



File reference No.: 2022-03-22

Applicant: Eastern Times Technology Co.,Ltd

Product: MECHANICAL GAMING KEYBOARD

Model No.: K607P-KBS, ET-8499, ET-8523, ET-8527, ET-8666,

K607P-WBS, K607P-WRS, K607P-WNS, K607P-KRS,

K607P-KNS

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: March 22, 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: 2022-03-22



Test Report Conclusion

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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: MECHANICAL GAMING KEYBOARD

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: K607P-KBS

Additional Model Name ET-8499, ET-8523, ET-8527, ET-8666, K607P-WBS, K607P-WRS,

K607P-WNS, K607P-KRS, K607P-KNS

Rating: DC5V, 720mA or DC3.7V, 265mA Battery DC3.7V, 1900mAh 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

Serial No.: RDK607P-KBS21112900011

Antenna Designation PCB antenna with gain -1.85dBi Max (Declared by the Manufacturer)

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1.4 Submitted Sample: 1 Sample

1.5 Test Duration

2021-05-13 to 2022-03-22

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					
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

The EUT has	been teste	d according	to the f	following	specifications:
	~~~~		,		000000000000000000000000000000000000000

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 and RSS-210	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

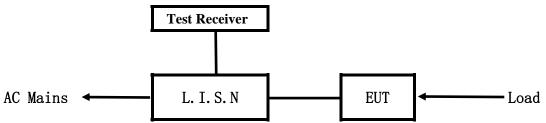
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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#### 5. Power Line Conducted Emission Test

#### 5.1 Schematics of the test

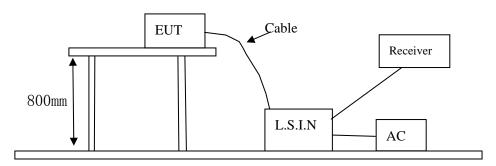


**EUT: Equipment Under Test** 

#### 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.

# 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
MECHANICAL GAMING KEYBOARD	Eastern Times Technology Co.,Ltd	K607P-KBS, ET-8499, ET-8523, ET-8527, ET-8666, K607P-WBS, K607P-WRS, K607P-WNS, K607P-KRS, K607P-KNS	TUVET-8499

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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	60.0	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)

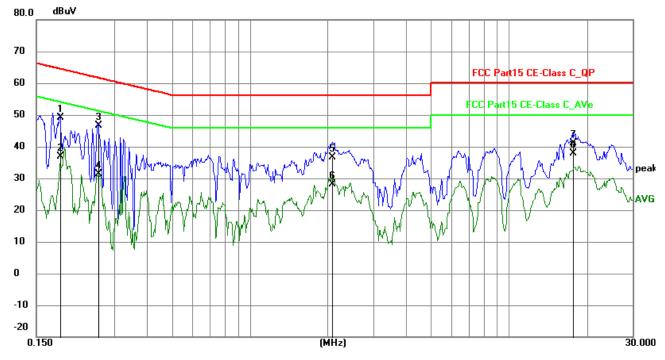
**EUT Operating Environment** 

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	0.1850	39.32	9.76	49.08	64.26	-15.18	QP	Р
2	0.1850	27.04	9.76	36.80	54.26	-17.46	AVG	Р
3	0.2592	36.94	9.75	46.69	61.46	-14.77	QP	Р
4	0.2592	21.66	9.75	31.41	51.46	-20.05	AVG	Р
5	2.0765	26.72	9.80	36.52	56.00	-19.48	QP	Р
6	2.0765	18.34	9.80	28.14	46.00	-17.86	AVG	Р
7	17.6055	30.69	10.54	41.23	60.00	-18.77	QP	Р
8	17.6055	27.39	10.54	37.93	50.00	-12.07	AVG	Р

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

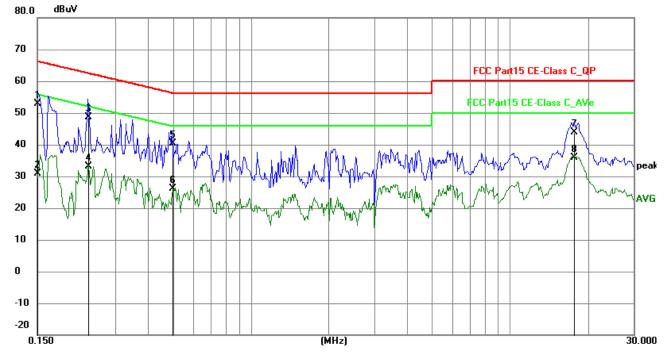
**EUT Operating Environment** 

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	43.16	9.79	52.95	66.00	-13.05	QP	Р
2	0.1500	21.02	9.79	30.81	56.00	-25.19	AVG	Р
3	0.2358	38.94	9.75	48.69	62.24	-13.55	QP	Р
4	0.2358	23.45	9.75	33.20	52.24	-19.04	AVG	Р
5	0.4971	30.54	9.77	40.31	56.05	-15.74	QP	Р
6	0.4971	16.30	9.77	26.07	46.05	-19.98	AVG	Р
7	17.7030	33.38	10.54	43.92	60.00	-16.08	QP	Р
8	17.7030	25.39	10.54	35.93	50.00	-14.07	AVG	Р

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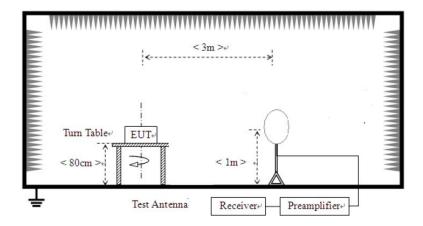


#### **6** Radiated Emission Test

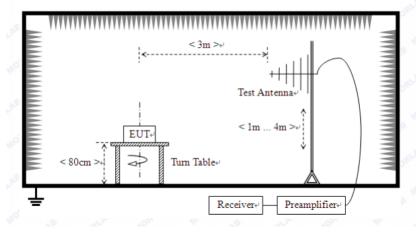
- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size 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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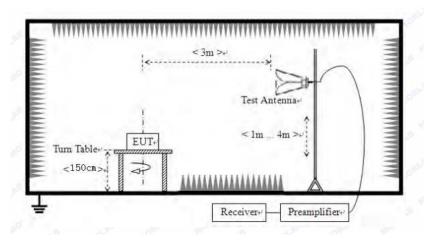
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For radiated emissions above 1GHz



- 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 Stre	ength of Fundame	ntal (3m)	Field S	trength of Harmo	onics (3m)
(MHz)	mV/m	dBu	V/m	uV/m	dBuV/m	
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)

Note:

- 1. RF Field Strength  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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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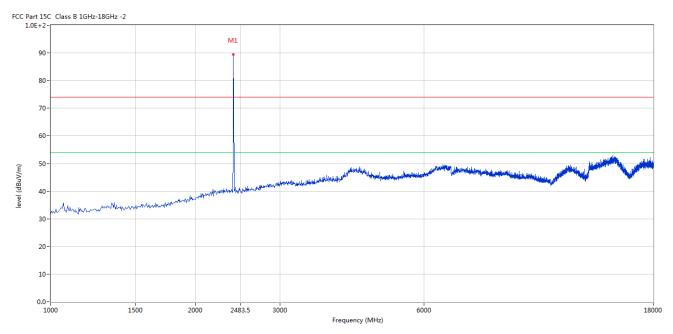


#### 6.5 Test result

# A Fundamental & Harmonics Radiated Emission Data

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

#### Horizontal



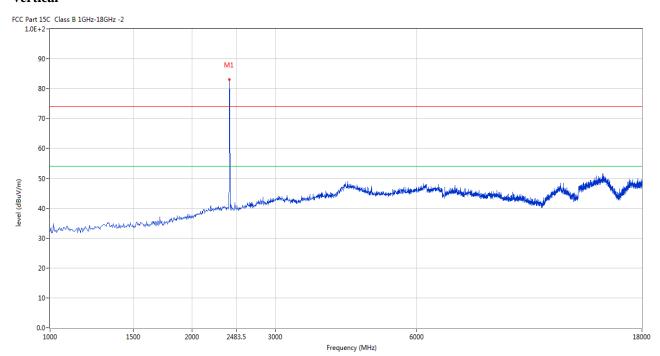
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.404	89.75	-3.57	114.0	-24.25	Peak	257.00	100	Horizontal	Pass

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# Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.404	82.96	-3.57	114.0	-31.04	Peak	74.00	100	Vertical	Pass

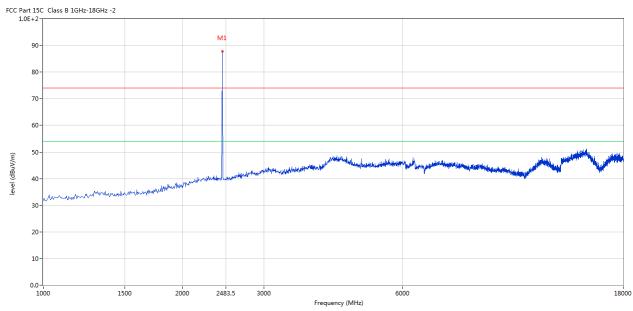
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Please refer to the following test plots for details: Middle Channel-2441MHz

#### **Horizontal**



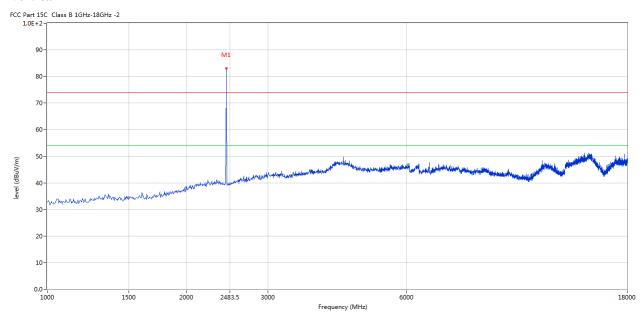
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2440.404	87.78	-3.57	114.0	-26.22	Peak	274.00	100	Horizontal	Pass

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# Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2440.404	83.05	-3.57	114.0	-30.95	Peak	65.00	100	Vertical	Pass

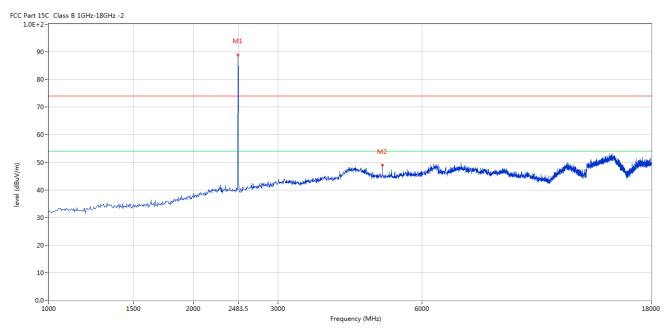
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Please refer to the following test plots for details: High Channel-2480MHz

#### Horizontal



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2479.394	88.96	-3.57	114.0	-25.04	Peak	271.00	100	Horizontal	Pass
2	4960.010	48.90	3.36	74.0	-25.10	Peak	229.00	100	Horizontal	Pass

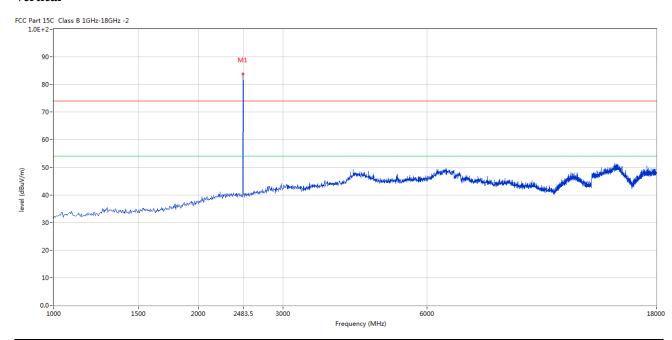
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#### Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2479.394	84.25	-3.57	114.0	-29.75	Peak	338.00	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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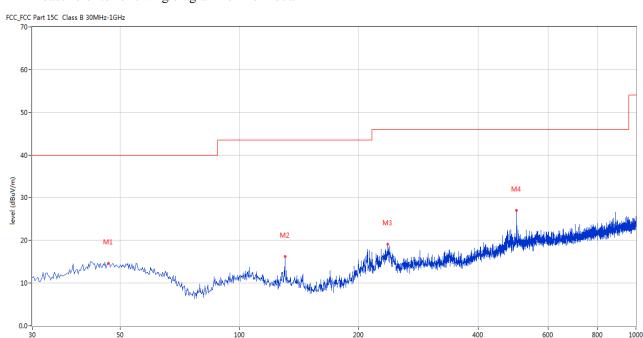


# B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

**Results:** Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	46.971	14.69	-11.45	40.0	-25.31	Peak	179.00	170	Horizontal	Pass
2	130.127	16.26	-16.77	43.5	-27.24	Peak	0.00	170	Horizontal	Pass
3	236.558	19.16	-12.37	46.0	-26.84	Peak	77.00	170	Horizontal	Pass
4	500.090	27.06	-6.91	46.0	-18.94	Peak	53.00	170	Horizontal	Pass

Frequency (MHz)

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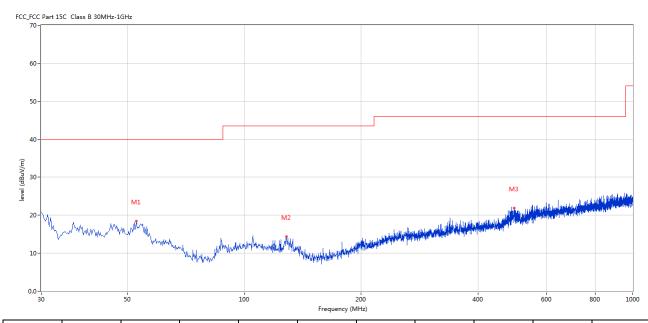


# Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequen	Results	Factor	Limit	Over	Detector	Table (o)	Height	ANT	Verdict
	cy (MHz)	(dBuV/m	(dB)	(dBuV/m	Limit			(cm)		
		)		)	(dB)					
1	52.789	18.43	-11.48	40.0	-21.57	Peak	252.00	170	Vertical	Pass
2	128.188	14.37	-16.73	43.5	-29.13	Peak	305.00	170	Vertical	Pass
3	495.726	21.86	-7.13	46.0	-24.14	Peak	186.00	170	Vertical	Pass

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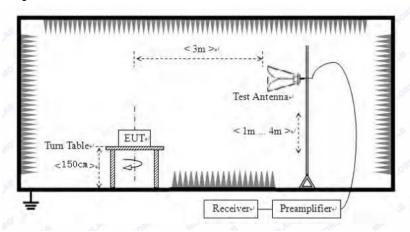


## 7. Band Edge

#### 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.

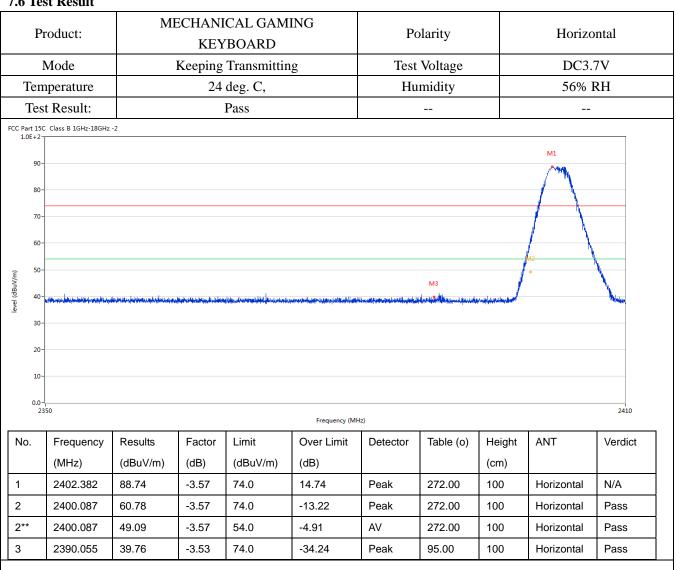
The report refers only to the sample tested and does not apply to the bulk.

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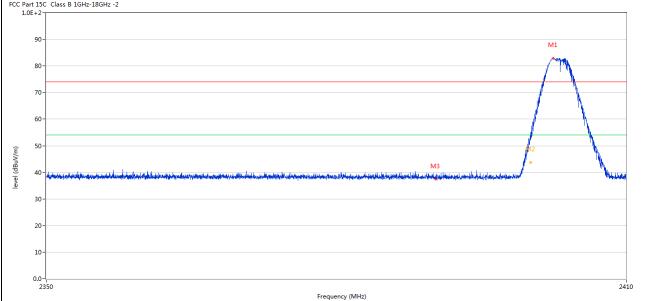
# 7.6 Test Result



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Product:	MECHANICAL GAMING KEYBOARD	Detector	Vertical
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		
FCC Part 15C Class B 1GHz-18GHz 1.0E+2-	-2		M1

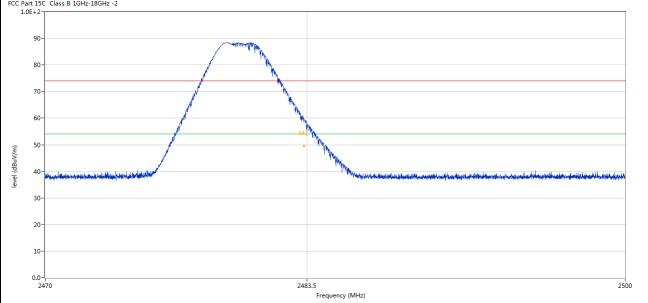


No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.367	82.95	-3.57	74.0	8.95	Peak	69.00	100	Vertical	N/A
2	2400.012	55.08	-3.57	74.0	-18.92	Peak	69.00	100	Vertical	Pass
2**	2400.012	43.78	-3.57	54.0	-10.22	AV	69.00	100	Vertical	Pass
3	2390.085	37.44	-3.53	74.0	-36.56	Peak	339.00	100	Vertical	Pass

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Product:	MECHANICAL GAMING KEYBOARD	Polarity	Horizontal					
Mode	Keeping Transmitting	Test Voltage	DC3.7V					
Temperature	24 deg. C,	Humidity	56% RH					
Test Result:	Pass							
FOC Part 15C Class B 1GHz-18GHz -2  1.0E+2- 90								



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2479.920	88.42	-3.57	74.0	14.42	Peak	269.00	100	Horizontal	N/A
2	2483.339	59.67	-3.57	74.0	-14.33	Peak	264.00	100	Horizontal	Pass
2**	2483.339	49.44	-3.57	54.0	-4.56	AV	264.00	100	Horizontal	Pass

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	Product:	ME	CHANI	CAL GAMI	ING KEYBO	DARD	Det	ector	Ver	tical
Mode Kee			eeping Tran	smitting		Test Voltage		DC:	DC3.7V	
Temperature				24 deg.	Humidity 56		56%	% RH		
Те	est Result:			Pass					-	-
CC Part 1	15C Class B 1GHz-18GHz	-2					•			
g	90-		,	CARLES BOOK						
8	30-			White her						
7	70-			1						
6	50-		f	, ₀	<b>\</b>					
	50-				**************************************					
_ 5	50-		ſ		M2 ^M					
(m//m)		<i></i>	f		M2 MANAGEMENT					
lBuV/m	60- 10-mil dandahan wakidahirina da	and below the subject to the subject of the subject	f		· Market Market	ikan gudu qorbir sophysaifum sharbus	iddraginal one and helpsymboles, only	skedtappi attpeldanathérékulay	oranisticismal displays the strong business in the lades playing	metaliya dila dika dika
level (dBuV/m	10-	and printed and resident described for the second	<i>f</i>		· Market Market	المغار يوران توسايله ويؤثر يدفؤ رسالون لهرا	idoropinal representativi for interpresentati	الإرادة	rominist de décident de la company de la	metricani de la constitución
level (dBuV/m	10-	antiphoto support so activity of a	<i>f</i>		· · · · · · · · · · · · · · · · · · ·	ikan gudi arabi parti padi mulanda.	illespecies ac and officer in course.	n nedden gyf allfor till om alle haddigiller	nanigun ilafayanin da	on training and the six high reflec
س/Auba) اevel	10 - mari haraki karrandaki karran da	and polarities and produced for the second produced for the second polarities and the second pol	<i>f</i>		· · · · · · · · · · · · · · · · · · ·	teta yada arabi sethipadi makesisi.	idospacionemento de como que en entre	person pri alteristano di distribi	manikan digi upai ng kalondada da	mortuinga dhe siri dhi dha
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س/(۱۹۹۳) هموا (۱۹۹۳) هموا (۱۹۹۳) هموا (۱۹۹۳) هم ا	10	Results	Factor	Limit	2483.5		Table (o)	Height	ANT	
س/(Ngp)   44 ع ا	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		Factor (dB)	Limit (dBuV/m)	2483.5 Frequency (MF	tz)				2500
س/(Ngp)   44 ع ا	10	Results			2483.5 Frequency (MI	tz)		Height		2500
ш//ngp) јалај 2 2 1 1 0 No.	Frequency (MHz)	Results (dBuV/m)	(dB)	(dBuV/m)	2483.5 Frequency (MF  Over Limit (dB)	Hz) Detector	Table (o)	Height (cm)	ANT	2500 Verdict

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 -1.85dBi Max. It fulfills the requirement of this section. Test Result: Pass

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<b>9.0</b> 20dB Bandwidt	h Measuremen	it				_				
Product:	MECHANIC	MECHANICAL GAMING KEYBOARD				Keep transmitting				
Mode	Ke	eping Transmit	ting		Test Voltage	56% RH				
Temperature		24 deg. C,			Humidity					
Test Result:		Pass			Detector					
20dB Bandwidth		2.625MHz								
Ŕ	Marke	er 1 [T1 nd	lB]	RBI	W 100 k	Hz RI	7 Att	20 dB		
Ref Lvl	ndB			VBI				_		
10 dBm	BW	2.6252505	0 MHz	SW:	T 5 m;	s Ur	nit	dBn	n 	
10					<b>v</b> ₁	[T1]	-6	.49 dBm	A	
0							2.40240	381 GHz		
0		1			ndB		20	.00 dB		
		$\overline{A}$	$\wedge$ $\wedge$		BW V _{T1}	[T1]	2.62525	050 MHz		
-10				~ /	-/\		2.40156		i	
					\[ \sqrt{\pi}\] \[ \sqrt{\pi}\] \[ \sqrt{\pi}\]	[T1]	-26	.58 dBm	1,	
-20	77.7	- Num				<u></u>	2.40418	737 GHz		
1MAX	War and the same of the same o					\rangle \frac{1}{2}			1MA	
-30	A PORTO DE LA COLONIA DE LA CO					<del>-\</del>				
سمهم						\	^	\		
-40						<b>W</b>	~\ <u>`</u> ,\\` \	\ <u>\</u>	-	
Wall Color								Www.		
-50										
-60									-	
-70										
-80										
-90										
Center 2.	403 GHz		500 kHz	/			Spa	n 5 MHz		
Date: 7.N	MAR.2022 1	7:34:25								

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Product:	MECHANICAL	GAMING KEYBOA	RD	Test Mode:	Keep transmitting		
Mode	Keepir	ng Transmitting	,	Test Voltage	DC3.7V		
Temperature	2	24 deg. C,		Humidity 56% Detector PK			
Test Result:		Pass					
20dB Bandwidth	2	.445MHz					
Ref Lvl	ndB	1 [T1 ndB] 20.00 dB	RBW VBW	300 kHz	Z	20 dB	
10 dBm	BW	2.44488978 MHz	SWI	' 5 ms	Unit	dBm	
0					T1] -3		
-10			<u>\</u>	ndB BW ∇ _{T1}	2.44488 [T1] -23		
-20	700	<i>→ →</i>		V _T 1	2.43974 [T1] -23	.92 dBm	
1MAX					T2 2.44218	737 GHz 1MA	
-40	mond				mun	\frac{1}{2}	
-50						W. M.	
-60							
-70							
-80							
-90 Center 2 Date: 7.		500	kHz/		Spa	ın 5 MHz	

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Product:	MECHANICAL	CHANICAL GAMING KEYBOARD		est Mode:	Keep tra	nsmitting	
Mode	Keepin	g Transmitting	Te	st Voltage	DC3.7V 56% RH		
Temperature	2	4 deg. C,	F	Iumidity			
Test Result:		Pass	I	Detector	F	PK	
20dB Bandwidth	2	.295MHz					
Ref Lvl	Marker ndB	1 [T1 ndB] 20.00 dB	RBW VBW	100 kHz 300 kHz		20 dB	
10 dBm	BW 2	2.29458918 MHz	SWT	5 ms	Unit	dBm	
0		1		ndB BW	2.47939 2.29458	.57 dBm A A 379 GHz .00 dB 918 MHz	
-10			\\\	W/	T1] -26 2.47888 T1] -25	.29 dBm 277 GHz .36 dBm	
1MAX	TA			No.	2.48117	735 GHz  1MA	
-40	mm				W. W.		
-50					·	han	
-60							
-70							
-80							
-90							
Center 2		500 17:05	kHz/		Spa	n 5 MHz	

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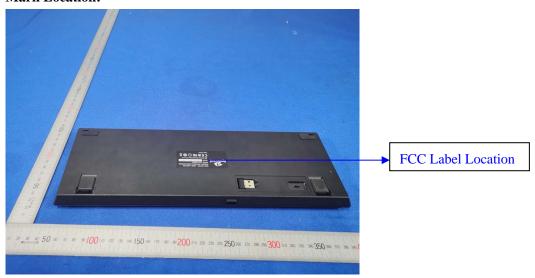
#### 10.0 FCC ID Label

#### FCC ID: TUVET-8499

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

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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#### 11.0 Photo of testing

#### 11.1 Conducted test View--



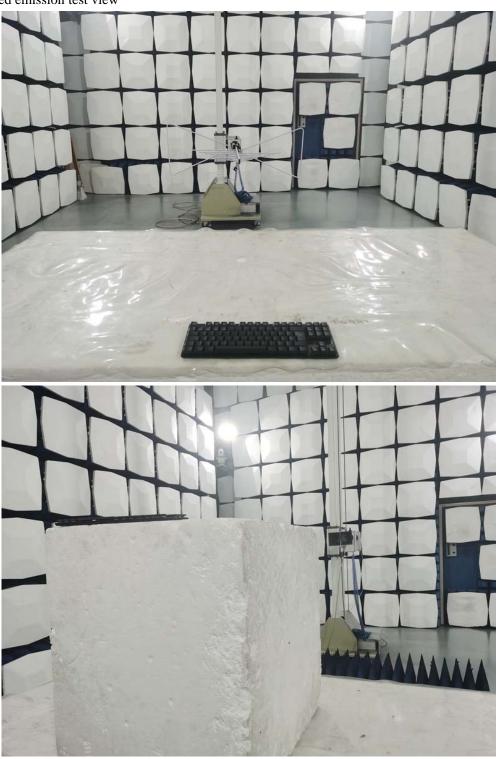
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#### Radiated emission test view



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

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#### 11.2 Photographs – EUT

#### Outside View



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Outside View





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#### Outside View



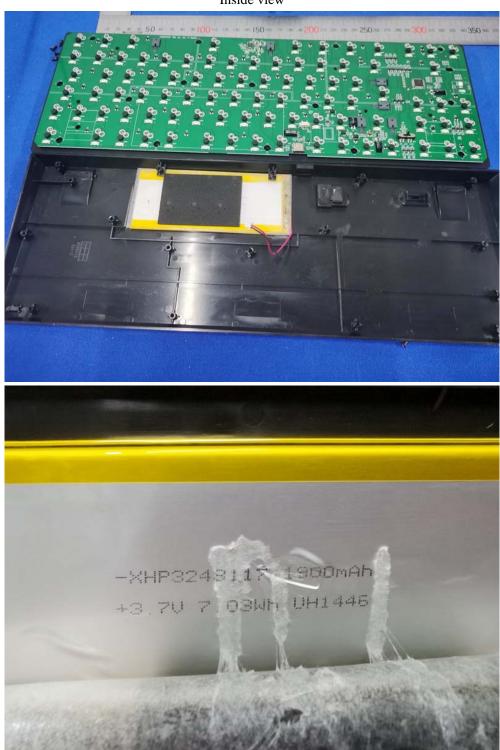
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Inside view



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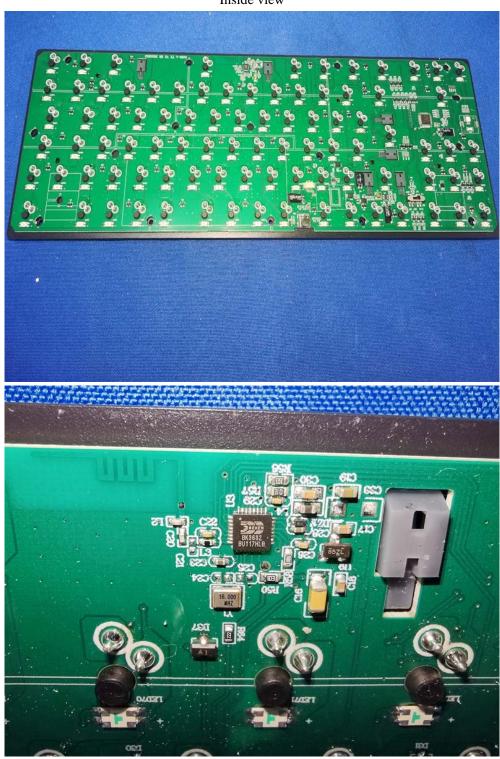
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Inside view



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Inside view



-- End of the report--