



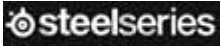
JAPAN RADIO TEST REPORT

Applicant : SteelSeries ApS.

Address : Dirch Passers Allé 27, 5. Sal 2000 Frederiksberg
Denmark.

Equipment : SteelSeries H Wireless Headset

Model No. : HS-00007TX, HS-00014TX

Trade Name : 

I HEREBY CERTIFY THAT :

The sample was received on Feb. 04, 2021 and the testing was completed on Apr. 20, 2021 at CerpPASS Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approval by:



Mark Liao / Supervisor

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory



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History of this test report

Report No.	Issue Date	Description
TEME1711163	Dec. 07, 2017	This test report is to request a Class II Permissive. Changes are as follow: 1.Change Components (refer to section 2.1) 2.Add Model No.: HS-00014TX
21020001-TRMIC01	Apr. 26, 2021	1.Change SPDIF IC.



1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

TELEC-T401 (2020-07):

- Item 19 of Article 2

Description	Result
Spurious Emissions(TX)	Pass
Spurious Emissions(RX)	Pass

*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement.

*The difference are listed below: 1. Change SPDIF IC.

After engineering evaluation, Spurious Emissions (TX) (30MHz ~ 2.387GHz) and Spurious Emissions (RX) (30MHz ~ 1GHz) need to retest. The rest test results can refer to original report number: TEME1711163.



2. Test Configuration of Equipment under Test

2.1 Feature of Equipment under Test

Frequency Range	2400-2483.5 MHz
Type of Modulation	$\pi/4$ -DQPSK
Antenna Type	Loop Antenna
Antenna Gain	Antenna A: 2.48 dBi Antenna B: 3.73 dBi

*EUT Support SRD 1TX Diversity.

Note: For more details, please refer to the User's manual of the EUT.

Change IC:

SPDIF IC	Original	Update
	AK4118	PCM9211



2.2 Carrier Frequency of Channels

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
*00	2402	14	2430	28	2458
01	2404	15	2432	29	2460
02	2406	16	2434	30	2462
03	2408	17	2436	31	2464
04	2410	18	2438	32	2466
05	2412	19	2440	33	2468
06	2414	20	2442	34	2470
07	2416	21	2444	35	2472
08	2418	22	2446	36	2474
09	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454	--	--
13	2428	27	2456	--	--

Note: Channels remarked * are selected to perform test.



2.3 Test Mode and Test Software

a. An executive program, "VMltest ver.1.1.6.42" under Windows OS system was executed to transmit and receive data.

b. The following test mode was performed for the test:

Test Mode	Operating Description
1	$\pi/4$ -DQPSK

Modulation Type	TX CONFIGURATION
$\pi/4$ -DQPSK	1TX

2.4 Description of Test System

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	ASUS	P2430U	N/A	Adapter / 1.8m / NS



2.5 General Information of Test

Test Site	CerpPASS Technology Corporation Test Laboratory Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel:+886-3-3226-888 Fax:+886-3-3226-881	
	FCC	TW1439, TW1079
	IC	4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication test C-4663 for Conducted emission test R-4218 for Radiated emission test G-10812, G-10813 for radiated disturbance above 1GHz
Test Condition	Normal Voltage : 5 V Extreme Voltage : 4.5 V and 5.5 V	

Test Item	Test Site	Test Period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2021/04/20	22.5°C / 50%	Nick Guan

2.6 Measurement Uncertainty

Measurement Item	Uncertainty
Output power	±1.715dB
TX Unwanted Emissions Strength	±1.737dB
RX Unwanted Emissions Strength	±2.105dB
Occupied bandwidth	±4.400%
Spreading Bandwidth	±4.400%
Frequency tolerance	±134.781Hz
Dwell Time	±1.16%



3. Test Equipment and Ancillaries Used for Tests

Test Item	RF Conducted						
Test Site	RFCON01-NK						
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date	Calibration authority	Calibration method
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	102151	2020/08/03	2021/08/02	ETC	C
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2020/12/25	2021/12/24	ETC	C
Attenuator	KEYSIGHT	8491B	MY39250705	2020/9/28	2021/9/27	ETC	C
Power Meter	Anritsu	ML2495A	2034001	2020/9/25	2021/9/24	ETC	C
Power Sensor	Anritsu	MA2411B	1911175	2020/9/25	2021/9/24	ETC	C
MXG-B RF Vector Signal Generator	KEYSIGHT	N5182B	MY53051383	2020/06/19	2021/06/18	ETC	C
Switch Box	Theda	1-4	TW5451159	NA	NA	NA	NA

Note: Calibration Method

- a) : Calibration conducted by the National Institute of Information and Communications Technology(NICT) or a designated calibration agency under Article 102-18 paragraph (1).
- b) : Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
- c) : Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- d) : Calibration conducted by using other equipment that listed above from a) to c).



4. Transmitter Parameters

4.1 Spurious Emissions

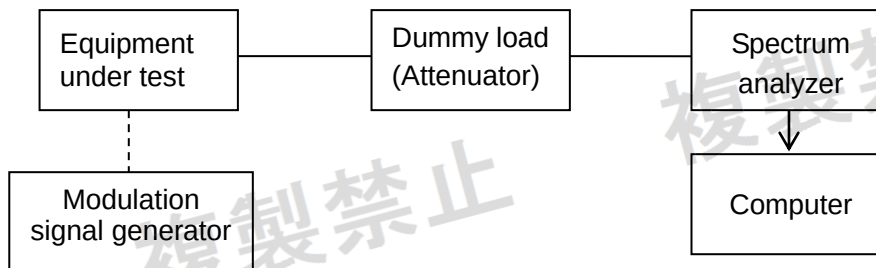
4.1.1 Test Limit

	Frequency Band (For 2400 ~ 2483.5 MHz)	Limit
*1	<2387MHz	2.5 μ W/MHz
*2	2387MHz ~ 2400MHz	25 μ W/MHz
*3	2483.5MHz ~ 2496.5MHz	25 μ W/MHz
*4	>2496.5MHz	2.5 μ W/MHz

4.1.2 Test Procedure

According to TELEC-T401 Spurious and unwanted emission intensity measuring procedure.

4.1.3 Test Setup





4.1.4 Test Result and Data

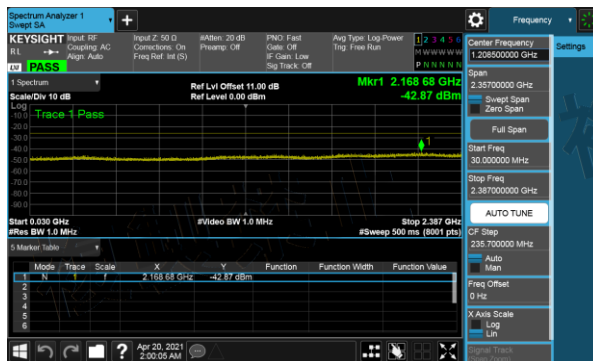
SRD($\pi/4$ -DQPSK)

Test Conditions				
Voltage	Frequency Band	Test Frequency	MHz	2402
Vnom	30 MHz~ 2387 MHz	Unwanted Emission Frequency	MHz	2168.68
Vnom	30 MHz~ 2387 MHz	Unwanted Emission Intensity	μ W	0.0516



Vnom

Modulation Standard: SRD($\pi/4$ -DQPSK), CH00





5. Receiver Parameters

5.1 Spurious Emissions

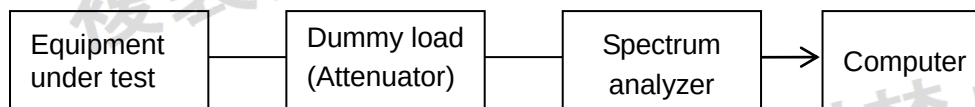
5.1.1 Test Limit

Modulation type	Limit
<1GHz	4nW
1GHz ~ 10GHz	20nW

5.1.2 Test Procedures

According to TELEC-T401 Limit of secondary radiated emissions measuring procedure.

5.1.3 Test Setup



5.1.4 Test Result and Data

SRD($\pi/4$ -DQPSK)

Test Conditions					
Voltage	Frequency Band	Test Frequency		MHz	2402
Vnom	30 MHz~ 1000 MHz	Spurious	Emission Frequency	MHz	432.07
Vnom	30 MHz~ 1000 MHz	Spurious	Emission Intensity	nW	0.0363



Vnom

Modulation Standard: SRD($\pi/4$ -DQPSK), CH00



-----THE END OF REPORT-----