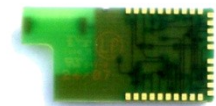


# nanoZB - NanoZigBee

## features

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- Module MCU-RF in a small package
- Scalable IEEE 802.15.4 and ZigBee Compliant Platform
- 2.4 GHz Low Power Transceiver for the IEEE 802.15.4 Standard
- 16 selectable channels
- Nominal output power 0dBm
- Receive sensitivity of -94 dBm (typ)
- Integrated or external antenna
- 6-channel 8-10 bit ADC (AD1Px)
- 2-UART
- 1 IIC bus (SCL, SDA)
- 5 general purpose input/output (GPIO)
- 1 general purpose output (GPO)
- 1-channel Input-Output Compare/PWM
- Field upgradeable
- 2V to 3.4V operating voltage
- Average current: less then 17 $\mu$ A (stop mode at 85°C)
- Operating Temperature -40°C ~ +85°C



## overview

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This module is the right response at any low-data-rate, monitoring, control or automation application that requires long battery life and wireless connectivity. This module provides solutions for wireless sensing and control applications that require networks that support simple point-to-point solutions, to complete ZigBee compliant mesh networks. It is a stand-alone module with its MCU that is in field programmable and with many pins configurable for a flexible and adaptable use to every field.

## target applications

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Industrial automation  
 Domotic  
 Medical equipment  
 Localization

Remote monitoring and control  
 Remote sensors monitoring  
 Active RF ID

## certifications

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**CE** This device complies the EU directive 99/05/CE, 73/23/CEE, 2004/108/CE

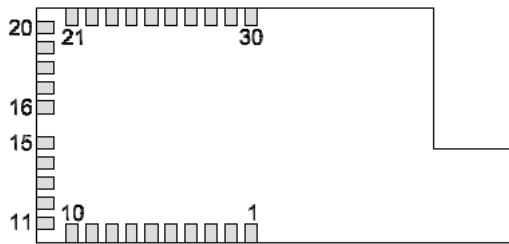
**FCC** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Module type : *IEEE802.15.4/ZigBee MODEL nanoZB*

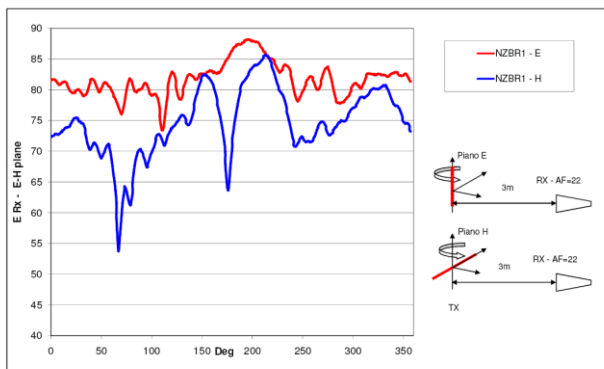
FCC-ID: *UKMNZB01*

This intends to inform you how to specify the FCC ID of our *IEEE802.15.4/ZigBee MODEL nanoZB* on your final product. Based on the Public Notice from FCC, the product into which the our transmitter module is installed mast display a label referring to the enclosed module.

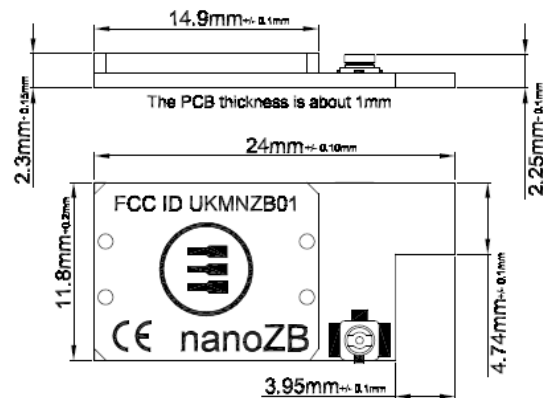
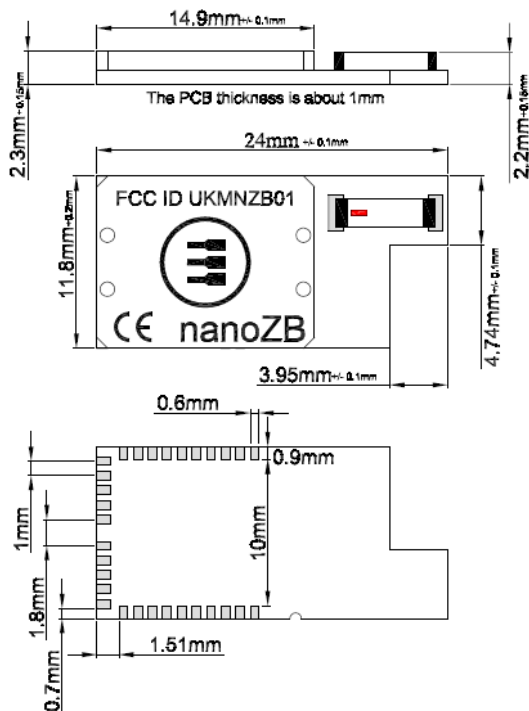
## Specifications



| Terminals    |               |
|--------------|---------------|
| 1. GND       | 16. GPIO/SCL  |
| 2. BKGD/GPO  | 17. GPIO/SDA  |
| 3. RST~      | 18. GPIO      |
| 4. AD1P1     | 19. NC        |
| 5. AD1P2     | 20. GND       |
| 6. AD1P3     | 21. AD1P0     |
| 7. AD1P4     | 22. UART_CTS1 |
| 8. AD1P5     | 23. UART_RTS1 |
| 9. VDD       | 24. UART_TX1  |
| 10. GND      | 25. UART_RX1  |
| 11. UART_CTS | 26. GPIO      |
| 12. UART_RTS | 27. GPIO      |
| 13. UART_TX  | 28. GPIO      |
| 14. UART_RX  | 29. GPIO/TPM  |
| 15. GPIO     | 30. GND       |



## Physical Dimension and Labeling



## Block diagram

### NanoZigBee

