

TEST REPORT

Applicant Name : M5Stack Technology Co., Ltd
Address : Block A10, Expo Bay South Coast, Fuhai Street, Bao'an District,
Shenzhen,Guangdong, China
Report Number : 2604P04223E-RF
FCC ID: 2AN3WM5UNITCARDKB2

Test Standard (s)

47 CFR §2.1091

Sample Description

Product Type: M5Unit CardKB2
Model No.: Unit CardKB2
Trade Mark:



Date Received: 2026-01-12
Report Date: 2026-01-29

Test Result:	The EUT complied with the standards above.
--------------	--

Prepared and Checked By:

Matt_Liang

Matt Liang
EMC Engineer

Approved By:

Bob.Liao

Bob.Liao
EMC Engineer

Note: This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA, or any agency of the Federal Government. The information marked "#" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included but no need marked. This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

Shenzhen Accurate Technology Co., Ltd.

Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Tel: +86 755-26503290

Web: www.atc-lab.com

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY..... 3

GENERAL INFORMATION..... 4

 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) 4

 OBJECTIVE 4

 TEST FACILITY 4

RF EXPOSURE 5

 APPLICABLE STANDARD..... 5

 RESULT 5

EXHIBIT A-EUT PHOTOGRAPHS 6

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2604P04223E-RF	Original Report	2026-01-29

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	M5Unit CardKB2
Tested Model	Unit CardKB2
Frequency Range	BLE 1M & 2M: 2402-2480MHz 2.4G Wi-Fi: 2412-2462MHz, 2422-2452MHz
Maximum Conducted Output Power	BLE: 7.45 dBm 2.4G Wi-Fi: 23.54 dBm
Antenna Specification [#]	PCB Antenna: 2.49 dBi (It is provided by the manufacturer.)
Voltage Range [#]	DC 5V from USB port
Sample Serial Number	For CE&RE Test: 3G10-2 For RF Conducted Test: 3G10-3 (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts C and Part 2-Subpart J, Radiofrequency Radiation Exposure of the Federal Communication Commission rules.

The tests were performed in order to determine compliance with FCC §2.1091 rules.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

RF EXPOSURE

Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (Minutes)
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
1500-100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

Result

Calculated Formulary:

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Mode	Frequency (MHz)	Antenna Gain [#]		Tune up conducted power [#]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2412-2480	2.49	1.77	7.5	5.62	20	0.001985	1.00
2.4G WiFi	2412-2462	2.49	1.77	24	251.19	20	0.08866	1.00

Note 1: The tune-up power and antenna gain are declared by the applicant.

Note 2: The Bluetooth and WIFI can't transmission simultaneously.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliance

EXHIBIT A-EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2604P04223E-RF EUT External Photos and Attachment No.2 2604P04223E-RF EUT Internal Photos

***** END OF REPORT *****