

MPE REPORT

Report No.: SRTC2021-9004(F)-21090103(I)

Product Name: Black Shark JoyBuds

Product Model: BE18

Applicant: Blackshark Technologies (Nanchang) Co., Ltd.

Manufacturer: Blackshark Technologies (Nanchang) Co., Ltd.

Specification: FCC Part §2.1091, §2.1093, §1.1307(b), §1.1310 (2019)

FCC ID: 2A2ZHBE18

The State Radio_monitoring_center Testing Center (SRTC)

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1 GENERAL INFORMATION

1.1 Notes of the test report

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1.2 Information about the testing laboratory

Company:	The State Radio_monitoring_center Testing Center (SRTC)
Address:	15th Building, No.30 Shixing Street, Shijingshan District, P.R.China
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Registration number	239125

1.3 Applicant's details

Company:	Blackshark Technologies (Nanchang) Co., Ltd.
Address:	Room 815-1, 8th floor, Block A, Huajiang Building, No. 1 Tsinghua Science Park, No. 299, Yupingdong Street, Nanchang Economic and Technological Development Zone, Nanchang City, Jiangxi Province
City:	Nanchang
Country or Region:	China
Contacted person:	Henry Cai
Tel:	15317579805
Email:	Henry.cai@blackshark.com

1.4 Manufacturer's details

Company:	Blackshark Technologies (Nanchang) Co., Ltd.
Address:	Room 815-1, 8th floor, Block A, Huajiang Building, No. 1 Tsinghua Science Park, No. 299, Yupingdong Street, Nanchang Economic and Technological Development Zone, Nanchang City, Jiangxi Province
City:	Nanchang
Country or Region:	China
Contacted person:	Henry Cai
Tel:	15317579805
Email:	Henry.cai@blackshark.com

2 DESCRIPTION OF THE DEVICE UNDER TEST

2.1 Final Equipment Build Status


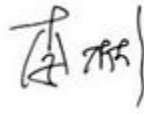

Frequency Bands	BT/BLE: 2.402GHz~2.480GHz
Mode	BT: GFSK, $\pi/4$ DQPSK, 8DPSK BLE: GFSK (LE 1Mbps)/GFSK (LE 2Mbps)
Power Supply	DC Adapter
Hardware Version	BTE630-ZB_L/BTE630-ZB_R
Software Version	BE18210825V0
IMEI or Sample	#1

3 REFERENCE SPECIFICATION

Specification	Version	Title
2.1091	2019	Radio frequency radiation exposure evaluation: mobile devices.
2.1093	2019	Radio frequency radiation exposure evaluation: portable devices.
1.1307(b)	2019	Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.
1.1310	2019	Radio frequency radiation exposure limits.
KDB447498	October 23, 2015	RF exposure procedures and equipment authorization policies for mobile and portable devices

4 RESULT SUMMARY

No.	Test case	FCC reference
1	MPE Calculation	FCC Part §2.1091, FCC Part §2.1093, FCC Part §1.1307(b) FCC Part §1.1310 KDB 447498

This Test Report Is Issued by: Mr. Peng Zhen 	Checked by: Mr. Li Bin 
Tested by: Mr. Du Wei 	Issued date: 20210923

5 TEST RESULTS

5.1 Average Power Output Test Result

Bluetooth

Mode	Frequency(MHz)	Maximum Average power(dBm)
GFSK	2441	9.50
π4DQPSK	2402	7.00
8DPSK	2441	7.00

BLE

Mode	Frequency(MHz)	Maximum Average power(dBm)
GFSK (LE 1Mbps)	2402	7.50
GFSK (LE 2Mbps)	2402	4.50

5.2 Calculation result

According to the KDB447498 4.3.1(a)

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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

· $f(\text{GHz})$ is the RF channel transmit frequency in GHz

· Power and distance are rounded to the nearest mW and mm before calculation

· The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 4.1 f) is applied to determine SAR test exclusion.

Summary of Transmitters

Mode/Band	Freq (GHz)	Max. power of channel, including tune-up tolerance, (dBm)	Max. power of channel, including tune-up tolerance, (mW)	Min. test separation distance, (mm)	The calculation results (1g)	SAR test exclusion Threshold (1g)	SAR Required
Bluetooth	2.441	9.50	8.91	5	1.14	≤ 3.0	No

---End of Test Report---