

## Bluetooth v5.0 (BLE) SMART SOC Class II IoT 0.01Mbps 3.3V 33-Pin Tray



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Microchip Technology, Inc](#)

**Package/Case:** MODULE-33

**Product Type:** RF Integrated Circuits

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The RN4870 BluetoothLow Energy module is designed for easy implementation into a broad range of applications. It delivers up to 2.5x throughput improvement and more secure connections vs. Bluetooth 4.1 based products. Developers can easily interface to the device via a standard UART interface, available on most Microcontrollers and Processors. The RN4870 has a completely integrated Bluetooth software stack, and offers a shielded regulatory certified version with built-in antenna. Developers are freed from the complexities of Bluetooth Software and RF development and can simply utilize the RN4870 as a wireline replacement. Perfect for IoT (Internet of Things) applications, when interfaced to a Bluetooth Low Energy enabled smartphone or Bluetooth Internet Gateway, applications can be monitored, controlled and updated from anywhere in the world.

The Microchip Bluetooth Data (MBD) mobile app is available to speed up development for both Android and iOS.

Microchip's complimentary and confidential Wireless Check online design review service is available for customers who have selected our products for their application design-in\*. \*The online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Firmware Release Summary, see Software Release Notes for details:

RN4870-I(V)/RM140 - (FW 1.40.0) Fixes bug with random private addressing which created IOP issue with select Android devices. Added feature to turn off advertising at power-on in order to easily configure module with the host MCU before advertising. Available in industrial temperature range (I) and varying (V) for easier transition from RN4870-V/RM118.

RN4870-I/RM130 - (FW 1.30.0) Fixes bug with invalid Bluetooth address. Refer to Errata document for more information.

RN4870-I/RM128 - (FW 1.28.2) Introduces LE Secure Connections and Data Length Extension features among other bug fixes. Also improved the operating range to 85C.

RN4870-V/RM118 - (FW 1.18.3) Initial Release.

## Key Features

Fully qualified Bluetooth smart module

On-board Bluetooth 4.2 low energy stack

ASCII command interface API over UART

Scripting engine for hostless operation

Beacon private service for beacon services

UART transparent service for serial data applications

Remote configuration over the air

Operating voltage range from 1.9V to 3.6V

Temperature range from -20°C to +70°C

Supports UART, up to three pulse width modulation (PWM) outputs

## Application

Communications & Networking, Industrial

## Recommended For You

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### **RN171-I/RM**

Microchip Technology, Inc  
MODULE

### **RN42-I/RM630**

Microchip Technology, Inc  
MODULE-35

### **RN42XVP-I/RM**

Microchip Technology, Inc  
MODULE-20

### **RN171XVU-I/RM**

Microchip Technology, Inc  
MODULE-20

### **RN42N-I/RM**

Microchip Technology, Inc  
MODULE

### **RN42-I/RM**

Microchip Technology, Inc  
35-SMD

### **RN131C/RM**

Microchip Technology, Inc  
Module

### **RN4020-V/RM120**

Microchip Technology, Inc  
MODULE

### **RN2483A-I/RM105**

Microchip Technology, Inc  
MODULE

### **RN4871U-V/RM118**

Microchip Technology, Inc  
MODULE-17

### **RN1723-I/RM100**

Microchip Technology, Inc  
Module

### **RN4870-I/RM130**

Microchip Technology, Inc  
MODULE

### **RN42HID-I/RM**

Microchip Technology, Inc  
MODULE-35

### **RN52-I/RM116**

Microchip Technology, Inc  
Module

### **RN42SM-I/RM**

Microchip Technology, Inc  
MODULE-35