

802.11 a/b/g/n Module

EUB600-DM

User's Manual

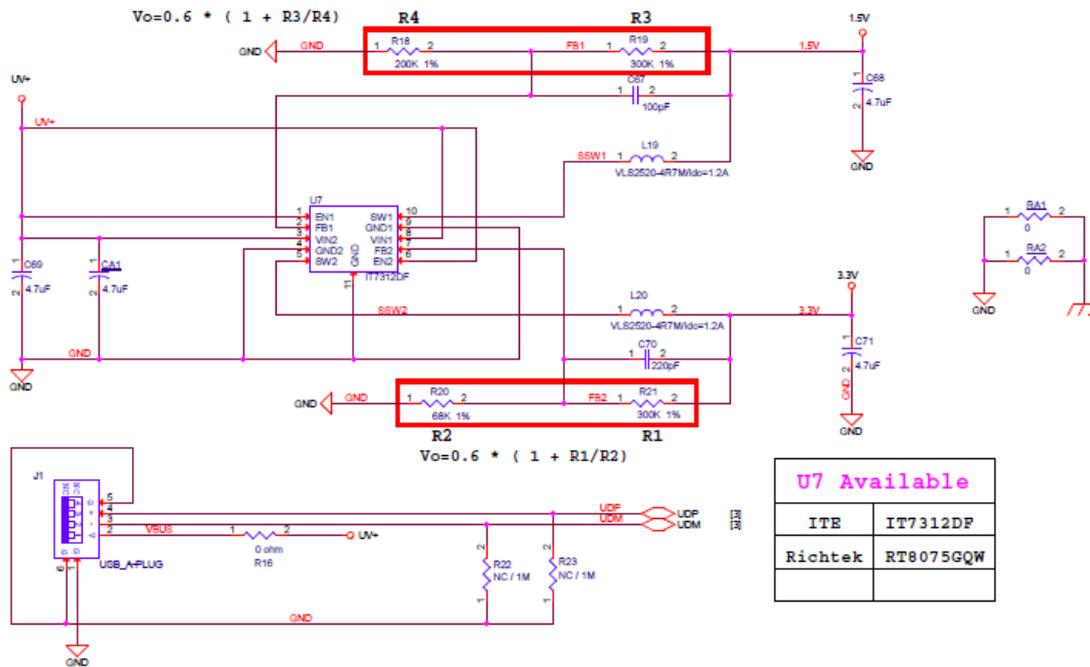
PRODUCT DESCRIPTION

The EUB600-DM is a 2.4G/5G dual band 2T2R USB module base on RT5572N solution.

PRODUCT SPECIFICATION

RF Specification																											
Radio 1	Support 2.4GHz and 5GHz																										
Interface	USB 2.0																										
Operating Voltage	5V																										
Antenna Connectors	I-PEX																										
Frequency Band	802.11a/b/g/n 2400~2483.5 MHz and 5150~5850 MHz																										
Data rate	300Mbps																										
Receive Sensitivity (Typical)	<table border="0"> <tbody> <tr> <td>802.11g</td> <td>≤ -89dBm@1~11Mbps</td> </tr> <tr> <td>802.11g</td> <td>≤ -89dBm@6Mbps</td> </tr> <tr> <td></td> <td>≤ -73dBm@54Mbps</td> </tr> <tr> <td>802.11g/n_HT20</td> <td>≤ -89dBm @ MCS0/8</td> </tr> <tr> <td></td> <td>≤ -71dBm @ MCS7/15</td> </tr> <tr> <td>802.11g/n_HT40</td> <td>≤ -89dBm @ MCS0/8</td> </tr> <tr> <td></td> <td>≤ -69dBm @ MCS7/15</td> </tr> <tr> <td>802.11a</td> <td>≤ -89dBm@6Mbps</td> </tr> <tr> <td></td> <td>≤ -72dBm@54Mbps</td> </tr> <tr> <td>802.11a/n_HT20</td> <td>≤ -89dBm @ MCS0/8</td> </tr> <tr> <td></td> <td>≤ -70dBm @ MCS7/15</td> </tr> <tr> <td>802.11a/n_HT40</td> <td>≤ -89dBm @ MCS0/8</td> </tr> <tr> <td></td> <td>≤ -68dBm @ MCS7/15</td> </tr> </tbody> </table>	802.11g	≤ -89dBm@1~11Mbps	802.11g	≤ -89dBm@6Mbps		≤ -73dBm@54Mbps	802.11g/n_HT20	≤ -89dBm @ MCS0/8		≤ -71dBm @ MCS7/15	802.11g/n_HT40	≤ -89dBm @ MCS0/8		≤ -69dBm @ MCS7/15	802.11a	≤ -89dBm@6Mbps		≤ -72dBm@54Mbps	802.11a/n_HT20	≤ -89dBm @ MCS0/8		≤ -70dBm @ MCS7/15	802.11a/n_HT40	≤ -89dBm @ MCS0/8		≤ -68dBm @ MCS7/15
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PRODUCT Pin Define



List of certificated antennas

Type	Connector	2412~2484MHz			
PCB Dipole	U.FL	2			
Type	Connector	5150~5250MHz	5250~5350MHz	5470~5725MHz	5725~5850MHz
PCB Dipole	U.FL	3	3	3	3

Gain : 3dBi

Manufacturer : Senao Networks

Model name : PCB DM AIOS core module ANT Dual-1.00 T:0.6*1L-45*10(HASL)P24 PAL

Note: The EUT has two antennas. (2TX/2RX)

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

USERS MANUAL OF THE END PRODUCT:

In the users manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the IC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. IC statement is required to be available in the users manual: This Class B digital apparatus complies with Canadian ICES-003. 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.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 2400~2483.5 MHz and 5150~5850 MHz band are restricted to indoor usage only.

This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna,

As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains FCC ID: U2M-EUB600DM".

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user' s manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Industry Canada statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et*
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Caution:

- (i) the device for operation in the band 2400~2483.5 MHz and 5150~5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

Avertissement:

- (i) les dispositifs fonctionnant dans la bande 2400~2483.5 MHz and 5150~5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

This device is intended only for OEM integrators under the following conditions:

1) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 1 condition above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes:

1) Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.

Tant que les 1 condition ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requis pour ce module installé.

IMPORTANT NOTE:

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the IC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate Canada authorization.

NOTE IMPORTANTE:

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considéré comme valide et l'ID IC ne peut pas être utilisé sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada.

End Product Labeling

The final end product must be labeled in a visible area with the following: "Contains IC:3616C-EUB600DM".

Plaque signalétique du produit final

Le produit final doit être étiqueté dans un endroit visible avec l'inscription suivante: "Contient des IC: 3616C-EUB600DM".

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Manuel d'information à l'utilisateur final

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module.

Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqué dans ce manuel.

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 3616C-EUB600DM) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

List of certificated antennas

Type	Connector	2412~2484MHz			
PCB Dipole	U.FL	2			
Type	Connector	5150~5250MHz	5250~5350MHz	5470~5725MHz	5725~5850MHz
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