



Ultra-Low-Power SoC with RISC-V Single-Core CPU

Bluetooth® 5 (LE)

4 MB flash in the chip's

package SDM (19×14 mm) package

Bluetooth®

- **Bluetooth LE: Bluetooth 5, Bluetooth mesh**
- **High power mode with up to 20 dBm transmission power**
- **Speed: 125 Kbps, 500 Kbps, 1 Mbps, 2 Mbps**
- **Advertising extensions**
- **Multiple advertisement sets**
- **Channel selection algorithm #2**

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FCC Warning Statement

This device complies with Part 15 of the FCC rules. Operation is subjected 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.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC Radiation Exposure Statement

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

The module can be installed or integrated in mobile or fix devices only. This module cannot be installed in any portable device, for example, USB dongle like transmitters is forbidden.

This module complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This module must be installed and operated with a minimum distance of 20cm between the radiator and user body.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: **2A3DLA00812** Or Contains FCC ID: **2A3DLA00812**".

When the module is installed inside another device, the user manual of this device must contain below warning statements:

1. 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.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

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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 or more 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.

IC warning statement

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:(1) This device may not cause interference.

This device must accept any interference, including interference that may cause undesired operation of the device.

Please notice that if the ISED certification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains IC: **27698-A00812**" any similar wording that expresses the same meaning may be used.

The device has been evaluated to meet general RF exposure requirement; users can obtain Canadian information on RF exposure and compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This radio transmitter **27698-A00812** has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

The concrete contents to check are the following three points.

- 1) Must use a FPC antenna such as BW2.4FNX26-10B1 with gain not exceeding 3dBi
- 2) Should be installed so that the end user cannot modify the antenna;

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3) Feed line should be designed in 50ohm

Fine tuning of return loss etc. can be performed using a matching network.

Antenna information:

Manufacturer : Shenzhen Bat Wireless Technology Co., Ltd.

Manufacturer Address : 1409, Building A, Zhiyun One Industrial Park, No. 13 Huaxing Road, Henglang Community, Dalang Street, Shenzhen, Guangdong, China

Antenna type: FPC Antenna

Model number: BW2.4FNX26-10B1

Maximum gain: 3dBi

Frequency: **2400-2500 MHz**

Notice to OEM integrator

Must use the device only in host devices that meet the FCC/ISED RF exposure category of mobile, which means the device is installed and used at distances of at least 20cm from persons.

The end user manual shall include FCC Part 15 /ISED RSS GEN compliance statements related to the transmitter as show in this manual.

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B, ICES 003.

Host manufacturer is strongly recommended to confirm compliance with FCC/ISED requirements for the transmitter when the module is installed in the host.

Must have on the host device a label showing Contains FCC ID: **2A3DLA00812**,

IC: **27698-A00812**

The modular transmitter is only FCC authorized for the specific rule parts (Part 15.247) listed on the grant, and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. If the grantee markets their product as being Part 15 Subpart B compliant (when it also contains unintentional-radiator digital circuitry), the final host product still requires Part 15 Subpart B or Part 18 etc. compliance testing with the modular transmitter installed.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;

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2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

L'appareil hôte doit porter une étiquette donnant le numéro de certification du module d'Industrie Canada, précédé des mots « Contient un module d'émission », du mot « IC: **27698-A00812** » ou d'une formulation similaire exprimant le même sens, comme suit

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

Le présent émetteur radio **27698-A00812** a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

Le contenu concret à vérifier sont les trois points suivants.

- 1) doit utiliser une antenne comme BW2.4FNX26-10B1 avec pifa gain n'excédant pas 3dBi
- 2) doivent être installés de façon que l'utilisateur final ne peut pas modifier l'antenne
- 3) La ligne d'alimentation doit être conçue en 50ohm Le réglage précis de la perte de rendement, etc. peut être effectué en utilisant un réseau correspondant

l'hôte doit utiliser l'instrument uniquement dans des dispositifs qui répondent à la fcc / (catégorie d'exposition rf mobile, ce qui signifie le dispositif est installé et utilisé à une distance d'au moins 20 cm de personnes.

le manuel de l'utilisateur final doit inclure la partie 15 / (fac rss gen déclarations de conformité relatives à l'émetteur que de montrer dans ce manuel.

le fabricant est responsable de la conformité de l'hôte, le système d'accueil avec le module installé avec toutes les autres exigences applicables du système comme la partie 15 b, ices-003.

accueillir le fabricant est fortement recommandé de confirmer la conformité avec les exigences de la fcc / (émetteur lorsque le module est installé dans l'hôte.

le dispositif d'accueil doivent avoir une étiquette indiquant contient

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