

Zigbee RF Module Description

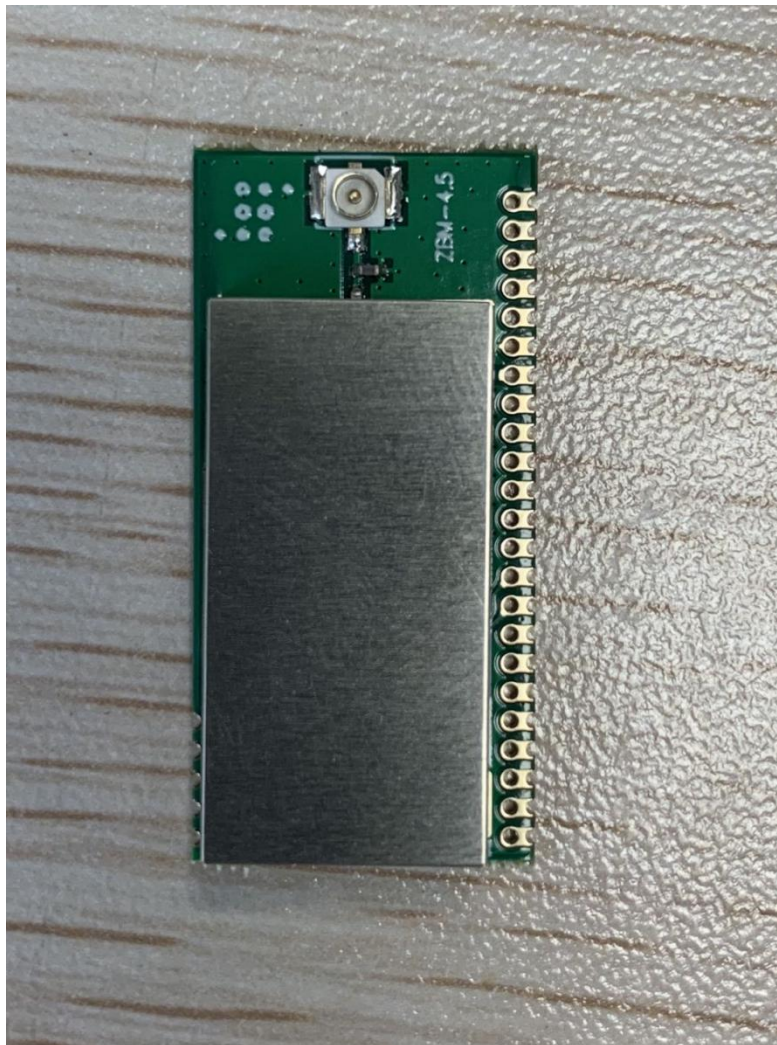
ZBM

Appearance Description

The picture is shown below, L=32mm, W=15.30mm, H=3.6mm(With the antenna). It has 28 pins, 5 on the left and 23 on the right. Foot spacing 1.27 mm.

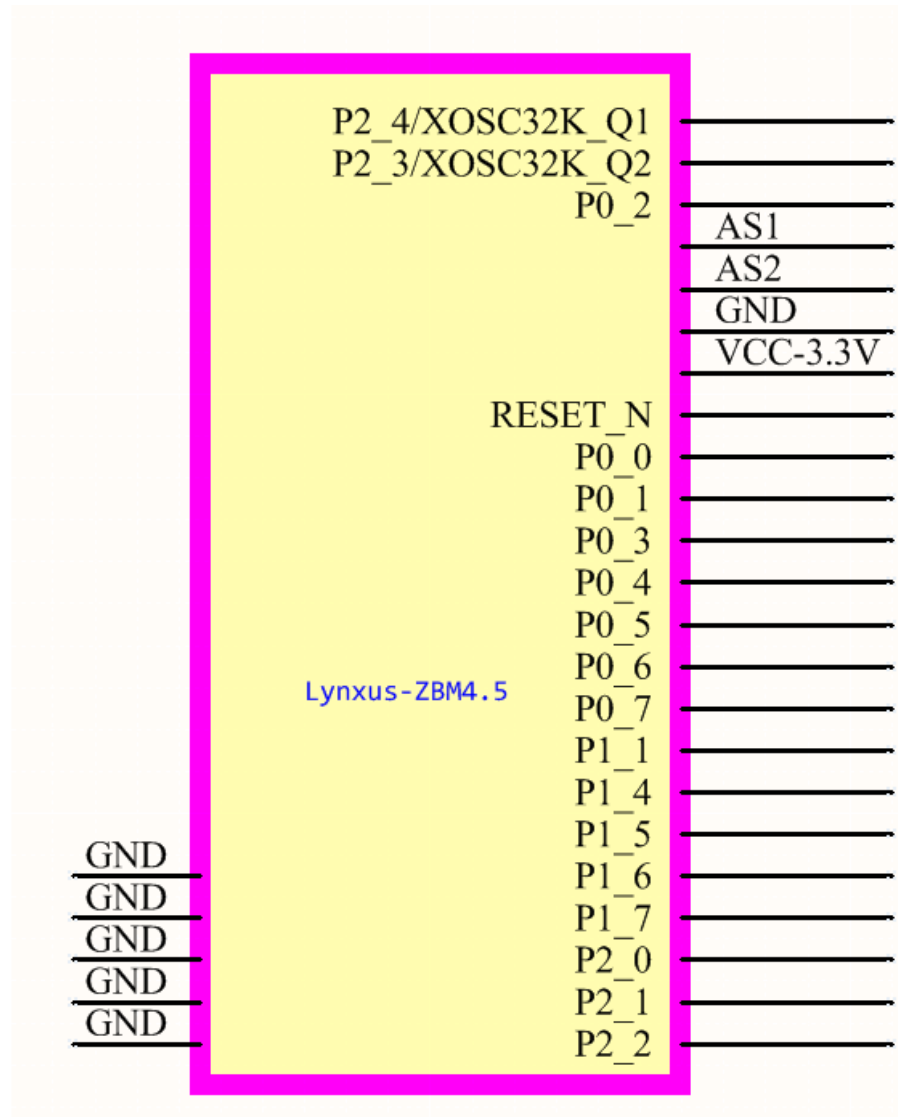
And it comes with a standard U.FL antenna seat.

This module can be used not only as patch element, but also as plug-in.



Pin distribution instructions

Pin allocation is shown below. these pins are drawn from the peripheral pins of the CC2530 chip of the module. The AS1 and AS2 are idle, the GND and VCC-3.3V are power supply pins. the voltage input range can support 2.5 V to 3.6 V. standard voltage input 3.3V.



Product characteristics

- Wireless protocol Zigbee IEEE802.15.4 standard, RF range is 2405 MHZ-2480MHZ
- The antenna interface is IPEX 1 generation and can be compatible with all kinds of 2.4 GHZ antennas such as PCB antenna, sucker antenna, columnar antenna and so on
- Support software and hardware write protection
- Storage temperature -40°C to 125°C, operating temperature -40°C to 85°C
- The output power of the built-in PA, can be up to 20 dbm, receiving sensitivity -95 dbm
- The built-in Flash, storage is 1024 KB, supported OTA
- Built-in 32.768 KHZ crystal and 32 MHZ crystal
- SPI,I2C communications can be configured

FCC Statement

- FCC standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249 External antenna with gain 3.5dBi
- 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 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
- 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.
- RF Exposure Compliance:
 - This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.
- Notice to OEM integrator

- If the FCC ID 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. The end product shall have the words “Contains Transmitter Module FCC ID: 2AHUTZBM” .
- The device must be professionally installed.
- The intended use is generally not for the general public. It is generally for industry/commercial use.
- The connector is within the transmitter enclosure and can only be accessed by disassembly of the transmitter that is not normally required.
- The user has no access to the connector.
- Installation must be controlled. Installation requires special training.
- Any company of the host device which installs this modular with unlimited modular approval should perform the test of radiated & conducted emission and spurious emission, etc. according to FCC part 15C: 15.249 and 15.209 & 15.207, 15B Class B requirement, only if the tests result comply with FCC part 15C: 15.249 and 15.209 & 15.207, 15B Class B requirement, then the host can be sold legally.
- When the module is installed inside another device, the user manual of the host contain below
 - 1) This device may not cause harmful interference.
 - 2) This device must accept any interference received, including interference that may cause undesired operation