

# RF Exposure Evaluation Report

Product Name: WIRELESS GAMING KEYBOARD

Model No. : XA09

FCC ID : XW3DKKBXA09

Applicant: Dongguan Siliten Electronics CO.,LTD

Address : Sijia Yewu Industrial estate, Shijie Town, Dongguan, China

Date of Receipt : Nov. 20, 2021

Date of Declaration: Dec. 24, 2021

Report No. : 21B0789R-RFUSMPEV03-A

Report Version : V1.0





The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.



Issued Date: Dec. 24, 2021

Report No.: 21B0789R-RFUSMPEV03-A



Product Name	WIRELESS GAMING KEYBOARD				
Applicant	Dongguan Siliten Electronics CO.,LTD				
Address	Sijia Yewu Industrial estate, Shijie Town, Dongguan, China				
Manufacturer	Dongguan Siliten Electronics CO.,LTD				
Model No.	XA09				
FCC ID.	XW3DKKBXA09				
Trade Name	ASUS				
Applicable Standard	KDB 447498 D01 v06 ☐ Minimum test separation distance ≥ 20 cm ☐ For low power devices				
Test Result	Complied				
Documented By	: Gente Chang  (Senior Project Specialist / Genie Chang)				
Tested By	Dlan Chen				
	( Senior Engineer / Alan Chen )				
Approved By	7im Lung				
	( Manager / Tim Sung )				



# **Revision History**

Report No.	Version	Description	<b>Issued Date</b>
21B0789R-RFUSMPEV03-A	V1.0	Initial issue of report.	Dec. 24, 2021



## 1. GENERAL INFORMATION

# 1.1. EUT Description

Product Name	WIRELESS GAMING KEYBOARD				
Trade Name	ASUS				
Model No.	XA09				
FCC ID.	XW3DKKBXA09				
F D	2.4G wireless: 2403-2480MHz				
Frequency Range	BLE: 2402 – 2480MHz				
Channel Number	2.4G wireless: 78				
	BLE: 40CH				
Type of Modulation	2.4G wireless: Pi/4 DQPSK				
	BLE: GFSK				
Antenna Type	FPC Antenna				
Antenna Gain	Refer to the table "Antenna List"				

#### **Antenna List**

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Baishun	BS1C70F3D38A	FPC Antenna	4.12dBi for 2.4GHz



## 1.2. Test Facility

Site Description : Accredited by TAF

Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd

Address : No. 5-22, Ruishukeng Linkou District, New Taipei City,

24451, Taiwan

Performed Location : No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City

333411, Taiwan, R.O.C.

Phone number : +886-3-275-7255

Fax number : +866-3-327-8031

Email address : info.tw@dekra.com

Website : http://www.dekra.com.tw



## 2. RF Exposure Evaluation

## 2.1. Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

#### 2.2. Measurement Result:

According to KDB Publication 447498 D01, section 4.3.1, per the calculations of item 1 (Power(mW)/separation (mm)\*sqrt(f(GHz)≤3.0), SAR is required as shown in the table below where calculated values are greater than 3.0:

Operation frequency = 2450MHz and antenna separation distance = 5mm Body SAR Test Exclusion Threshold = 10mW

**BLE** 

Frequency Band	Maximum peak output power Peak Gain: 4.12dBi			SAR Test Exclusion Threshold	Calculated Threshold Value (≤3.0 SAR is not required)
(MHz)	conducted	EIRP	EIRP	(mW)	
	(dBm)	(dBm)	(mW)		
2402	3.97	8.09	6.44	10	1.997

#### 2.4G Wireless:

Frequency Band	Maximum peak EIRP power		SAR Test Exclusion Threshold	Calculated Threshold Value
	(dBuV/3m)	(mW)	(mW)	$(\leq 3 \text{ SAR is not required})$
2403 - 2480	88.78	0.22	10	0.068

Note1: The SAR/MPE measurement is not necessary.

Note2: The maximum peak output power is refer to report No.: 21B0789R-RFUSBLEV01-A, 21B0789R-RFUSOTHV06-A from the DEKRA.