



KK-3003 Development Guide

FCC ID: 2AJZ4-KK3003

IC: 23777-KK3003

Version: Ver_1.0.0

Release date: 2018-12-28

receiver:

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Module photo

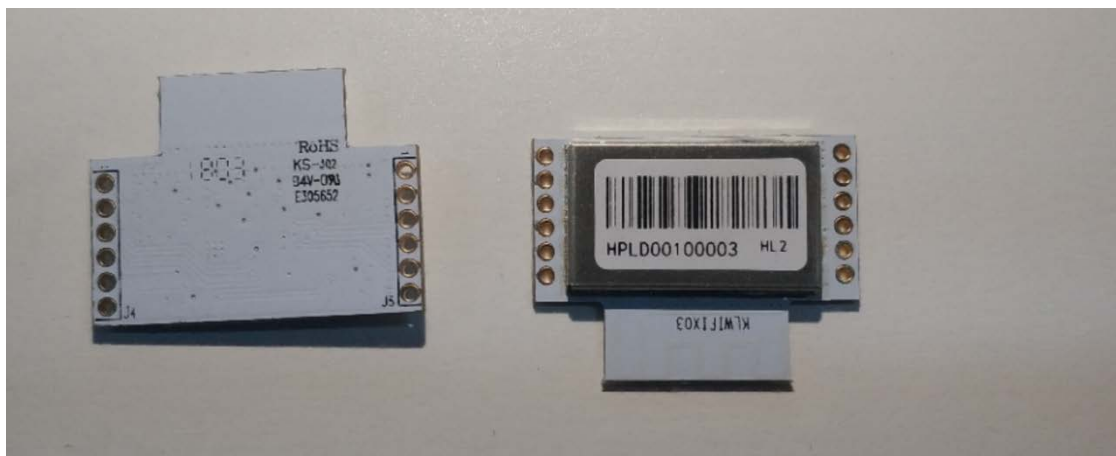


Figure 1 : Module physical map

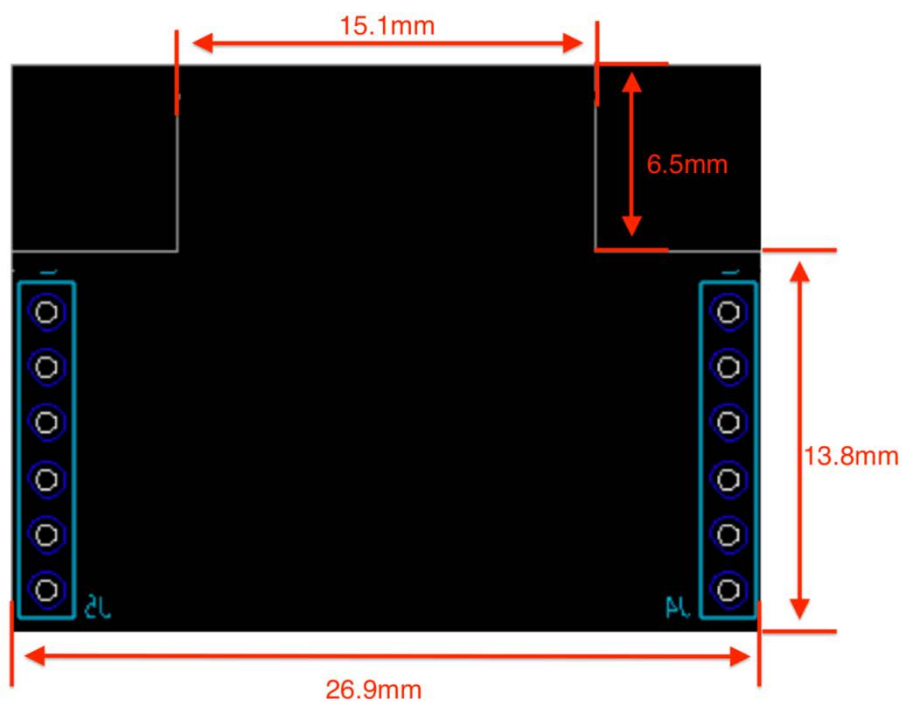


Figure 2 : Module size chart

Basic parameters

Name	Function	Remarks
WIFI	IEEE 802.11b/g/n	



CPU frequency	160MHz (Max)	
Operating System	FreeRTOS	
FLASH	1MB	Increase according to demand
RAM	128KB	
Peripherals	UART/IIC/SPI	
Number of GPIO pins	10	
Dimension (mm)	26.9 x 20.3x 1	

Pin Definitions

No.	Function	
TOP		
A1	GND	power supply , Ground
A2	VCC_33	power supply , 3.3V , 300mA (MAX)
A3	UART_TX	UART pin , Analog SignalTX Out
A4	UART_RX	UART pin, RX Signal In
A5	GPIO_A5	
A6	GPIO_A6	
A7	GPIO_A7	
BOTTOM		
B1	GPIO_B1	Do not External Pull-down; when power-up must be pin floating or Pull-up;
B2	GPIO_B2	
B3	GPIO_B3	Do not External Pull-down; when power-up must be pin floating or Pull-up; ;
B4	GPIO_B4	Do not External Pull-down; When power-up must be pin floating or Pull-up;
B5	GPIO_B5	
B6	GPIO_B6	

B7	CHIP_SLEEP	power-up must be pin floating or Pull-up When Pull-down, operating in the sleep mode, which enables low-power consumption
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Integrated Applications Solution

【Hardware integration】

- Leave a 1.2mm slot on the original control circuit board, insert the module into the slot, and solder the wave solder to the circuit board;
- The original control board supplies 3.3V power to the module to ensure a maximum supply current of 300mA;
- The original control board provides a dedicated UART interface and module interconnection for command transmission.

【Software integration】

- Modify the MCU program of the original control circuit board according to the agreed UART serial port command;

A certified modular has the option to use a permanently affixed label, or an electronic label. For a permanently affixed label, the module must be labelled with an FCC ID: 2AJZ4-KK3003. The OEM manual must provide clear instructions explaining to the OEM the labelling requirements, options and OEM user manual instructions that are required

For a host using a this FCC certified modular with a standard fixed label, if (1) the module's FCC ID is not visible when installed in the host, or (2) if the host is marketed so that end users do not have straightforward commonly used methods for access to remove the module so that the FCC ID of the module is visible; then an additional permanent label referring to the enclosed module:

“Contains Transmitter Module FCC ID: 2AJZ4-KK3003 or “Contains FCC ID: 2AJZ4-KK3003 ” must be used. The host OEM user manual must also contain clear instructions on how end users can find and/or access the module and the FCC ID.

Host product is required to comply with all applicable FCC equipment authorizations regulations, requirements and equipment functions not associated with the transmitter module portion. compliance must be demonstrated to regulations for other transmitter components within the host product; to requirements for unintentional radiators (Part 15B). To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and fully



operational. If a host was previously authorized as an unintentional radiator under the Declaration of Conformity procedure without a transmitter certified module and a module is added, the host manufacturer is responsible for ensuring that after the module is installed and operational the host continues to be compliant with the Part 15B unintentional radiator requirements. Since this may depend on the details of how the module is integrated with the host, we suggest the host device to recertify part 15B to ensure complete compliance with FCC requirement: Part 2 Subpart J Equipment Authorization Procedures , KDB784748 D01 v07, and KDB 997198 about importation of radio frequency devices into the United States.

FCC caution

Federal Communication Commission (FCC) Radiation Exposure Statement

When using the product, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements.

FCC statements:

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.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.

15B: NOTE: 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 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.

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

warning

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.

IC caution:

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.

Lors de l'utilisation du produit, maintenez une distance de 20 cm du corps afin de vous conformer aux exigences en matière d'exposition aux RF.

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.

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

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

Important Note:

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the Federal Communications Commission of the U.S. Government (FCC) and the Canadian Government authorizations are no longer considered valid and the FCC ID and IC ID cannot be used on the final product. In these circumstances, the OEM integrator shall be responsible for re-evaluating the end-product (including the transmitter) and obtaining a separate FCC and IC authorization in the U.S. and Canada.

OEM Integrators - End Product Labeling Considerations:

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: [2AJZ4-KK3003](#), IC: [23777-KK3003](#)”.

The grantee's FCC ID/IC ID can be used only when all FCC/IC compliance requirements are met.

OEM Integrators - End Product Manual Provided to the End User:

The OEM integrator shall not provide information to the end user regarding how to install or remove this RF module in end product user manual. The end user manual must include all required regulatory information and warnings as outlined in this document.



French :

**Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes:
(Pour utilisation de dispositif module)**

1. L'antenne doit être installée de telle sorte qu'une distance de 20 cm est respectée entre l'antenne et les utilisateurs.
 2. Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.
- Tant que les deux conditions 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.

Note Importante:

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisations avec un autre émetteur), la commission fédérale des communications des Etats-Unis (FCC) et l'autorisation du Canada n'sont plus considéré comme valide et l'ID FCC ou 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 FCC et IC distincte au U.S. et Canada.

Intégrateurs OEM - Considérations sur l'étiquetage des produits finis:

Ce module émetteur est autorisé uniquement pour une utilisation dans un dispositif où l'antenne peut être installée de telle sorte qu'une distance de 20cm peut être maintenue entre l'antenne et les utilisateurs.

Le produit final doit être étiqueté dans un endroit visible avec l'inscription suivante:

“Contient des, FCC ID: **2AJZ4-KK3003**, IC: **23777-KK3003**”.

L'ID FCC / ID du FCC du bénéficiaire ne peut être utilisé que lorsque toutes les exigences de conformité FCC / IC sont remplies.

Intégrateurs OEM - Manuel du produit final fourni à l'utilisateur final:

L'intégrateur OEM ne doit pas fournir d'informations à l'utilisateur final sur la manière d'installer ou de retirer ce module RF dans le manuel d'utilisation du produit final.

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

