RF Exposure Evaluation Report

Product	:	Bluetooth Module
Trade mark	:	
Model/Type reference	:	SST1120JA-P, SST1100JA-P, SST1230JA-P
Serial Model	:	/
Report Number	:	EED39P81093602
FCC ID	:	2BCRSSST1120
Date of Issue	:	Nov 16,2023

Test Standards	Results
☒ 47 CFR Part 1.1307	PASS
☒ 47 CFR Part 1.1310	PASS
☒ KDB 447498 D01v06	PASS

Prepared for:

CAN Microelectronics (Changzhou) Co., Ltd.
A188, 1/F, Building 12, China Israel Changzhou Innovation Park, No.18-67, middle Changwu Road, Wujin District, Changzhou,China

Prepared by:

Centre Testing International (Suzhou) CO., LTD.
Building 18, Zhihui New Town Ecological Industrial Park, No. 1206, Jinyang East Road, Lujia Town, Kunshan, Jiangsu, China
TEL: +86-0512-5015 8288

Compiled by: Jenny. Yu Reviewed by: Lily. Wang

Approved by: Jeff Fang Date: Nov 16,2023

Jeff Fang

Authorized Signatory

EED39P81093602

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Modification Record

No.	Last Report No.	Modification Description
1	EED39P81093602	First report

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1 General Information

1.1 Client Information

Applicant:	CAN Microelectronics (Changzhou) Co., Ltd.
Address of Applicant:	A188, 1/F, Building 12, China Israel Changzhou Innovation Park, No.18-67, middle Changwu Road, Wujin District, Changzhou,China
Manufacturer:	CAN Microelectronics (Changzhou) Co., Ltd.
Address of Manufacturer:	A188, 1/F, Building 12, China Israel Changzhou Innovation Park, No.18-67, middle Changwu Road, Wujin District, Changzhou,China
Factory:	CAN Microelectronics (Changzhou) Co., Ltd.
Address of Factory:	A188, 1/F, Building 12, China Israel Changzhou Innovation Park, No.18-67, middle Changwu Road, Wujin District, Changzhou,China

1.2 General Description of EUT

Product Name:	Bluetooth Module
Model No.(EUT):	SST1120JA-P, SST1100JA-P, SST1230JA-P
Model difference:	Their electrical circuit design, layout, components and internal wireing are identical, only the memory size inside the chip and module metal shielding cover are different.
Trade Mark:	
EUT Supports Radios application:	Bluetooth V5.0 BLE
Power Supply:	DC 5V (for USB power supply)
Sample Received Date:	2023.07.19
Sample tested Date:	2023.08.14~2023.08.15

1.3 Product Specification subjective to this standard

Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	Bluetooth LE5.0
Modulation Technique:	DSSS
Modulation Type:	GFSK
Number of Channel:	40
Sample Type:	mobile production
Test Software of EUT:	PhyPlusKit.exe (manufacturer declare)
Antenna Type:	PCB antenna
Antenna Gain①:	-3.5 dBi

1.4 Test Location

All test facilities used to collect the test data are located at Building 18, Zhihui New Town Ecological Industrial Park, No. 1206, Jinyang East Road, Lujia Town, Kunshan, Jiangsu, China.

1.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Cert. No. 5734.01

Centre Testing International (Suzhou) CO., LTD. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of

Testing and Calibration. Laboratories and any additional program requirements in the identified field of testing.

FCC-Designation No.:CN1290

Centre Testing International Group Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The American association for Centre Testing International Group Co., Ltd. EMC laboratory accreditation Designation No.:CN1290

1.6 Deviation from Standards

None.

1.7 Abnormalities from Standard Conditions

None.

1.8 Other Information Requested by the Customer

None.

2 RF Exposure Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Limits

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

Limits For Maximum Permissible Exposure(MPE)

Frequency Range (MHz)	Electric field strength (V/m)	Magentic field strength (A/m)	Power density (Mw/CM^2)	Averaging time (minutees)
(A)Limits for Occupational/Controlled Exposures				
0.3 ~ 3.0	614	1.63	100	6
3.0 ~ 30	1842/f	4.89/f	$900/f^2$	6
30 ~ 300	61.4	0.163	1.0	6
300 ~ 1500	---	---	f/300	6
1500 ~ 100000	---	---	5	6
(B)Limits for General Population/Uncontrolled Exposure				
0.3 ~ 1.34	614	1.63	100	30
1.34 ~ 30	824/f	2.19/f	$180/f^2$	30
30 ~ 300	27.5	0.073	0.2	30
300 ~ 1500	---	---	f/1500	30
1500 ~ 100000	---	---	1.0	30

A rough estimation of the expected exposure in power flux density on a given point can be made with the
following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:
S = power density
P = power input to the antenna
G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator
R= distance to the centre of radiation of the antenna
EIRP = P*G
The antenna of the product, under normal use condition is at least 20 cm away from the body of the user.
Warning statement to the user for keeping at least 20cm separation distance and the pr ohibition of operating to
a person has been printed on the user's manual. Therefore, the S of the device is calcul ated with R=20cm,
and if it is below the limit S, then we can conclude the device complies with the rules.

2.1.2 Test Procedure

Software provided by client enabled the EUT to transmit data at lowest, middle and highest channel individually.

2.1.3 EUT RF Exposure Evaluation

Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Max Conducted Output Power(dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R (cm)	S (mW/cm^2)	Limit (mW/cm^2)	Result
BLE	2402	3.71	-3.5	0.21	1.05	20	0.0002	1.0	Pass

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***