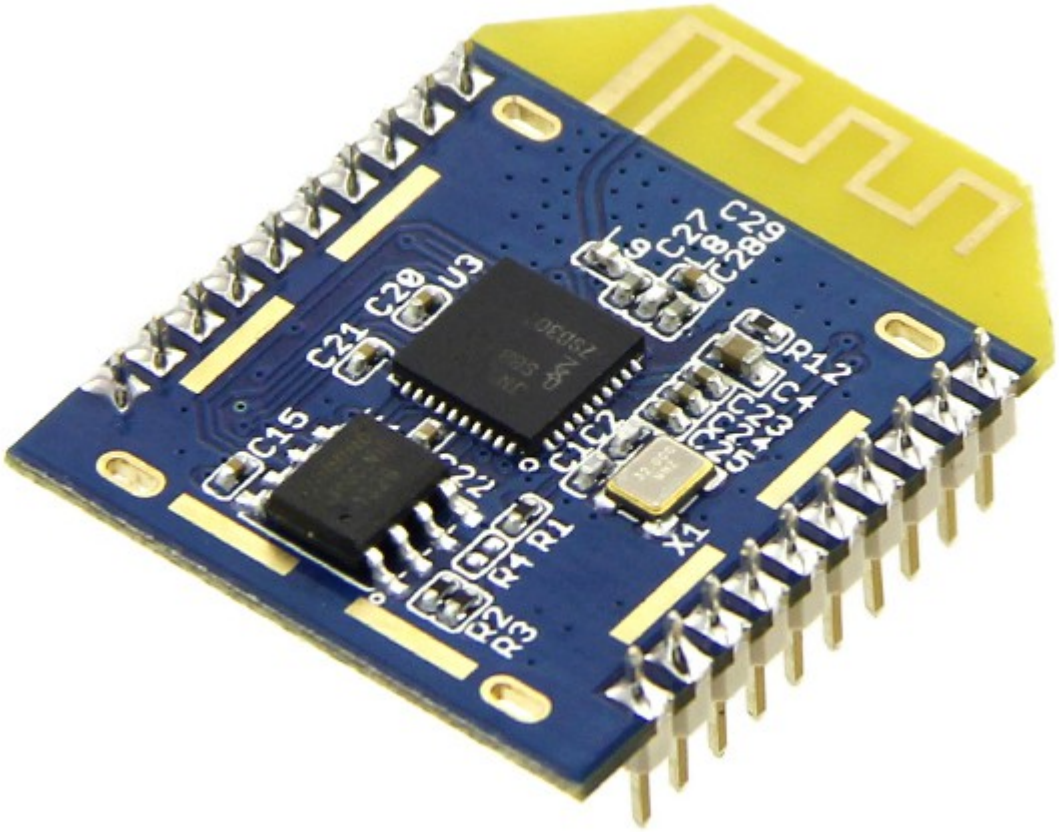
RB-See-334
Mesh Bee MCU ZigBee Pro Module



Mesh Bee is a 2.4GHz wireless transceiver from seeed studio. It's based on NXP's newly JN516x series wireless microcontroller chip and supports ZigBee Pro network stack. The factory firmware wraps the complicated ZigBee stack operation into a few easy to use serial commands, and drives Mesh Bee into a transparent serial communication node that can be part of a simple point-to-point connection or a complex mesh network. Moreover, Mesh Bee is totally open hardware and open sourced, which means that you can customize the firmware on your requirements. You can use JN516x's ARM core to control things and JenOS to simplify your development. The development environment and tools from NXP are all free. Mesh Bee will bring you lots of fun.

Features

- Range: Indoor/Urban: up to 30m; Outdoor line-of-sight: up to 100m;
- Receiver Sensitivity: -95dBm
- Data Transmission Rate: 4800, 9600, 19200, 38400, 57600, 115200 (bps)
- Working Frequency: unlicensed 2.4GHz band
- Communication type: Point to Point or Start Network or Mesh Network
- OTA support: update node's firmware on-the-air
- Easy-to-Use Serial Interface and rich extendable ports
- Easy-to-Use AT Command: Setup ZigBee network, Set Serial Baud Rate, etc.
- Open source Hardware and Firmware
- Programmable 32-bit RISC CPU: 32M clock, 256KB Flash, 32KB RAM, 4KB EEPROM
- Socket compatible with the Xbee, so you can plug it into any Xbee socket as a quick replacement.

Specifications

- Microprocessor: JN5168 (32-bit RISC CPU, 32MHz clock speed)
- Resources: 256kB/32kB/4kB (Flash/RAM/EEPROM)
- Indicators: No
- Power supply: 3.3V
- IO counts: 12
- ADC input: 3(2 multiplexing with IO)
- Interfaces: UARTx2, SPI, I2C
- Program interface: UART+MISO
- Connectivity: Socket compatible with XBee
- Communication Protocol: Uart(TTL)
- Operating Frequency Band: 2.4GHz
- Stack/Software: RF4CE, JenNet-IP , ZigBee Pro
- PCB size: 24.5mmx30.5mmx0.8mm
- Outline Dimension: 24.5mmx30.5mmx9.77mm
- Weight: 4 g