

File reference No.: 2022-05-07

Applicant: Eastern Times Technology Co.,Ltd

Product: WIRED & WIRELESS GAMING MOUSE

Model No.: M991-RGB, DS-2891

Trademark: REDRAGON

Test Standards: FCC Part 15.249

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10 & FCC Part 15 Subpart C,

Paragraph 15.249 regulations for the evaluation of

electromagnetic compatibility

Approved By

Terry Tang

Manager

Dated: May 07, 2022

Results appearing herein relate only to the sample tested

The technical reports is issued errors and omissions exempt and is subject to withdrawal at

SHENZHEN TIMEWAY TESTING LABORATORIES

Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com



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Special Statement:

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

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

CNAS-LAB Code: L2292

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

FCC-Registration No.: 744189

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 744189.

Industry Canada (IC) — Registration No.:5205A

The EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 5205A.

A2LA (Certification Number:5013.01)

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (A2LA). Certification Number:5013.01

Date: 2022-05-07



Test Report Conclusion

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The report refers only to the sample tested and does not apply to the bulk.

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Photo of Test Setup and EUT View.

Date: 2022-05-07



1.0 General Details

1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le

Village, Nanshan District, Shenzhen, China

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 744189 For 3m Anechoic Chamber

1.2 Applicant Details

Applicant: Eastern Times Technology Co.,Ltd

Address: Building D, Nan An Industrial Area, Youganpu Village, Fenggang Town, Dongguan City,

Guangdong, China.

Telephone: --Fax: --

1.3 Description of EUT

Product: WIRED & WIRELESS GAMING MOUSE

Manufacturer: Eastern Times Technology Co.,Ltd

Address: Building D, Nan An Industrial Area, Youganpu Village, Fenggang Town,

Dongguan City, Guangdong, China.

Trademark: REDRAGON
Model Number: M991-RGB
Additional Model Name DS-2891

Rating: DC5.0V, 150mA or DC3.7V, 75mA Battery DC3.7V, 1000mAh Li-ion battery

Modulation Type: GFSK

Operation Frequency: 2403-2480MHz

Channel Number: 16

Channel List (Unit: MHz): 2403, 2424, 2441, 2461, 2414, 2435, 2450, 2470, 2409, 2429, 2455, 2475,

2419, 2445, 2465, 2480

Hardware Version: V3.07 Software Version: 2891-C V1

Serial No.: RDM991-RGB220320000278

Antenna Designation PCB antenna with gain 1.87dBi Max (Declared by the applicant)

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1.4 Submitted Sample: 1 Sample

1.5 Test Duration 2022-04-28 to 2022-05-07

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty =6.0dB

Occupied Channel Bandwidth Uncertainty = 5%

Conducted Emissions Uncertainty = 3.6dB

Note: The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

1.7 Test Engineer

The sample tested by

Print Name: Andy Xing

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2.0 Test Equipment	2.0 Test Equipment								
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date				
ESPI Test Receiver	R&S	ESPI 3	100379	2021-06-18	2022-06-17				
LISN	R&S	EZH3-Z5	100294	2021-06-18	2022-06-17				
LISN	R&S	EZH3-Z5	100253	2021-06-18	2022-06-17				
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2021-06-18	2022-06-17				
Loop Antenna	EMCO	6507	00078608	2021-06-18	2024-06-17				
Spectrum	R&S	FSIQ26	100292	2021-06-18	2022-06-17				
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2021-07-02	2024-07-01				
Horn Antenna	R&S	BBHA 9120D	9120D-631	2021-07-02	2024-07-01				
Power meter	Anritsu	ML2487A	6K00003613	2021-06-18	2022-06-17				
Power sensor	Anritsu	MA2491A	32263	2021-06-18	2022-06-17				
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2021-07-02	2024-07-01				
9*6*6 Anechoic			N/A	2021-07-02	2022-07-01				
EMI Test Receiver	RS	ESVB	826156/011	2021-06-18	2022-06-17				
EMI Test Receiver	RS	ESH3	860904/006	2021-06-18	2022-06-17				
Spectrum	HP/Agilent	ESA-L1500A	US37451154	2021-06-18	2022-06-17				
Spectrum	HP/Agilent	E4407B	MY50441392	2021-06-18	2022-06-17				
Spectrum	RS	FSP	1164.4391.38	2022-01-15	2023-01-14				
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2021-06-18	2022-06-17				
RF Cable	Zhengdi	7m		2021-06-18	2022-06-17				
RF Switch	EM	EMSW18	060391	2021-06-18	2022-06-17				
Pre-Amplifier	Schwarebeck	BBV9743	#218	2021-06-18	2022-06-17				
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2021-06-18	2022-06-17				
LISN	SCHAFFNER	NNB42	00012	2022-01-05	2023-01-04				

2.2 Automation Test Software

For Conducted Emission Test

Name	Version
EZ-EMC	Ver.EMC-CON 3A1.1

For Radiated Emissions

Name	Version
EMI Test Software BL410-EV18.91	V18.905
EMI Test Software BL410-EV18.806 High Frequency	V18.06

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3.0 Technical Details

3.1 Summary of test results

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.203	Antenna Requirement	Pass	Complies
FCC Part 15, Paragraph 15.207	Conducted Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(a) & 15.249(b) Limit	Field Strength of Fundamental	Pass	Complies
FCC Part 15, Paragraph 15.209	Radiated Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(d) Limit	Band Edge Test	Pass	Complies

3.2 Test Standards

FCC Part 15 Subpart C, Paragraph 15.249, ANSI C63.4:2014 and ANSI C63.10:2013

4.0 EUT Modification

No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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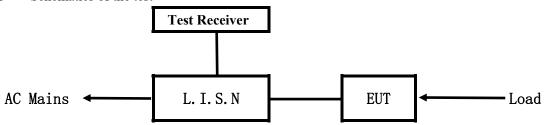
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5. Power Line Conducted Emission Test

5.1 Schematics of the test

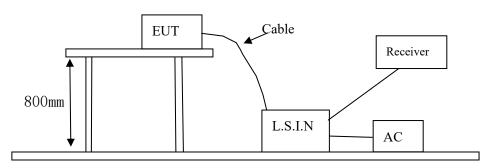


EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2014. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2014.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.4-2014. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

16 channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID	
WIRED & WIRELESS	Fastava Timas Tashnalasay Ca I til	M001 DCD DC 2001	TIWDC 2001	
GAMING MOUSE	Eastern Times Technology Co.,Ltd	M991-RGB, DS-2891	TUVDS-2891	

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B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

C. Peripherals

Device	Manufacturer	Model	Rating
Power Supply	KEYU	KA23-0502000DEU	Input: 100-240V~, 50/60Hz, 0.35A;
			Output: DC5V, 2A

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2014

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency	Limits (dB μ V)				
(MHz)	Quasi-peak Level	Average Level			
$0.15 \sim 0.50$	66.0~56.0*	56.0~46.0*			
$0.50 \sim 5.00$	56.0	46.0			
5.00 ~ 30.00	0.0	50.0			

Notes:

- 1. *Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

5.6 Test Results:

Pass

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A: Conducted Emission on Live Terminal (150kHz to 30MHz)

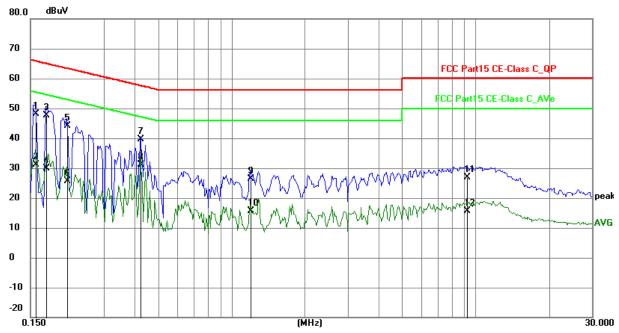
EUT Operating Environment

Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

EUT set Condition: Charging and Keep Transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1578	38.41	9.78	48.19	65.58	-17.39	QP	Р
2	0.1578	21.39	9.78	31.17	55.58	-24.41	AVG	Р
3	0.1734	37.80	9.77	47.57	64.80	-17.23	QP	Р
4	0.1734	20.12	9.77	29.89	54.80	-24.91	AVG	Р
5	0.2124	34.38	9.75	44.13	63.11	-18.98	QP	Р
6	0.2124	15.94	9.75	25.69	53.11	-27.42	AVG	Р
7	0.4230	29.93	9.76	39.69	57.39	-17.70	QP	Р
8	0.4230	21.47	9.76	31.23	47.39	-16.16	AVG	Р
9	1.1952	16.58	9.79	26.37	56.00	-29.63	QP	Р
10	1.1952	5.86	9.79	15.65	46.00	-30.35	AVG	Р
11	9.2517	16.66	10.12	26.78	60.00	-33.22	QP	Р
12	9.2517	5.55	10.12	15.67	50.00	-34.33	AVG	Р

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B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

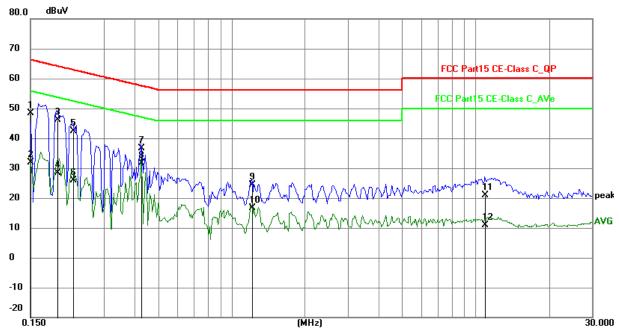
EUT Operating Environment

Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

EUT set Condition: Charging and Keep Transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	38.68	9.79	48.47	66.00	-17.53	QP	Р
2	0.1500	22.09	9.79	31.88	56.00	-24.12	AVG	Р
3	0.1929	36.36	9.75	46.11	63.91	-17.80	QP	Р
4	0.1929	18.52	9.75	28.27	53.91	-25.64	AVG	Р
5	0.2241	32.60	9.75	42.35	62.67	-20.32	QP	Р
6	0.2241	16.20	9.75	25.95	52.67	-26.72	AVG	Р
7	0.4269	26.90	9.76	36.66	57.31	-20.65	QP	Р
8	0.4269	21.91	9.76	31.67	47.31	-15.64	AVG	Р
9	1.2147	14.69	9.79	24.48	56.00	-31.52	QP	Р
10	1.2147	6.95	9.79	16.74	46.00	-29.26	AVG	Р
11	10.9209	10.70	10.20	20.90	60.00	-39.10	QP	Р
12	10.9209	0.73	10.20	10.93	50.00	-39.07	AVG	Р

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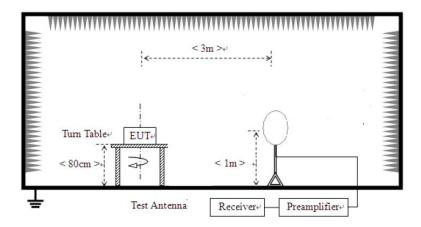


6 Radiated Emission Test

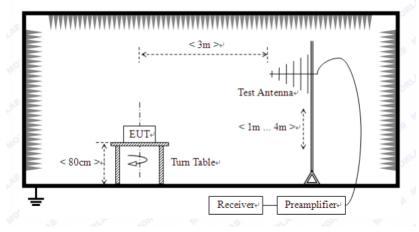
- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 kHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz (Note: for Fundamental frequency radiated emission measurement, RBW=3MHz, VBW=10MHz). Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) The antenna polarization: Vertical polarization and Horizontal polarization.

Block diagram of Test setup

For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to1GHz



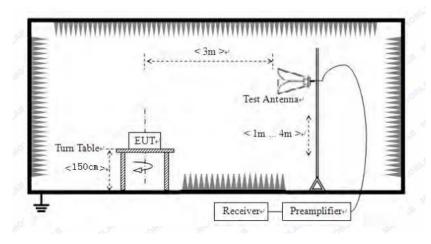
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For radiated emissions above 1GHz



- 6.2 Configuration of The EUT

 Same as section 5.3 of this report
- 6.3 EUT Operating Condition
 Same as section 5.4 of this report.
- 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

A FCC Part 15 Subpart C Paragraph 15.249(a) Limit

Fundamental Frequency	Field Strength of Fundamental (3m)			Field S	trength of Harmo	nics (3m)
(MHz)	mV/m	dBuV/m		uV/m	dBuV/m	
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)

Note:

- 1. RF Field Strength (dBuV) = 20 log RF Voltage (uV)
- 2.Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- 3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

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B. Frequencies in restricted band are complied to limit on Paragraph 15.209.

	•	
Frequency Range (MHz)	Distance (m)	Field strength (dB μ V/m)
0.009-0.490	3	20log(2400/F(kHz)) +40log (300/3)
0.490-1.705	3	20log(24000/F(kHz)) +40log (30/3)
1.705-30	3	69.5
30-80	3	40.0
88-216	3	43.5
216- 60	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.
- 5. All scanning using PK detector. And the final emission level was get using QP detector for frequency range from 30-1000MHz.As to 1G-25G, the final emission level got using PK. For fundamental measurement, PK detector used.
- 6. For radiated emissions from 9kHz to 30MHz, the emission level is much less than the limit for more than 20dB. No necessary to take down the record.
- 7. Battery full charged during tests.

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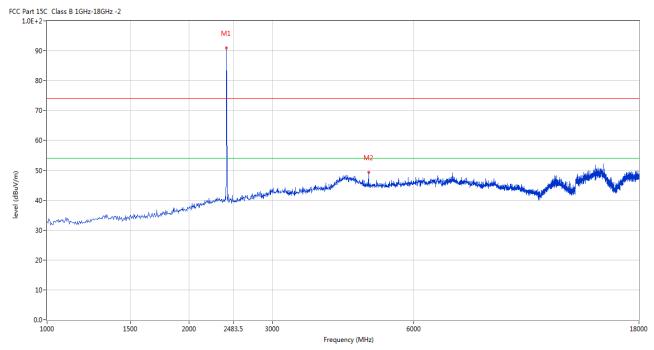


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2403MHz

Horizontal



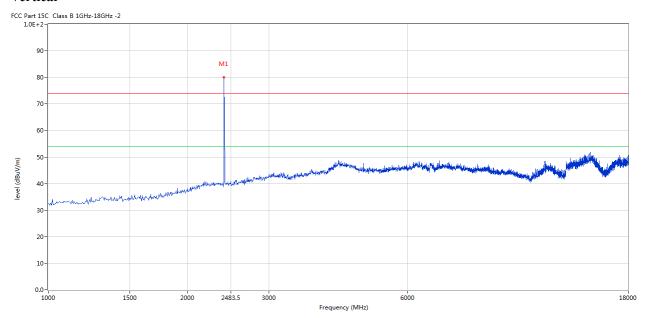
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2403	90.99	-3.57	114.0	-23.01	Peak	198.00	100	Horizontal	Pass
2	4807.048	49.30	3.13	74.0	-24.70	Peak	92.00	100	Horizontal	Pass

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Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2403	80.10	-3.57	114.0	-33.90	Peak	10.00	100	Vertical	Pass

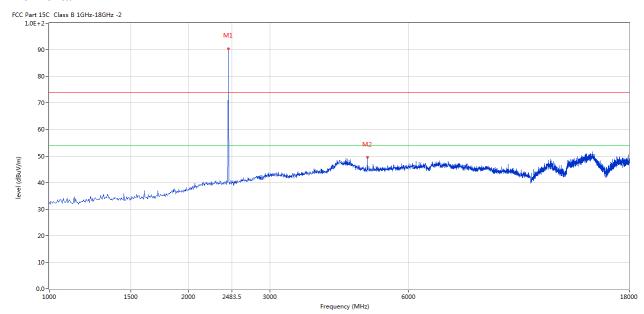
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Please refer to the following test plots for details: Middle Channel-2441MHz

Horizontal



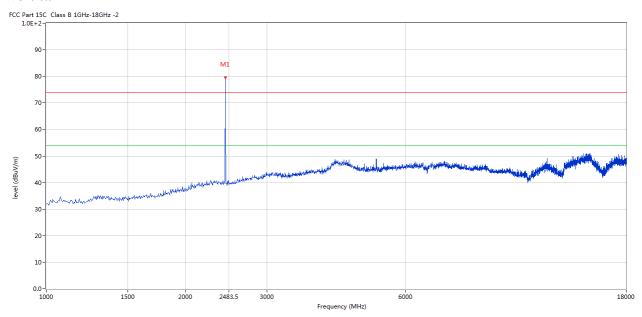
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	90.39	-3.57	114.0	-23.61	Peak	204.00	100	Horizontal	Pass
2	4883.529	49.49	3.20	74.0	-24.51	Peak	219.00	100	Horizontal	Pass

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Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	79.63	-3.57	114.0	-34.37	Peak	342.00	100	Vertical	Pass

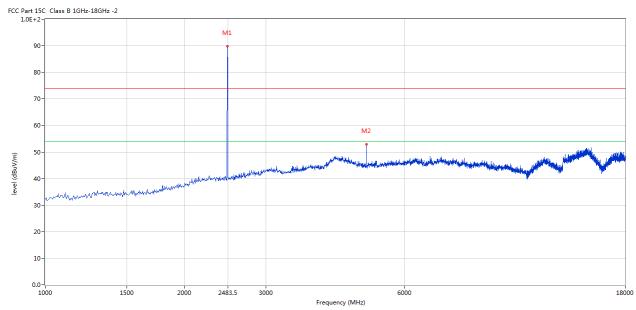
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



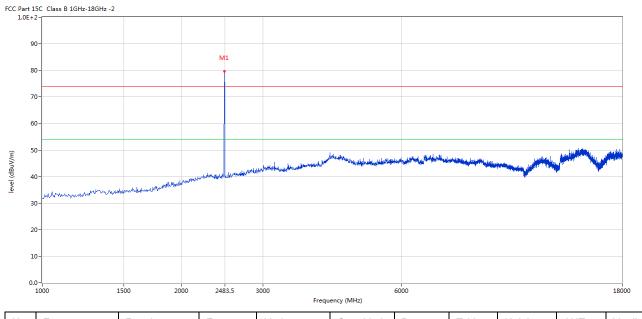
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	90.11	-3.57	114.0	-23.89	Peak	201.00	100	Horizontal	Pass
2	4960.010	52.91	3.36	74.0	-21.09	Peak	266.00	100	Horizontal	Pass

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Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	79.73	-3.57	114.0	-34.27	Peak	6.00	100	Vertical	Pass

Note: (2) Emission Level = Reading Level + Antenna Factor + Cable Loss-Amplifier

- (3)Margin=Emission-Limits
- (4)According to section 15.35(b), the peak limit is 20dB higher than the average limit
- (5) For test purpose, keep EUT continuous transmitting
- (5) For emission above 18GHz and Below 30MHz, It is only the floor noise. No necessary to take down.
- (6) the measured PK value less than the AV limit.

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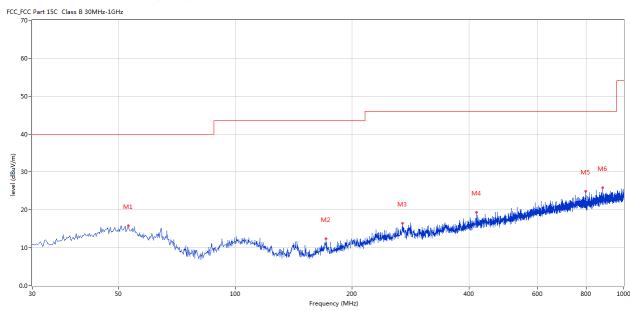


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(0)	(cm)		
1	53.032	15.85	-11.50	40.0	-24.15	Peak	75.00	100	Horizontal	Pass
2	171.342	12.35	-15.88	43.5	-31.15	Peak	100.00	100	Horizontal	Pass
3	269.288	16.53	-11.74	46.0	-29.47	Peak	329.00	100	Horizontal	Pass
4	418.145	19.37	-8.15	46.0	-26.63	Peak	89.00	100	Horizontal	Pass
5	797.806	24.91	-3.02	46.0	-21.09	Peak	61.00	100	Horizontal	Pass
6	882.659	25.89	-2.04	46.0	-20.11	Peak	34.00	100	Horizontal	Pass

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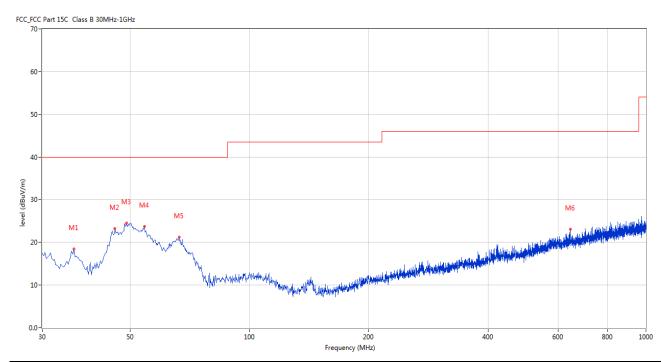


Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	36.061	18.49	-13.68	40.0	-21.51	Peak	180.00	100	Vertical	Pass
2	45.759	23.26	-11.40	40.0	-16.74	Peak	91.00	100	Vertical	Pass
3	48.910	24.55	-11.21	40.0	-15.45	Peak	128.00	100	Vertical	Pass
4	54.244	23.68	-11.60	40.0	-16.32	Peak	258.00	100	Vertical	Pass
5	66.366	21.24	-14.08	40.0	-18.76	Peak	177.00	100	Vertical	Pass
6	643.857	23.01	-4.72	46.0	-22.99	Peak	285.00	100	Vertical	Pass

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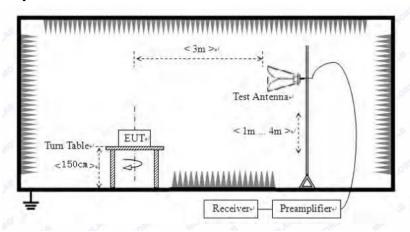


7. Band Edge

7.1 Test Method and test Procedure:

- (1) The EUT was tested according to ANSI C63.10–2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) Set Spectrum as RBW=1MHz, VBW=3MHz and Peak detector used for PK value. RBW=1MHz, VBW=10Hz and Peak detector used for AV value.
- (3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (4) The antenna polarization: Vertical polarization and Horizontal polarization.

7. 2 Radiated Test Setup



For the actual test configuration, please refer to the related items – Photos of Testing

7.3 Configuration of The EUT

Same as section 5.3 of this report

7.4 EUT Operating Condition

Same as section 5.4 of this report.

7.5 Band Edge Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

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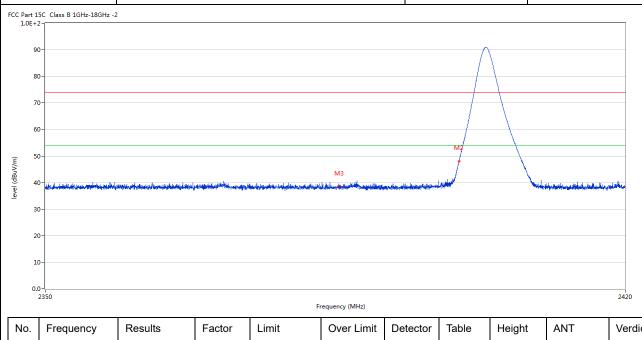
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7.6 Test Result

Product:	WIRED & WIRELESS GAMING MOUSE	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		

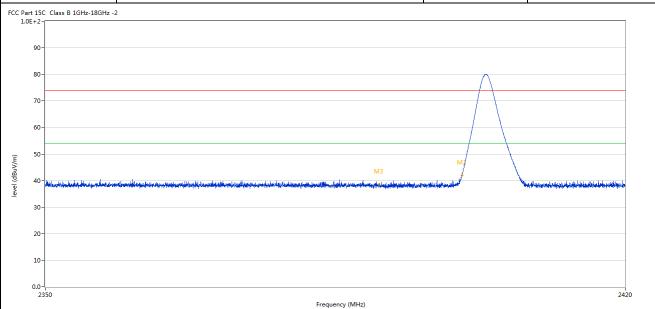


No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402.994	90.92	-3.57	74.0	16.92	Peak	199.00	100	Horizontal	N/A
2	2400.090	48.16	-3.57	74.0	-25.84	Peak	205.00	100	Horizontal	Pass
3	2389.993	38.53	-3.53	74.0	-35.47	Peak	315.00	100	Horizontal	Pass

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Product:	WIRED & WIRELESS GAMING MOUSE	Detector	Vertical
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		

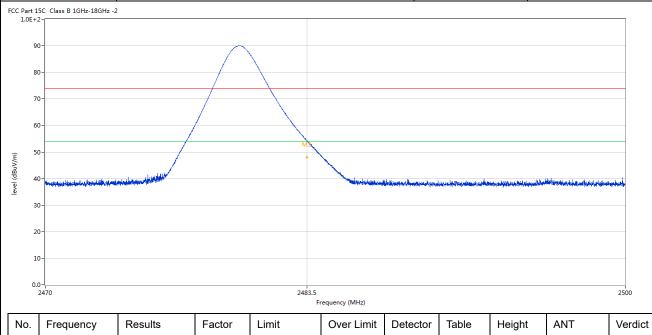


No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2403.012	80.07	-3.57	74.0	6.07	Peak	11.00	100	Vertical	N/A
2	2400.090	41.94	-3.57	74.0	-32.06	Peak	360.00	100	Vertical	Pass
3	2390.007	38.54	-3.54	74.0	-35.46	Peak	327.00	100	Vertical	Pass

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THE REAL PROPERTY.	

Product:	WIRED & WIRELESS GAMING MOUSE	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
	1	2479.995	90.03	-3.57	74.0	16.03	Peak	204.00	100	Horizontal	N/A
	2	2483.494	54.41	-3.57	74.0	-19.59	Peak	204.00	100	Horizontal	Pass
	2**	2483.494	48.10	-3.57	54.0	-5.90	AV	204.00	100	Horizontal	Pass
Г											

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Product: WIRED & WIRELESS GA				WIRED & WIRELESS GAMING MOUSE		E	Detector		Vertical	
	Mode Keeping Transmi			tting	Т	Test Voltage DC		DC3.7V		
Te	Temperature 24 deg. C,			Humidity			ty	56% RH		
Te	Test Result: Pass									
CC Part 1	5C Class B 1GHz-18GHz	-2								
9	0-									
8	0-									
7	0-									
	0-									
6										
	0-			M2						
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(iii/noon) ia/noon) i		Results	Factor	2483	.5	Detector	Table	Height	ANT	
3 2 1 0.	0		Factor (dB)		.5 Frequency (MHz)				a common of the party of the pa	2500
3 2 1 0.	o- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0-	Results		Limit	.5 Frequency (MHz)		Table	Height	a common of the party of the pa	2500

Note: 1. The PK emission level less than the AV limit. No necessary to record the AV emission level.

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8.0 Antenna Requirement

Applicable Standard

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

This product has a PCB antenna. The antenna gain is 1.87dBi Max. It fulfills the requirement of this section. Test Result: Pass

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9.0 20dB Bandwidt	th Measurement					
Product:	WIRED & V	Test Mode:	Keep transmitting	3		
Mode	Mode Keeping Transmitting				DC3.7V	
Temperature	Temperature 24 deg. C,				56% RH	
Test Result:	est Result: Pass				PK	
20dB Bandwidth		2.305MHz				
Ŕ	Marker	1 [T1 ndB]	RBW 1	.00 kHz R	F Att 20 dB	
Ref Lvl	ndB	20.00 dB	VBW 3	00 kHz		
0 dBm	BW	2.30460922 MHz	SWT	5 ms U	nit dBm	
-10				▼1 [T1]	-4.37 dBm 2.40302505 GHz	A
-20				ndB NW VTI [T1]	20.00 dB 2.30460922 MHz -24.52 dBm	
-30	T			▼ _{T2} [T1]	2.40183267 GHz -24.66 dBm	
1MAX	MMW			4	2.40413727 GHz	LMA
-50						
-50						
-60						
-70						
-80						
-90						
-100 Center 2.	403 GHz	500	kHz/		Span 5 MHz	
Date: 5.N	MAY.2022 14	:46:42			-	

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Product:	WIRED & W	RELESS GAMING	MOUSE	Test Mode:	Keep transmitting
Mode	Mode Keeping Transmitting				DC3.7V
Temperature	Temperature 24 deg. C,			Humidity	56% RH
Test Result:				Detector	PK
20dB Bandwidth		2.295MHz			
r r	Marker	1 [T1 ndB]	RBW	100 kHz RE	F Att 20 dB
Ref Lvl	ndB	20.00 dB	VBW	300 kHz	
0 dBm	BW	2.29458918 MHz	SWT	5 ms Ur	nit dBm
-10			~	V1 [T1]	-3.63 dBm 2.44042385 GHz 20.00 dB 2.29458918 MHz
-20	T			V _{T1} [T1]	-23.39 dBm 2.43984269 GHz
-30	<u> </u>			▼ _{T2} [T1]	-23.64 ABR
1MAX	JAMES AND CON			Yww.	1MA
-50					V
30					
-60					
-70					
-80					
-90					
-100	441 55		1 /		
Center 2 Date: 5.	.441 GHz MAY.2022 14:	50:08	kHz/		Span 5 MHz

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Product:	WIRED & WIRELESS GAMING MOUSE			Test Mode:	Keep transmitting
Mode	Kee	eping Transmitting		Test Voltage	DC3.7V
Temperature	24 deg. C,			Humidity	56% RH
Test Result:	Pass			Detector	PK
20dB Bandwidth		2.265MHz			
, KA	Marker	1 [T1 ndB]	RBW	100 kHz F	RF Att 20 dB
Ref Lvl	ndB	20.00 dB	VBW	300 kHz	
0 dBm	BW	2.26452906 MHz	SWT	5 ms t	Jnit dBm
-10		1 July War	Laura Contraction of the Contrac	V1 [T1]	-4.92 dBm 2.48000501 GHz 20.00 dB 2.26452906 MHz
-30	To the state of th			V _T , [T1] V2 V _{T2} (T1]	-25.76 dBm 2.47884269 GHz -24.44 dBm
-40	War Mary Land			A	1MA
-50					
-60					
-70					
-80					
-90					
Center 2	.48 GHz .MAY.2022 14	500	kHz/		Span 5 MHz

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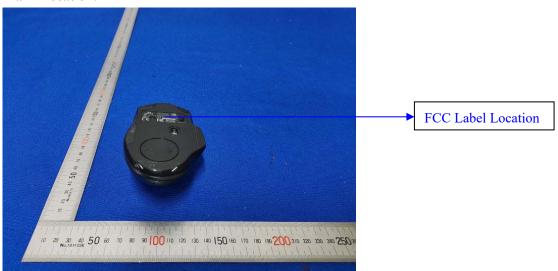


10.0 FCC ID Label

FCC ID: TUVDS-2891

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Mark Location:



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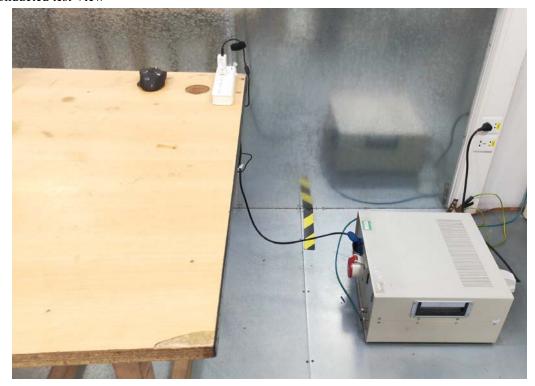
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11.0 Photo of testing

11.1 Conducted test View--

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Radiated emission test view



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11.2 Photographs – EUT

Outside View



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Outside View





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Outside View



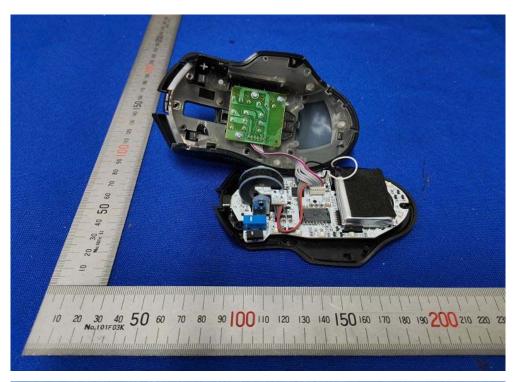
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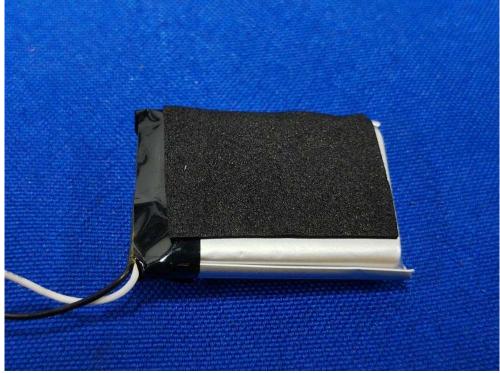
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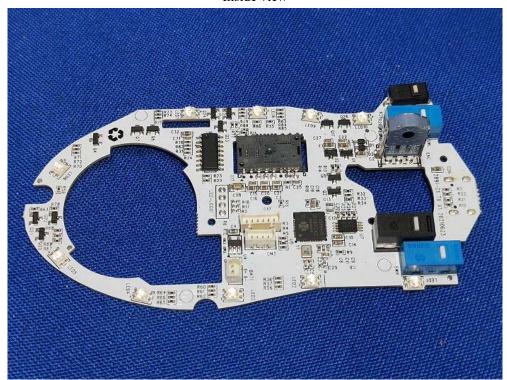
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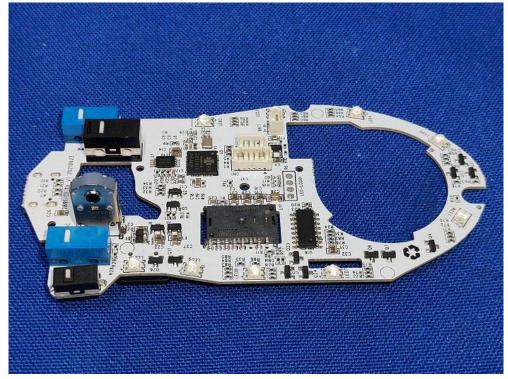
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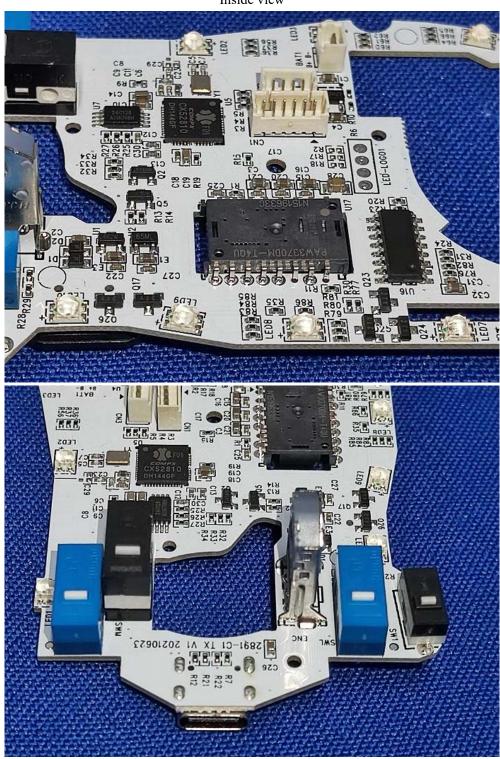
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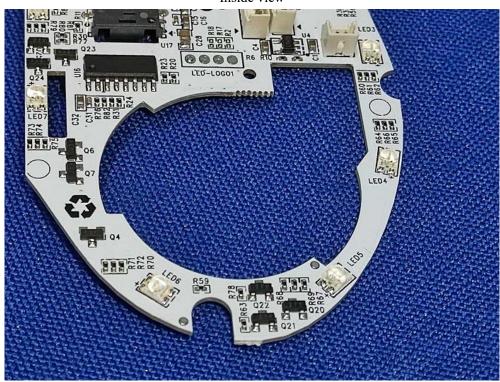
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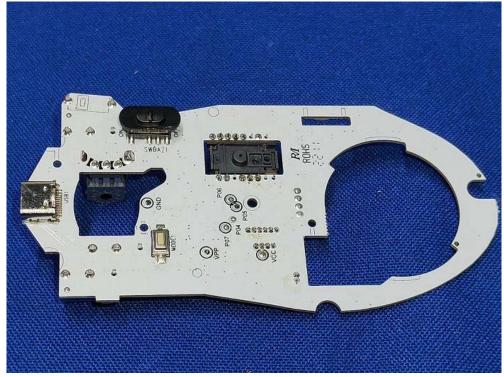
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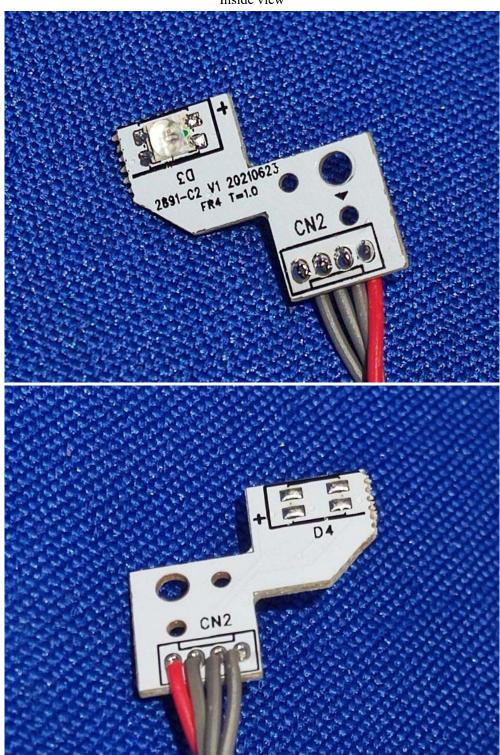
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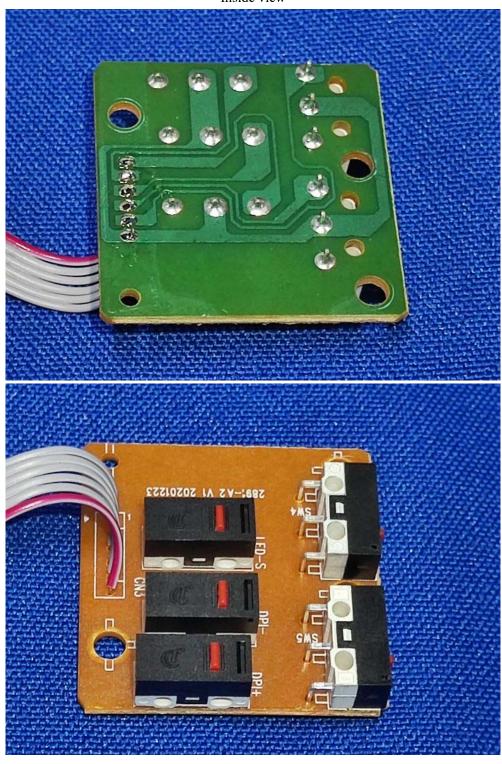
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Inside view



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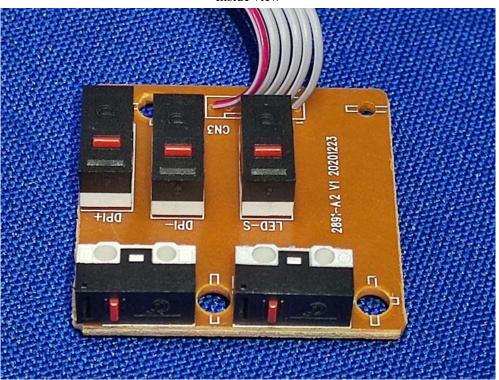
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Inside view



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