TCB

#### **GRANT OF EQUIPMENT** AUTHORIZATION



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

By:

EMCCert Dr. Rasek GmbH Boelwiese 5 D-91320 Ebermannstadt, Germany

Date of Grant: 06/27/2006

Application Dated: 06/27/2006

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: S7APARANISD100

Name of Grantee: Sena Technologies, Inc.

Equipment Class: Part 15 Spread Spectrum Transmitter Notes:

Bluetooth RS232C Serial Adaptor

	N U VA	Frequency	Output	Frequency	Emission
<u>Grant Notes</u>	FCC Rule Parts	Range (MHZ)	Watts	<u>Tolerance</u>	<u>Designator</u>
	15C	2402.0 - 2480.0	0.017		
	Man	MMI55V	Į.		

Power output listed is peak conducted. SAR compliance has been established in a laptop computer configuration as tested and shown in filing, and can be used in laptop computers with substantially similar physical dimensions, construction, and electrical and RF characteristics. Compliance of this device in all final host configurations is the responsibility of the Grantee. The transmitter may operate with the antenna tested for this filing.

End-users must be provided with specific information required to satisfy RF exposure compliance for all final host devices. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. Maximum measured SAR value: 0,110 W/kg (Body)



#### GRANT OF EQUIPMENT AUTHORIZATION



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By:

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Date of Grant: 07/27/2006

Application Dated: 07/27/2006

Sena Technologies,Inc.

Grant Notes

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

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FCC IDENTIFIER: S7	APARANISD2	00		
Name of Grantee: Ser	na Technologies	s,Inc.		
Equipment Class: Par Notes: Blu	t 15 Spread Spect etooth RS232C Se			
FCC Rule Parts	Frequency Range (MHZ)	Output <u>Watts</u>	Frequency <u>Tolerance</u>	Emission <u>Designator</u>
15C	2402.0 - 2480.0	0.00282		

Power output listed is peak conducted. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

#### Technical Construction File (TCF) Details

To demonstrate conformity v	with Article 3.1(a) Heal	ĥ	
Applied Standards	Version	Applied Standards	Version
Council Rec. 99/519/EC			
Report or Certificate No.	lssue Date	Issued by	
STROS-06-021	2006-06-15	SGS Testing Korea Co., Ltd.	
To demonstrate conformity v	with Article 3 1(2) Safet	h/	
Applied Standards	Version	Applied Standards	Version
EN 60950-1	2001		Version
EN 00930-1	2001		
Report or Certificate No.	lssue Date	Issued by	
STS-06-0145 S R LV	2006-05-29	SGS Testing Korea Co., Ltd.	
		, <b>-</b> ,,,,,,	
To demonstrate conformity w			
Applied Standards	Version	Applied Standards	Version
EN 301 489-1	V1.6.1		
EN 301 489-17	V1.2.1		
Report or Certificate No.		Issued by	
STK-05-EMCG0068	2006-05-25	SGS Testing Korea Co., Ltd.	
To demonstrate conformity v	with Article 3.2 Spectru	m Efficiency	
Applied Standards	Version	Applied Standards	Version
EN 300 328	V1.6.1		
Report or Certificate No.	lssue Date	Issued by	
STROR-06-047	2006-06-05	SGS Testing Korea Co., Ltd.	
Declaration of Conformity			
Signed by		Date	
YS Kim		2006-05-17	
Technical Documentation		2000-00-17	
Block diagram			
Parts list			
Component layout			
Schematic diagram			
User Manual			
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Notified Body Directive 99/5/EC Competent Body EMC Directive 89/336/EEC Notified Body EMC Directive 89/336/EEC FCB under the Canada-EC MRA TCB under the USA-EC MRA

EC Identification No. 0678

Designated by the German Regulator

to act as a Notified Body in accordance with the R&TTE Directive 1999/5/EC of 9. March 1999

## **EC-R&TTE CERTIFICATE**

Registration No. G103044U Certificate Holder SENA Technologies, Inc. 210, Yangjae-dong, Seocho-gu Seoul, 137-130 South Korea Bluetooth Serial Adaptor, Model: Parani SD100 Product Designation Wideband transmission system in the 2.4 GHz ISM band Product Description Manufacturer SENA Technologies, Inc. 210, Yangjae-dong, Seocho-gu Seoul. 137-130 South Korea

Essential	Requirement	Applied Specifications / Standards	Do cumentar y Evidence	Result
Art. 3.1(a)	Health	Council Rec. 99/519/EC	Test Report STROS-06-021	conform
Art. 3.1(a)	Safety	EN 60950-1	Test Report STS-06-0145 S R LV	conform
Art. 3.1(b)	EMC	EN 301 489-1/-17	Test Report STK-05-EMCG0068	conform
Art. 3.2	Radio	EN 300 328	Test Report STRO R-06-047	conform

The product shall be marked with the CE conformity marking and our Notified Body number as shown on the right.

The scope of evaluation relates to the submitted documents only.

This Certificate is issued in accordance with Annex IV of the R&TTE Directive 1999/5/EC of 9<sup>th</sup> March, 1999 and is only valid in conjunction with the attached Annex.

Ebermannstadt, 2006-06-20

Eddo de Buhi Notified Body



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#### Technical Construction File (TCF) Details

To demonstrate conformity v	vith Article 3.1(a) Healt	h	
Applied Standards	Version	Applied Standards	Version
Council Rec. 99/519/EC			
Report or Certificate No.	Issue Date	Issued by	
Declaration of Conformity	2006-07-25	SENA Technologies, Inc.	
To demonstrate conformity v	with Article 3.1(a) Safet	V	
Applied Standards	Version	Applied Standards	Version
EN 60950-1	2001		
Report or Certificate No.	lssue Date	Issued by	
STS-06-0184 S R LV	2006-07-20	SGS Testing Korea Co., Ltd.	
To demonstrate conformity v	with Article 3 1(b) FMC		
Applied Standards	Version	Applied Standards	Version
EN 301 489-1	V1.6.1		Vereien
EN 301 489-17	V1.2.1		
Report or Certificate No.	lssue Date	Issued by	
STK-06-EMCG0073	2006-07-05	SGS Testing Korea Co., Ltd.	
To demonstrate conformity v	with Article 3 2 Spectru	m Efficiency	
Applied Standards	Version	Applied Standards	Version
EN 300 328	V1.6.1		
Report or Certificate No.	lssue Date	Issued by	
STROR-06-059	2006-07-25	SGS Testing Korea Co., Ltd.	
Declaration of Conformity			
Signed by		Date	
YS Kim		2006-07-25	
Technical Documentation			
Block diagram			
Parts list			
Schematic diagram			
User Manual			



Notified Body Directive 99/5/EC Competent Body EMC Directive 89/336/EEC Notified Body EMC Directive 89/336/EEC FCB under the Canada-EC MRA TCB under the USA-EC MRA

EC Identification No. 0678

Designated by the German Regulator

to act as a Notified Body in accordance with the R&TTE Directive 1999/5/EC of 9. March 1999

## **EC-R&TTE CERTIFICATE**

Registration No. G103130U Certificate Holder SENA Technologies, Inc. 210, Yangjae-dong, Seocho-gu Seoul, 137-130 South Korea Bluetooth Serial Adaptor, Model: Parani-SD200 Product Designation Wideband transmission system in the 2.4 GHz ISM band Product Description Manufacturer SENA Technologies, Inc. 210, Yangjae-dong, Seocho-gu Seoul. 137-130 South Korea

Essential	Requirement	Applied Specifications / Standards	Do cumentar y Evidence	Result
Art. 3.1(a)	Health	Council Rec. 99/519/EC	Declaration of Conformity	conform
Art. 3.1(a)	Safety	EN 60950-1	Test Report STS-06-0184 S R LV	conform
Art. 3.1(b)	EMC	EN 301 489-1/-17	Test Report STK-06-EMCG0073	conform
Art. 3.2	Radio	EN 300 328	Test Report STRO R-06-059	conform

The product shall be marked with the CE conformity marking and our Notified Body number as shown on the right.

## €€0678

The scope of evaluation relates to the submitted documents only.

This Certificate is issued in accordance with Annex IV of the R&TTE Directive 1999/5/EC of 9<sup>th</sup> March, 1999 and is only valid in conjunction with the attached Annex.

Ebermannstadt, 2006-07-28

Eddo de Buhi Notified Body



# **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-SD200

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.

[Place, date] Austria Belgium Bulgaria Cyprus **Czech Republic** Denmark Estonia Finland France Germany Greece Hungary Ireland Italy Latvia Lithuania Luxembourg Malta Netherlands Poland Portugal Romania Slovenia [Name and signature of person responsible] Slovakia Spain Sweden **United Kingdom** 

> Seung – Hyun Kim Associate Research Engineer

July 28, 2006

# Type Certificate

To: Sena Technologies, Inc.

Manager Mr. Young-Sam Kim

Classification of specified radio equipment	Ordinance of Technical Regulations Conformity Certification, Article 2, Clause 1, Item 19, 2.4 GHz Band Wide-band Low Power Data Communication System
Type of emissions, frequency and antenna power	F1D 2441MHz 0.0004W/MHz
Model Name	Parani-SD100
Manufacturer Name (Brand Name)	Sena Technologies, Inc.
Certified Number	003NY06095 0000
Certified Date	July 10, 2006
Remark	

This is to certify that the above mentioned certification by type has been granted in accordance with the provisions of Article 38-24, Paragraph 1 of the Radio Law.

Date: July 10, 2006



# 認 証 書

Sena Technologies, Inc.

Manager Mr. Young-Sam Kim 殿

特定無線 設備の種類	証明規則第2条第1項第19号の無線設備 2.4GHz帯高度化小電力データ通信システム
電波の形式、 周波数及び 空中線電力	F1D 2441MHz 0.0004W/MHz
型 式 又 は 名 称	Parani-SD100
製造者名	Sena Technologies, Inc.
認 証 番 号	003NY06095 0000
認証をした 年 月 日	平成18年7月10日
備考	х.

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

平成18年8月25日

株式会社ディーエスピーリサーデ





(Translation)

## Type Certification Certificate

Classification	Radio equipment stipulated in the article 2-1-19 of the certification ordinance 2.4GHz low power data communication system
Type of emission, frequency and rated output power	F1D 2441MHz 0.000014W/MHz
Model number or name	Parani-SD200
Certified dealer	Sena Technologies, Inc.
End product vender	Sena Technologies, Inc.
Certification number	009NYCA0006
Certification date	August 11th 2006

This is to certify that the above radio equipment is complied with the provisions of the Article 38-24-1 of the Radio law.

August 11th 2006

SGS Japan Inc.

SGS Japan Inc.

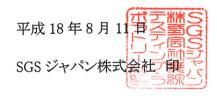
n Inc. Wireless Testing Laboratory : YBP East Tower 12F,134, Godo-cho,Hodogaya-ku, Yokohama 240-0005 Tel: 045 (330) 1103 Fax: 045 (330) 1104 URL: www.jp.sgs.com



## 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19号に掲げる無線設備 2.4GHz帯高度化小電力データ通信システム
電波の型式、周波数 及び空中線電力	F1D 2441MHz 0.000014W/MHz
型式又は名称	Parani-SD200
認証取扱業者名	Sena Technologies, Inc.
製造者名	Sena Technologies, Inc.
工事設計認証番号	009NYCA0006
認証をした年月日	平成 18 年 8 月 11 日

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



SGS Japan Inc. Wireless Testing Laboratory : YBP East Tower 12F,134, Godo-cho,Hodogaya-ku, Yokohama 240-0005 Tel: 045 (330) 1103 Fax: 045 (330) 1104 URL: www.jp.sgs.com

## 정보통신기기 인증서

Certificate of Information and Communication Equipment

인 증 종 류	형식등록(Type Registration)
Certification Type	
성 명 또 는 상 호	(주)세나테크놀로지
Trade Name or Applicant	
기 기 의 명 칭	무선데이터통신시스템용 무선기기
Equipment Name	
기 기 의 모 델 명	Parani-SD100
Model Number of Equipment	
인 증 번 호	SNA-Parani-SD100
Certification No	
제 조 자 및 제조국가	(주)세나테크놀로지/한국
Manufacturer and Country of Origin	
형 식 기 호	LARN8-IO2S2402/2480TR0.0003F1D79
Type Identification	
인 증 년 월 일	2006년(Year) 06월(Month) 09일(Date)
Date of Certification	
기 타	
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.

	2006년(Year)		06월(Month) 09월		i) 09일	
	전	파	연	구	소	
rect	or Ge	neral c	of Ra	dio Re	esear	ch Laborato

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

## 정보통신기기 인증서

Certificate of Information and Communication Equipment

인	증 종	류	형식등록(Type Registration)					
	Certification Type							
성	명 또 는	상 호	(주)세나테크놀로지					
Trade Name or Applicant								
וכ	기 의 당	병 칭	무선데이터통신시스템용 무선기기					
Equipment Name								
기	기 의 모	델 명	Parani-SD200					
Model Number of Equipment								
인	증 번	হ	SNA-Parani-SD200					
Certification No								
제	조 자 및 제	조 국 가	(주)세나테크놀로지/한국					
Ма	anufacturer and of Origin	Country						
형	식 기	ō	LARN8-IO2S2402/2480TR0.00006F1D79					
Type Identification								
인	증 년 물	일	2006년(Year) 07월(Month) 31일(Date)					
Date of Certification								
וכ	Other	타						
	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.

2006년(Year) 07월(Month) 31일(Date)

전 파 연 구 소 <u>장</u> Director General of Radio Research aboratory Ministry of Information and Communication Republic of Korea