

TEST REPORT

Report No.: BCTC2105722352E

Applicant: Shenzhen SimDisk Technology Co., Ltd.

Product Name: USB Flash Drive

Model/Type reference: USB Flash Drive

Tested Date: 2021-05-14 to 2021-05-18

Issued Date: 2021-05-19





No.: BCTC/RF-EMC-005 Page 1 of 15 Edition: A.3



Product Name: USB Flash Drive

Model /Type Ref.: N/A

Model/Type reference: USB Flash Drive

Prepared For: Shenzhen SimDisk Technology Co., Ltd.

304, 3rd Floor, No. A, Heping Industrial Park, Changyong

Address: Road, Yucui Community, Longhua Street, Longhua District,

Shenzhen, China

Manufacturer: Shenzhen SimDisk Technology Co., Ltd.

304, 3rd Floor, No. A, Heping Industrial Park, Changyong

Address: Road, Yucui Community, Longhua Street, Longhua District,

Shenzhen, China

Prepared By: Shenzhen BCTC Testing Co., Ltd.

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan

Address: 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District,

Shenzhen, Guangdong, China.

Sample Received Date: 2021-05-14

Sample tested Date: 2021-05-14 to 2021-05-18

Issue Date: 2021-05-19

Report No.: BCTC2105722352E

Test Standards FCC PART 15B

Test Results PASS

Tested by:

Jacob Nie/ Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

No.: BCTC/RF-EMC-0012 Page 2 of 15 / Ædition: A.2



TABLE OF CONTENT

Test Report Declaration	Page
1. VERSION	4
2. TEST SUMMARY	5
3. MEASUREMENT UNCERTAINTY	
4. PRODUCT INFORMATION AND TEST SETUP	
4.1 Product Information	
4.2 Test Setup Configuration	
4.3 Support Equipment	
4.4 Test Mode	
5. TEST FACILITY AND TEST INSTRUMENT USED	8
5.1 Test Facility	8
5.2 Test Instrument Used	8
6. RADIATION EMISSION TEST	9
6.1 Block Diagram Of Test Setup	9
6.2 Limit	
6.3 Test Procedure	
6.4 Test Result	
7. EUT PHOTOGRAPHS	12
8. EUT TEST SETUP PHOTOGRAPHS	14

(Note: N/A means not applicable)

No.: BCTC/RF-EMC-005





1. VERSION

Report No.	Issue Date	Description	Approved
BCTC2105722352E	2021-05-19	original	Valid



No.: BCTC/RF-EMC-005 Page 4 of 15



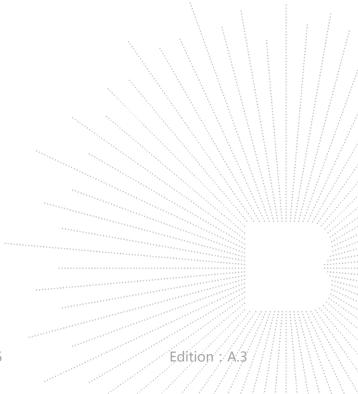
2. TEST SUMMARY

The Product has been tested according to the following specifications:

Standard	Test Item	Test result
FCC 15.107	Conducted Emission	N/A ¹
FCC 15.109	Radiated Emission	Pass

Remark:

1. The EUT is powered by the DC only, the test item is not applicable



No.: BCTC/RF-EMC-005 Page 5 of 15



3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Value (dB)
Radiated Emission(30MHz~1GHz)	4.80
Radiated Emission(1GHz~6GHz)	4.90





4. PRODUCT INFORMATION AND TEST SETUP

4.1 Product Information

Ratings: DC 5V

Cable of Product

No.	Cable Type	Quantity	Provider	Length (m)	Specification	Note
1		ŀ	Applicant	I	Shielded	With a ferrite ring in mid Detachable
2			встс		Unshielded	

4.2 Test Setup Configuration

See test photographs attached in EUT TEST SETUP PHOTOGRAPHS for the actual connections between Product and support equipment.

4.3 Support Equipment

No	Device Type	Brand	Model	Series No.	Data Cable	Power Cord
1.	PC	Lenovo				

Notes:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Test Mode

Test item	Test Mode	Test Voltage
Radiated emission(30MHz-1GHz) Class B	Working	DC 5V

test mode were tested and passed, only Radiated Emissions shows (*) is the nearest standard limit which were recorded in this report.

No.: BCTC/RF-EMC-005 Page 7 of 15 Edițion / A.3



5. TEST FACILITY AND TEST INSTRUMENT USED

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

Radiated emissions Test (966 chamber)							
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.		
966 chamber	ChengYu	966 Room	966	Jun. 06, 2020	Jun. 05, 2023		
Receiver	R&S	ESRP	101154	Jun. 08, 2020	Jun. 07, 2021		
Receiver	R&S	ESR3	102075	Jun. 08, 2020	Jun. 07, 2021		
Amplifier	Schwarzbeck	BBV9718	9718-309	Jun. 04, 2020	Jun. 03, 2021		
Amplifier	Schwarzbeck	BBV9744	9744-0037	Jun. 04, 2020	Jun. 03, 2021		
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	VULB9163-9 42	Jun. 08, 2020	Jun. 07, 2021		
Horn Antenna	SCHWARZBEC K	BBHA9120D	1541	Jun. 06. 2020	Jun. 05, 2021		
Software	Frad	EZ-EMC	FA-03A2 RE	1	\		

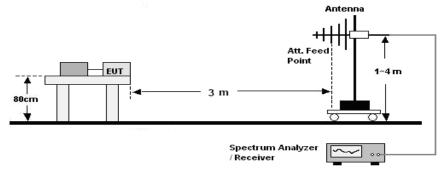
No.: BCTC/RF-EMC-005 Page 8 of 15 Edițion / A.3



6. RADIATION EMISSION TEST

6.1 Block Diagram Of Test Setup

30MHz ~ 1GHz:



6.2 Limit

Limits for Class B devices

Frequency (MHz)	limits at 3m dB(μV/m)				
r requeries (minz)	QP Detector	PK Detector	AV Detector		
30-88	40.0				
88-216	43.5				
216-960	46.0				
960 to 1000	54.0				
Above 1000		74.0	54.0		

Note: The lower limit shall apply at the transition frequencies.

6.3 Test Procedure

30MHz ~ 1GHz:

- a. The Product was placed on the nonconductive turntable 0.8 m above the ground at a chamber.
- b. Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 120 kHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied between 1~4 m in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.
- c. For each frequency whose maximum record was higher or close to limit, measure its QP value: vary the antenna's height and rotate the turntable from 0 to 360 degrees to find the height and degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to QP Detector and specified bandwidth with Maximum Hold Mode, and record the maximum value.

Remark:

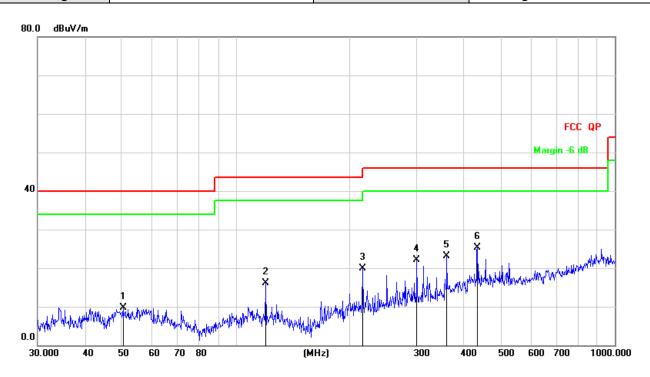
The highest frequency of the internal sources of the EUT is less than 108 MHz, so the measurement shall only be made up to 1 GHz.

No.: BCTC/RF-EMC-005 Page 9 of 15 Edition: A.3



6.4 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	Horizontal
Test Voltage:	DC 5V	Test Mode:	Working

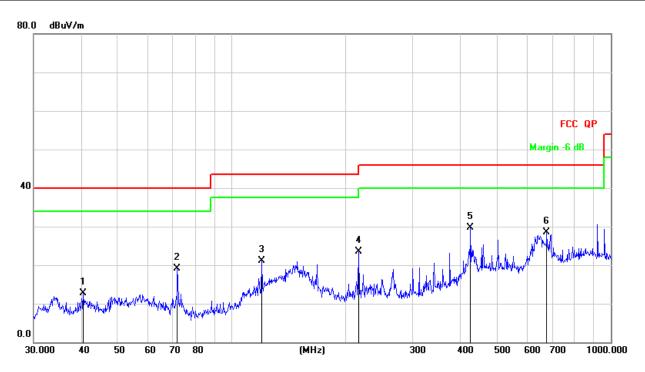


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		50.4089	23.89	-14.10	9.79	40.00	-30.21	QP
2		119.8556	32.94	-16.76	16.18	43.50	-27.32	QP
3		216.0240	34.80	-14.93	19.87	46.00	-26.13	QP
4		300.3672	34.50	-12.39	22.11	46.00	-23.89	QP
5		360.4476	33.89	-10.78	23.11	46.00	-22.89	QP
6	*	434.0651	34.30	-8.96	25.34	46.00	-20.66	QP

No.: BCTC/RF-EMC-005 Page 10 of 15 Edition A.3



Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	Vertical
Test Voltage:	DC 5V	Test Mode:	Working



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		40.5591	27.60	-14.89	12.71	40.00	-27.29	QP
2		71.8320	36.78	-17.66	19.12	40.00	-20.88	QP
3		119.8556	37.77	-16.76	21.01	43.50	-22.49	QP
4		216.0240	38.35	-14.93	23.42	46.00	-22.58	QP
5	*	426.5210	38.73	-9.12	29.61	46.00	-16.39	QP
6		677.5798	32.42	-3.93	28.49	46.00	-17.51	QP

Remark:

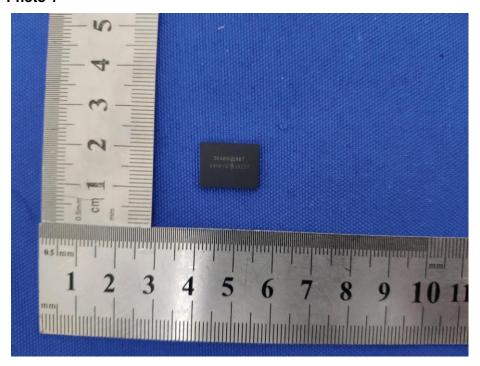
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.: BCTC/RF-EMC-005 Page 11 of 15 Edition. A.3

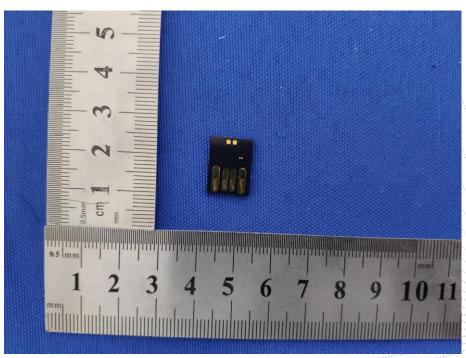


7. EUT PHOTOGRAPHS

EUT Photo 1



EUT Photo 2



No.: BCTC/RF-EMC-005 Page 12 of 15 Edition A.3



EUT Photo 3



EUT Photo 4

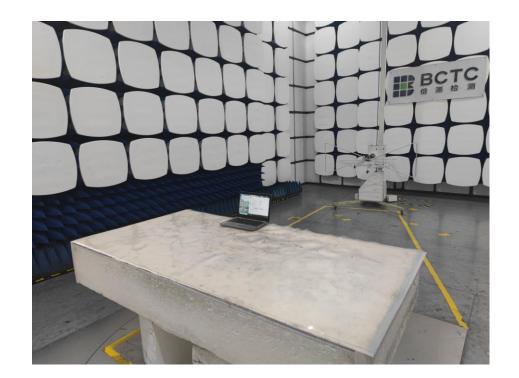


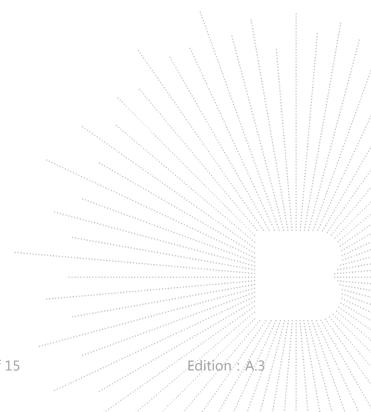
No.: BCTC/RF-EMC-005 Page 13 of 15 Edition A.3



8. EUT TEST SETUP PHOTOGRAPHS

Radiated emission





No.: BCTC/RF-EMC-005 Page 14 of 15



STATEMENT

The equipment lists are traceable to the national reference standards.

The test report can not be partially copied unless prior written approval is issued from our lab.

The test report is invalid without stamp of laboratory.

The test report is invalid without signature of person(s) testing and authorizing.

The test process and test result is only related to the Unit Under Test.

The quality system of our laboratory is in accordance with ISO/IEC17025.

If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

TEL: 400-788-9558

P.C.: 518103

FAX: 0755-33229357

Website: http://www.chnbctc.com

E-Mail: bctc@bctc-lab.com.cn

**** END ****

No.: BCTC/RF-EMC-005 Page 15 of 15 Edition A.3