

**RF Exposure evaluation****Report Reference No.** ..... : **GTS20220505010-1-3****FCC ID.** ..... : **2A6VK-BBM22-A**

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Date of issue ..... : May.14, 2022

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Address ..... : No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong,China

**Applicant's name** ..... : **Shenzhen Sany Pioneer Technology Co., Ltd**

Address ..... : NO.318, Building F, Guanghong Center, Pinghu Street, Longgang, Shenzhen, 518000 CN

**Test specification** ..... :

47CFR §1.1310

Standard ..... : 47CFR §2.1093

KDB 447498 D04 Interim General RF Exposure Guidance v01

TRF Originator ..... : Shenzhen Global Test Service Co.,Ltd.

Master TRF ..... : Dated 2014-12

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**Test item description** ..... : **BABY MONITOR**

Trade Mark ..... : N/A

Manufacturer ..... : Shenzhen Sany Pioneer Technology Co., Ltd

Model/Type reference ..... : BBM22-A

Listed Models ..... : N/A

Exposure category ..... : General population/uncontrolled environment

EUT Type ..... : Portable

Hardware Version ..... : ESD-2151S-P5

Software Version ..... : V02

Rating ..... : DC 3.0V by Battery(CR2450)

Result ..... : **PASS**

## TEST REPORT

Test Report No. :	GTS20220505010-1-3	May.14, 2022 Date of issue
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Equipment under Test : BABY MONITOR

Model /Type : BBM22-A

Listed model : N/A

Applicant : **Shenzhen Sany Pioneer Technology Co., Ltd**

Address : NO.318, Building F, Guanghong Center, Pinghu Street, Longgang, Shenzhen, 518000 CN

Manufacturer : **Shenzhen Sany Pioneer Technology Co., Ltd**

Address : NO.318, Building F, Guanghong Center, Pinghu Street, Longgang, Shenzhen, 518000 CN

<b>Test Result:</b>	<b>PASS</b>
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The test report merely corresponds to the test sample.  
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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## 1. SUMMARY

### 1.1. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer
- - supplied by the lab

<input type="radio"/>	Adapter	Length (m) :	0.4m
		Shield :	Non-Shielded
		Detachable :	Non- Detachable

### 1.2. Product Description

Product Name	BABY MONITOR
Trade Mark	N/A
Model/Type reference	BBM22-A
List Models	N/A
Model Declaration	N/A
Power supply:	DC 3.0V by Battery(CR2450)
Sample ID	GTS20220505010-1-1# & GTS20220505010-1-2#
Bluetooth	
Operation frequency	2402-2480MHz
Channel Number	40 channels for Bluetooth (DTS)
Channel Spacing	2MHz for Bluetooth (DTS)
Modulation Type	GFSK for Bluetooth (DTS)
Antenna Description	Internal Antenna, 0dBi(Max.) for 2.4G Band

## 2. TEST ENVIRONMENT

### 2.1. Address of the test laboratory

#### Shenzhen Global Test Service Co.,Ltd.

No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong,China

### 2.2. Test Facility

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

#### CNAS (No. CNAS L8169)

Shenzhen Global Test Service Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2019 General Requirements) for the Competence of Testing and Calibration Laboratories.

#### A2LA (Certificate No. 4758.01)

Shenzhen Global Test Service Co., Ltd. has been assessed by the American Association for Laboratory Accreditation (A2LA). Certificate No. 4758.01.

Industry Canada Registration Number. is 24189.

FCC Designation Number is CN1234.

FCC Registered Test Site Number is 165725.

### 2.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

### 2.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the Shenzhen Global Test Service Co.,Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen GTS laboratory is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.57 dB	(1)

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

### 3. Method of measurement

#### 3.1. Applicable Standard

[ANSI C95.1–1999](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

[KDB 447498 D04 Interim General RF Exposure Guidance v01](#): Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures

[FCC CFR 47 part1 1.1310](#): Radiofrequency radiation exposure limits.

[FCC CFR 47 part2 2.1093](#): Radiofrequency radiation exposure evaluation: portable devices

#### 3.2. Evaluation Method and Limit

FCC: According to 447498 D04 Interim General RF Exposure Guidance v01.

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold  $P_{th}$  (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by Formula (B.2).

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and  $f$  is in GHz,  $d$  is the separation distance (cm), and  $ERP_{20\text{cm}}$  is per Formula (B.1).

The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

#### 4. Conducted Power Results

##### Bluetooth(BT)

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
GFSK(BLE)	00	2402	-3.89
	19	2440	-2.03
	39	2480	-1.96

## 5. Manufacturing Tolerance

### Bluetooth(BT)

GFSK BLE(Peak)			
Channel	Channel 00	Channel 19	Channel 39
Target (dBm)	-3.0	-2.0	-1.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

## 6. Evaluation Results

### 6.1. Standalone Evaluation

#### Bluetooth(BT)

Band/Mode	f (GHz)	Antenna Distance (mm)	RF output power		Limit Pth(mW)	SAR Test Exclusion
			dBm	mW		
GFSK(BLE)	2.480	5	0	1.00	3.00	Yes

Remark:

1. Output power including tune up tolerance;
2. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to f) in section 4.1 of KDB447498 D04 Interim General RF Exposure Guidance v01 is applied to determine SAR test exclusion.

## **7. Conclusion**

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB447498 D04 Interim General RF Exposure Guidance v01, No SAR is required.

.....**End of Report**.....