

# RN2483A-I/RM104

Data Sheet

Transceiver Module, FSK, GFSK, LoRa, 300Kbps, 870MHz, -146 dBm, 2.1V to 3.6V Supply, I2C, SPI, UART

Manufacturers <u>Microchip Technology, Inc</u>

Package/Case SMD

Product Type RF Integrated Circuits

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for RN2483A-I/RM104 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

# **General Description**

The RN2483 is a fully-certified 433/868 MHz module based on wireless LoRa® technology. The RN2483 utilizes a unique spread spectrum modulation within the Sub-GHz band to enable long range, low power, and high network capacity. The module's embedded LoRaWAN<sup>TM</sup> Class A protocol enables seamless connectivity to any LoRaWAN compliant network infrastructure, whether public or privately deployed. The module is specifically designed for ease of use, which shortens development time and speeds time to market. LoRa technology is ideal for battery-operated sensors and low power applications such as IoT, M2M, Smart City, Sensor networks, Industrial automation, and more. The RN2483 is the first LoRa module to pass LoRa Alliance Certification testing. It is certified to the LoRaWAN 1.0 specification, ensuring that designers can quickly and easily integrate their end devices into any LoRaWAN network.

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.

Microchip Technology Inc., a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced the first in a series of modules for the LoRa technology low-data-rate wireless networking standard, which enables Internet of Things (IoT) and Machine-to-Machine (M2M) wireless communication with a range of more than 10 miles (suburban), a battery life of greater than 10 years, and the ability to connect millions of wireless sensor nodes to LoRa technology gateways. The 433/868 MHz RN2483 is a European R&TTE Directive Assessed Radio Module, accelerating development time while reducing development costs. Additionally, it combines a small module form factor of 17.8x26.3x3 mm with 14 GPIOs, providing the flexibility to connect and control a large number of sensors and actuators while taking up very little space. To learn more about this new module, go to: http://www.microchip.com/LoRa-Module-030215a. And, visit Microchip at the LoRa Alliance should be Morld Congress Open House, at 5:30 p.m. on this Wednesday, March 4, at the Miramar Hotel. The RN2483 module is a revolutionary end-node IoT solution for the new LoRa technology network, enabling extremely long-range, bidirectional communication with significant battery life, said Steve Caldwell, vice president of Microchips Wireless Products Division. As a founding member of the LoRa Alliance, we are working to ensure our modules are compatible with all partner gateways and back-end network service providers.

# **Features**

On-board LoRaWAN<sup>TM</sup> Class A protocol stack

ASCII command interface over UART

Compact form factor 17.8 x 26.7 x 3 mm

Castellated SMT pads for easy and reliable PCB mounting

Device Firmware Upgrade (DFU) over UART

14 GPIO for control, status, and ADC

Highly integrated module with MCU, crystal, EUI-64 Node Identity Serial EEPROM, Radio transceiver with analog front end, and matching circuitry

Environmentally friendly, RoHS compliant

European R&TTE Directive Assessed Radio Module

#### **Related Products**



### RN52SRC-I/RM100

Microchip Technology, Inc SMD



### RN4871-I/RM128

Microchip Technology, Inc SMD



# RN4871-V/RM140

Microchip Technology, Inc



#### RN4871-I/RM130

Microchip Technology, Inc 16-SMD SMD



### RN4871-V/RM130

Microchip Technology, Inc SMD



#### RN4871-V/RM118

Microchip Technology, Inc 16-SMD SMD



# RN4871-I/RM140

Microchip Technology, Inc SMD



#### **RN-4870-SNSR**

Microchip Technology, Inc N/A