

OPERATIONAL DESCRIPTION

nZB R1 – nanoZigBee

Index

Features.....	2
Overview	2
Target Applications	2
Physical Dimension.....	3

Features

- 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)
- 6-channel 8-10 bit ADC (AD1Px)
- 2-UART
- 1 I2C 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
- Low power: less then 17 μ A (stop mode at 85°C)
- Peak current consumption: 60 mA
- Operating Temperature -40°C ~ +85°C

Overview

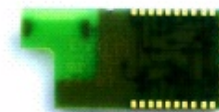
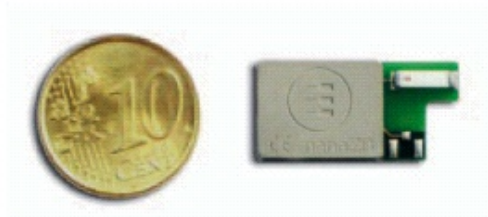
This module is the right response at any low-data-rate, monitoring, control or automation application that requires long battery life and wireless connectivity.

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.

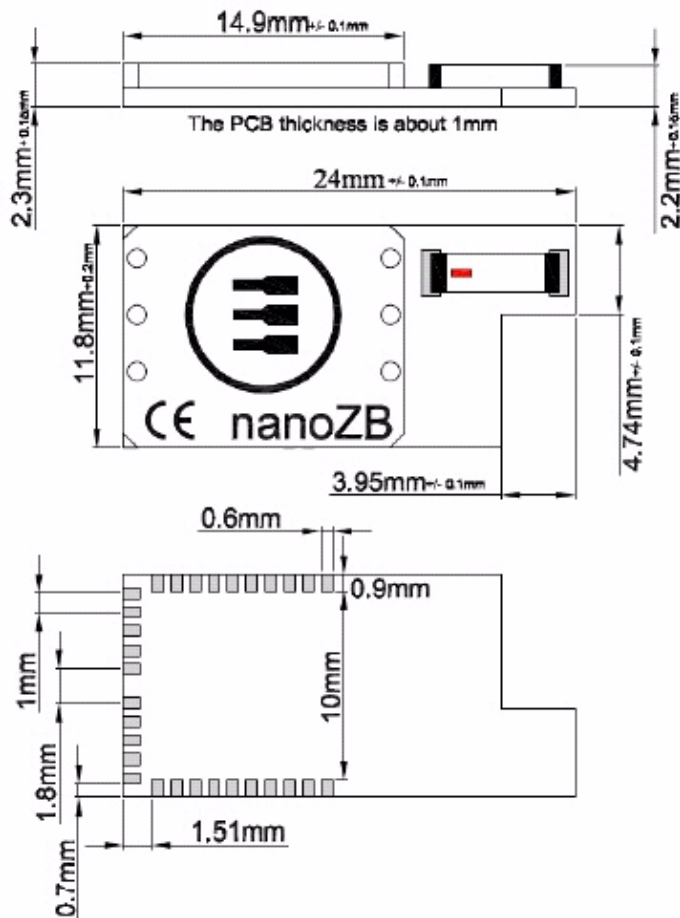
Target Applications

Industrial automation
Domotic
Medical equipment
Localization

Remote monitoring and control
Remote sensors monitoring
Active RF ID



Physical Dimension



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