JJPlus Corporation
13F.-3, No.120, Qiaohe Rd., Zhonghe Dist.,
New Taipei City 235, Taiwan

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product
Product description: 11ac/abgn 2T2R WIFI & BT Half Mini-PCIE Module
Model No: JWX6058

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the
Product : 11ac/abgn 2T2R WIFI & BT Half Mini-PCIE Module
will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M21805-18110-C-1 and W6M21805-18110-C-54 and the accompanying calculations.

Company: JJPlus Corporation
Address: 13F.-3, No.120, Qiaohe Rd., Zhonghe Dist., New Taipei City 235, Taiwan
Date: June 11, 2018

Signature

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

Test exclusion = max. conducted output power
Test exclusion = 19.36 dBm

3.3 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.
The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

$$S = \frac{PG}{4\pi R^2}$$

S – Power Density
P – Output power ERP
R – Distance
D – Cable Loss
AG – Antenna Gain

Item	Unit	Value	**Remarks**
P	mW	86.3	Peak value
D	dB		
AG	dBi	5.01	
G		3.17	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.0544	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm^2)
1500 – 100.000	1.0

3.9 Equivalent isotropic radiated power, FCC 15.407 (f)

FCC Rule: 15.407(b)(3)
Band 1
Test exclusion = max. conducted output power + adjusted for tune-up tolerance
Test exclusion = 12.7 dBm

Band 2
Test exclusion = max. conducted output power + adjusted for tune-up tolerance
Test exclusion = 12.75 dBm

Band 3
Test exclusion = max. conducted output power + adjusted for tune-up tolerance
Test exclusion = 12.3 dBm

Band 4
Test exclusion = max. conducted output power + adjusted for tune-up tolerance
Test exclusion = 11.84 dBm

Test equipment used: ETSTW-RE 055

3.10 RF Exposure Compliance Requirements

ystems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.25 m normally can be maintained between the user and the device.
FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.
The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

$$S = \frac{PG}{4 \pi R^2}$$

S – Power Density
P – Output power ERP
R – Distance
D – Cable Loss
AG – Antenna Gain

Band 1

Item	Unit	Value	**Remarks**
P	mW	18.63	Peak value
D	dB	- -	- -
AG	dBi	5.01	- -
G	- -	3.17	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.0117	Calculated value

Band 2

Item	Unit	Value	**Remarks**
P	mW	18.84	Peak value
D	dB	- -	- -
AG	dBi	5.01	- -
G	- -	3.17	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.119	Calculated value

Band 3

Item	Unit	Value	**Remarks**
P	mW	16.97	Peak value
D	dB	- -	- -
AG	dBi	5.01	- -
G	- -	3.17	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.0107	Calculated value

Band 4

Item	Unit	Value	**Remarks**
P	mW	15.27	Peak value
D	dB	- -	- -
AG	dBi	5.01	- -
G	- -	3.17	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.0096	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm^2)
1500 – 100.000	1.0

3.11 Transmit Power Control (TPC)

Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

Explanation: Max put power of the EUT is less than 500 mW (27dBm) so this test item is not required.