Variant RF Exposure Report

Report No.:	SA170818C25B
FCC ID:	2ADWC-AI7697HD
Test Model:	AI7697HD
Received Date:	Agu. 30, 2018
Date of Evaluation:	Sep. 19, 2018
Issued Date:	Sep. 21, 2018
Applicant:	AcSiP Technology Corporation
Address:	3F.-1, No.207, Fusing Rd., Taoyuan Dist., Taoyuan County 330, Taiwan (R.O.C.)
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
Test Location:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Vil, Kwei Shan Dist., Taoyuan City 33383, Taiwan (R.O.C)
FCC Registration / Designation Number:	788550 / TW0003

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Release Control Record

Issue No.	Description	Date Issued
SA170818C25B	Original Release	Sep. 21, 2018

1 Certificate of Conformity

Product:	802.11 IoT Module
Brand:	AcSiP
Test Model:	AI7697HD
Sample Status:	Production Unit
Applicant:	AcSiP Technology Corporation
Date of Evaluation:	Sep. 19, 2018
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Gina Liu , **Date:** Sep. 21, 2018

Gina Liu / Specialist

Approved by : , **Date:** Sep. 21, 2018

Dylan Chiou / Project Engineer

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

f = Frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

The antenna information is listed as below.

SKU	Brand	Antenna Type	Model	Antenna Gain (dBi)		
				BT	WLAN 2.4 GHz	WLAN 5 GHz
1	Compal	Coupled	81.EKB15.G14	3.34	3.34	1.44
2		PIFA	DC33002520U	3.46	3.46	5.37

2.5 General Information

This report is issued as a supplementary report to BV CPS report no.: SA180818C25. The difference compared with original report is adding new antennas. Therefore, only conducted emission and radiated emission tests had been performed for this report. Therefore the EUT is re-calculations in this report.

2.6 Calculation Result of Maximum Conducted Power

SKU 1

Band	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WLAN	2412-2462	24.49	3.34	20	0.121	1.00
	5180-5240	14.17	1.44	20	0.007	1.00
	5745-5825	14.35	1.44	20	0.008	1.00
BT	2402-2480	6.23	3.34	20	0.002	1.00

SKU 2

Band	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WLAN	2412-2462	24.49	3.46	20	0.124	1.00
	5180-5240	14.17	5.37	20	0.018	1.00
	5745-5825	14.35	5.37	20	0.019	1.00
BT	2402-2480	6.23	3.46	20	0.002	1.00

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