUE & DATE SPÉCIFICATION/ ÉDITION & DATE
2402-2480 MHz	975KF1D	0.029 W	Helical Antenna, 5.02dBi	RSS-210 Issue 7, JUNE 07

Note: This equipment also complies with RSS-102, Issue 2 (November 2005) and RSS-Gen, Issue 2 (June 2007)

Certification of equipment means only that the equipment has met the requirements of the above noted specifications. License applications, where applicable to use certified equipment, are acted on accordingly by the issuing office and will depend on the existing radio environment, service and location of operation.

La certification du matériel signifie seulement que le matériel a satisfait aux exigences de la norme indiquée ci-dessus. Les demandes de licences nécessaires pour l'utilisation du matériel certifié sont traitées en conséquence par le bureau de délivrance et dépendent des conditions radio ambiantes, du service et de l'emplacement d'exploitation.

This certificate is issued on condition that the holder complies and will continue to comply with the requirements of the radio standards specifications and procedures issued by Industry Canada.

Le présent certificat est délivré à la condition que le titulaire satisfasse et continue de satisfaire aux exigences et aux procédures d'Industrie Canada.

ISSUED UNDER THE AUTHORITY OF MINISTER OF INDUSTRY
DÉLIVRÉ AVEC L'AUTORISATION DU MINISTRE DES INDUSTRIES

DATE: NOVEMBER 9, 2009



S. S. Sanders, President

Canadian Certification

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