

#### Shenzhen Most Technology Service Co., Ltd.

No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.

## **RF Exposure Evaluation Report**

Report Reference No....... MTEB22120310-H FCC ID...... IKQBTTRFM

Compiled by

( position+printed name+signature)..: File administrators Alisa Luo

Supervised by

( position+printed name+signature)..: Test Engineer Sunny Deng

Approved by

( position+printed name+signature)..: Manager Yvette Zhou

Date of issue...... January 06,2023

Representative Laboratory Name.: Shenzhen Most Technology Service Co., Ltd.

Nanshan, Shenzhen, Guangdong, China.

Applicant's name...... Scosche Industries Inc.

Test specification/ Standard ..........: 47 CFR Part 1.1307

47 CFR Part 2.1093

TRF Originator...... Shenzhen Most Technology Service Co., Ltd.

#### Shenzhen Most Technology Service Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen Most Technology Service Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen Most Technology Service Co., Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Test item description ...... Transceiver with FM

Trade Mark ...... Scosche

Listed Models ...... N/A

Model/Type reference.....

Modulation Type ...... GFSK, π/4DQPSK, 8DPSK,FM

Operation Frequency....... From 2402MHz to 2480MHz,88.1-107.9MHz

**BTTRFM** 

Hardware Version......V1.0

Software Version ...... V1.0

Rating ...... DC 3.7V(by battery)

DC 5V(by USB)

Result..... PASS

Report No.: MTEB22120310-H Page 2 of 6

# TEST REPORT

Equipment under Test : Transceiver with FM

Model /Type : BTTRFM

Applicant : Scosche Industries Inc.

Address : 1550 Pacific Ave, Oxnard, CA 93033

Manufacturer : Scosche Industries Inc.

Address : 1550 Pacific Ave, Oxnard, CA 93033

Test Result:	PASS

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.

Report No.: MTEB22120310-H Page 3 of 6

# 1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2023.01.06	Initial Issue	Alisa Luo

Report No.: MTEB22120310-H Page 4 of 6

## 2. SAR Evaluation

## 2.1 RF Exposure Compliance Requirement

### 2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### **2.1.2 Limits**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [ $\sqrt{f(GHz)}$ ]  $\leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

Report No.: MTEB22120310-H Page 5 of 6

# 2.1.3 EUT RF Exposure

#### Measurement Data

#### BT classic

DT GIGGGIG						
	GFSK					
Test channel	Peak Output Power	Tune up tolerance	Maximum tune-up Power			
	(dBm)	(dBm)	(dBm)			
Lowest(2402MHz)	-0.25	-0.25±1	0.75			
Middle(2440MHz)	0.08	0.08±1	1.08			
Highest(2480MHz)	0.05	0.05±1	1.05			

π /4DQPSK					
Test channel	Peak Output Power	Tune up tolerance	Maximum tune-up Power		
	(dBm)	(dBm)	(dBm)		
Lowest(2402MHz)	0.12	0.12±1	1.12		
Middle(2440MHz)	0.28	0.28±1	1.28		
Highest(2480MHz)	0.16	0.16±1	1.16		

8DPSK					
Test channel	Peak Output Power	Tune up tolerance	Maximum tune-up Power		
2 Con Chamiler	(dBm)	(dBm)	(dBm)		
Lowest(2402MHz)	0.36	0.36±1	1.36		
Middle(2440MHz)	0.04	0.04±1	1.04		
Highest(2480MHz)	0.15	0.15±1	1.15		

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output	Maximum tune-up Power		Calculated	Exclusion	SAR Test
	Power (dBm)	(dBm)	(mW)	value	threshold	Exclusion
Lowest (2402MHz)	0.36	1.36	1.37	0.42	3.0	Yes

Report No.: MTEB22120310-H Page 6 of 6

#### BLE

GFSK					
Test channel	Peak Output Power	Tune up tolerance	Maximum tune-up Power		
rest charmer	(dBm)	(dBm)	(dBm)		
Lowest(2402MHz)	-1.301	-1.301±1	0.301		
Middle(2441MHz)	-1.208	-1.208±1	0.208		
Highest(2480MHz)	-1.612	-1.612±1	0.612		

Worst case: GFSK						
Channel	Maximum Peak Conducted	Maximum tune-up Power		Calculated	Exclusion	SAR Test
G.1.a	Output Power (dBm)	(dBm)	(mW)	value	threshold	Exclusion
Highest (2480MHz)	-1.612	0.612	1.15	0.36	3.0	Yes

FM:

The worst case (refer to report MTEB22120310-R) is below:

Frequency (MHz)	Level (dBuV/m)	Polarization
88.1	45.9	Peak

E=EIRP-20logd+104.8 where E is the electric field strength in dBuV/m EIRP is the equivalent isotropically radiated power in dBm d is the specified measurement distance in m EIRP =-49.4 dBm=0.000011 mW So(0.000011mW/5mm)\*  $\sqrt{0.0881}$ GHz=0.0000007 exclusion=0.0000007<3.0 for 1-g SAR

So the SAR report is not required.