Shenzhen Most Technology Service Co., Ltd.
East A, 1 floor of New Aolin Factory buiding, Langshan Erlu, North District,
Hi-tech Industry Park, Nanshan,Shenzhen,Guangdong,China

RF Exposure Evaluation Report

Report Reference No..... :	**MTEB24090067-H**
FCC ID..... :	**2BKT2-SV-500MK**
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.....:	Sep. 05,2024
Representative Laboratory Name. :	**Shenzhen Most Technology Service Co., Ltd.**
Address..... :	No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.
Applicant's name.....:	**Sintron Distribution GmbH**
Address..... :	Sudring 14, 76473 Iffezheim, Germany
Test specification/ Standard.....**:**	**47 CFR Part 1.1307;47 CFR Part 1.1310** **KDB447498D01 General RF Exposure Guidance v06**
TRF Originator.....:	Shenzhen Most Technology Service Co., Ltd.

Test item description.....:	NTEGRATED STEREO AMPLIFIER
Trade Mark.....:	Vincent
Model/Type reference..... :	SV-500MK
Listed Models ..... :	N/A
Modulation Type..... :	GFSK, π/4DQPSK, 8DPSK GFSK
Operation Frequency..... :	From 2402MHz to 2480MHz
Hardware Version.....	1.0
Software Version.....	1.0
Rating.....:	AC 120V/60Hz
Result.....:	**PASS**

T E S T R E P O R T

Equipment under Test	:	NTEGRATED STEREO AMPLIFIER
Model /Type	:	SV-500MK
Listed Models	:	N/A
Remark		N/A
Applicant	:	Sintron Distribution GmbH
Address	:	Sudring 14, 76473 Iffezheim, Germany
Manufacturer	:	Zhongshan ShengYa audio electronics co., LTD
Address	:	Peach Blossom Sand Industrial Zone, Xiaolan Town, Zhongshan City, Guangdong Province, China

Test Result:	**PASS**

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024.09.05	Initial Issue	Alisa Luo

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

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)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(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
1500–100,000	.....	.....	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
1500–100,000	.....	.....	1.0	30

F= Frequency in MHz
Friis Formula
Friis transmission formula: Pd = (Pout*G)/(4* Pi * R^2) Where
Pd = power density in mW/cm2
Pout = output power to antenna in mW
G = gain of antenna in linear scale
Pi = 3.1416

R = distance between observation point and center of the radiator in cm
Pd id the limit of MPE, 1 mW/cm2 . If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2.1.3 EUT RF Exposure

BLE

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402 MHz)	1.216	1.216±1	2.216
Middle(2440MHz)	0.488	0.488±1	1.488
Highest(2480MHz)	0.805	0.805±1	1.805

BLE

Worst case: GFSK						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Lowest(2402 MHz)	2.216	1.67	5	0.0001	1.0	Pass

Note: 1) Refer to report MTEB24090067-R for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R2)=(1.67*3.16)/(4*3.1416*20^2)=0.0001

BT classic

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	1.586	1.586±1	2.586
Middle(2441MHz)	1.627	1.627±1	2.627
Highest(2480MHz)	1.449	1.449±1	2.449

π /4DQPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	2.458	2.458±1	3.458
Middle(2441MHz)	2.492	2.492±1	3.492
Highest(2480MHz)	2.307	2.307±1	3.307

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	2.942	2.942±1	3.942
Middle(2441MHz)	2.981	2.981±1	3.981
Highest(2480MHz)	2.811	2.811±1	3.811

Worst case: 8DPSK						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Middle(2441MHz)	3.981	2.50	5	0.0016	1.0	Pass

Note: 1) Refer to report MTEB24090067-R1 for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R2)=(2.50*3.16)/(4*3.1416*20^2)=0.0016
Note: 3)EUT's Bluetooth module is more than 20cm away from the human body.

.....THE END OF REPORT.....