

**Notified Body  
Number 1177**



**NOTIFIED BODY STATEMENT OF OPINION**

**R&TTE DIRECTIVE 1999/5/EC**

**Conformity assessment procedure Article 10(4) and Annex IV**

**PRODUCT DESCRIPTION**

Manufacturer Name	:	SENA TECHNOLOGIES, INC.
Manufacturer Address	:	210 YANGJAE-DONG SEOCHO-GU SEOUL, 137-130 KOREA
Brand/Trade Name	:	SENA
Model/Type Designation	:	PARANI-SD1100
Product Description	:	BLUETOOTH 422/485 ADAPTOR
Product Specifications	:	Please refer to ANNEX 1

**TECHNICAL CONSTRUCTION FILE**

Applicant Name	:	SENA TECHNOLOGIES, INC.
Applicant Address	:	210 YANGJAE-DONG SEOCHO-GU SEOUL, 137-130 KOREA
Signed by	:	SEUNG-HYUN KIM/ASSOCIATE RESEARCH ENGINEER
Date	:	2010-05-12
TCF Identification	:	RTTE-S1005A

**TIMCO NOTIFIED BODY STATEMENT OF OPINION**

Issued by	:	Notified Body 1177, TIMCO Engineering, Inc.
Date	:	May 14, 2010
Opinion number	:	TCF-1105KC10
On behalf of	:	The President of TIMCO Engineering, Inc.
Signature	:	
Name	:	Bruno Clavier

The device shall be marked as follows:

**CE1177**

THIS STATEMENT OF OPINION HAS 1 ANNEX.

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.

<b>TIMCO ENGINEERING, INC.</b> P.O. BOX 370 NEWBERRY, FL 32669 Tel.: 1-888-472-2424 Fax: 1-352-472-2030 E-mail: TEI@TIMCOengr.com	Designated as a U.S. CAB by <b>NIST National Institute of Standards and Technology</b> 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 Annex) in full is allowed. Reproduction of parts of this certificate may only be allowed by written permission of TIMCO Engineering, Inc.
--	---	---



## ANNEX 1 TO STATEMENT OF OPINION

### TCF-1105KC10

Date: May 14, 2010

#### PRODUCT SPECIFICATIONS

Intended Use/Category	:	SRD – Wideband data transmission system (Bluetooth)
RF output power	:	19.23dBm EIRP
Frequency band (MHz)	:	2402-2480
Modulation	:	FHSS (GFSK, DQPSK, 8DPSK)
Antenna type	:	Dipole Antenna (M/N: R-AN2400-1901RS) Max Gain 5.37dBi Dipole Antenna (M/N: R-AN2400-5801RS) Max Gain 3.17dBi Stub Antenna (M/N: AN2400-3306RS) Max Gain 1.4dBi
Duty cycle (%)	:	81.14

**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: 05/18/2010  
Application Dated: 05/14/2010**

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

**Attention: YOUNGSAM KIM , Vice President**

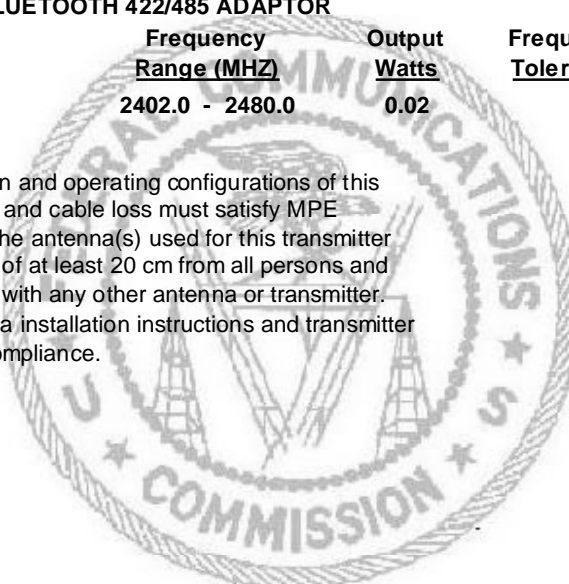
**NOT TRANSFERABLE**

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:** S7APARANISD1100  
**Name of Grantee:** Sena Technologies, Inc.  
**Equipment Class:** Part 15 Spread Spectrum Transmitter  
**Notes:** BLUETOOTH 422/485 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	0.02		

Power listed is conducted. The antenna installation and operating configurations of this transmitter, including any applicable antenna gain and cable loss must satisfy MPE categorical Exclusion Requirements of §2.1091. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operated in conjunction with any other antenna or transmitter. Users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.





**방송통신기기인증서**  
*Certificate of Broadcasting and Communication Equipment*

인증의 종류 <i>Certification Type</i>	형식등록(Type Registration)
상호 또는 성명 <i>Trade Name or Applicant</i>	(주)세나테크놀로지
기기의 명칭 <i>Equipment Name</i>	특정소출력무선기기(무선데이터통신시스템용 무선기기)
기본모델명 <i>Basic Model Number</i>	Parani-SD1100
파생모델명 <i>Series Model Number</i>	
인증번호 <i>Certification No</i>	SNA-Parani-SD1100
제조사/ 제조국가 <i>Manufacturer/ Country of Origin</i>	(주)세나테크놀로지/한국
형식기호 <i>Type Identification</i>	LARN8-IO3S2402/2480TR0.0005F1DG1D79
인증연월일 <i>Date of Certification</i>	2010년(Year) 05월(Month) 18일(Date)
기타 <i>Others</i>	

위 기기는 「전기통신기본법」, 「전파법」에 따라 인증되었음을 증명합니다.  
It is certified that foregoing equipment has been certificated under the Framework Act on Telecommunications and Radio Waves Act.

2010년(Year) 05월(Month) 18일(Date)

전파연구소장

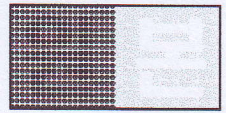


*Director General of Radio Research Agency  
Korea Communications Commission Republic of Korea*

\* 진위여부는 [www.ekcc.go.kr](http://www.ekcc.go.kr)에서 확인할 수 있습니다.

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





## <방송통신기기 인증표시 부착 의무사항 안내>

인증을 받은 모든 기기는 “전파법” 및 “전기통신기본법”에 따라 인증표시를 부착하여 유통하여야 합니다. 인증표시를 부착하지 않을 경우 “전파법 제90조” 및 “전기통신기본법 제53조”에 의거 과태료 처분 대상이 되오니, 자세한 안내 내용을 확인하시고 인증표시 부착의무를 반드시 준수해 주시기 바랍니다.



## Certificate of construction type

<b>Applicant</b>	<b>Sena Technologies, Inc.</b>
<b>Type of specified radio equipment</b>	<b>Technical Regulations for Specified Radio Equipment Article 2, Section 1 (19)</b>
<b>Types of radio wave, Frequency and Antenna power</b>	<b>F1D 2402 - 2480MHz (1MHz Separation 79ch) 0.0003W/MHz G1D 2402 - 2480MHz (1MHz Separation 79ch) 0.00003 W/MHz</b>
<b>Model or Product name</b>	<b>Parani-SD1100</b>
<b>The number of construction design certificate</b>	<b>010WWBT0041</b>
<b>Date of certified</b>	<b>20 May 2010</b>
<b>Remark</b>	

This radio equipment is accredited in accordance with the Japanese Radio Law Article 38, Section 24 (1)

TÜV SÜD Ohtama, Ltd.



平成 22 年 5 月 20 日

Sena Technologies, Inc. 殿

## 工 事 設 計 認 証 書

特 定 無 線 設 備 の 種 別	証明規則第2条第1項第 19 号の無線設備
電波の型式、周波数及び空中線電力	F1D 2402~2480MHz (1MHz 間隔 79 波) 0.0003W/MHz G1D:2402~2480MHz (1MHz 間隔 79 波) 0.00003 W/MHz
型 式 又 は 名 称	Parani-SD1100
製 造 者 名	Sena Technologies, Inc.
認 証 番 号	010WWBT0041
認 証 を し た 年 月 日	平成 22 年 5 月 20 日
備 考	

上記のとおり、電波法第38条の24第1項の規定に基づく工事設計認証を行ったものであることを証する。

テュフズードオータマ株式会社

