

# AT86RF233-ZUR

## RF Transceiver 3.3V 32-Pin QFN EP T/R

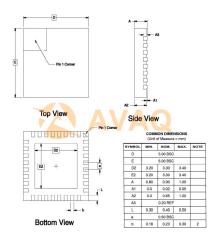
Manufacturer: <u>Microchip Technology, Inc</u>

Package/Case: QFN32

**Product Type:** Communication & Networking ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

## **General Description**

Feature rich, low-power 2.4GHz transceiver designed for industrial and consumer IEEE 802.15.4-2006/2011, zigbee, SP100, WirelessHART, ISM, and high data rate applications. It is a true SPI-to-antenna solution providing a complete radio transceiver interface between the antenna and the microcontroller. It comprises the analog radio transceiver and the digital demodulation including time and frequency synchronization, and data buffering. All RF-critical components are integrated on a single chip minimizing the number of required external components to the antenna, crystal and decoupling capacitors. The bidirectional differential antenna pins, used for transmission and reception, eliminate the need for an external antenna switch.

An internal 128 byte RAM buffers transmit and receive data. Two on-chip low dropout (LDO) voltage regulators provide the internal analog and digital 1.8V supply

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.

## **Key Features**

High Performance RF-CMOS 2.4GHz radio transceiver targeted for IEEE® 802.15.4, zigbee®, RF4CE, 6LoWPAN, and ISM applications

Industry leading link budget:

Receiver sensitivity -101dBm

Programmable TX output power from -17dBm up to +4dBm

Ultra-low current consumption: 0.02 µA in deep sleep mode

Ultra-low supply voltage (1.8V to 3.6V) with internal regulator

Support for coin cell operation

Optimized for low BoM Cost and ease of production: few external components necessary

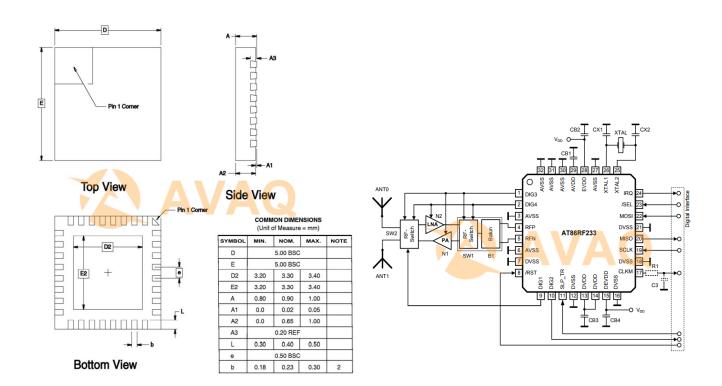
Easy to use interface

Industrial and extended temperature range: -40C to  $\pm$ 85C and -40C to  $\pm$ 125C

I/O and packages: 32-pin QFN package, 5 x 5 x 0.9mm3

Compliant to EN 300 328/440, FCC-CFR-47 Part 15, ARIB STD-66, RSS-210

Compliant to IEEE 802.15.4 2003/2006/2011



#### **Recommended For You**

ATmega128RFA1-ZU	AT86RF215-ZUR	AT86RF231-ZU
Microchip Technology, Inc	Microchip Technology, Inc	Microchip Technology, Inc
QFN64	QFN48	QFN32

AT86RF233-ZU

Microchip Technology, Inc

QFN32

ATWINC1500B-MU-T

Microchip Technology, Inc

QFN40

ATSAMR34J18BT-I/7JX

Microchip Technology, Inc

TFBGA

ATSAMR35J18BT-I/7JX

Microchip Technology, Inc

TFBGA-64

ATWILC1000B-UU-T

Microchip Technology, Inc

55LWLCSP3.25x3.25

AT86RF215-ZU

Microchip Technology, Inc

QFN48

ATWILC1000B-MU-Y

Microchip Technology, Inc

QFN

ATWILC1000B-MU-T

Microchip Technology, Inc

QFN

ATBTLC1000A-MU-T

Microchip Technology, Inc

QFN32

AT86RF212B-ZU

Microchip Technology, Inc

QFN32

AT88RF1354-ZU

Microchip Technology, Inc

VQFN6x6

ATSAMR21G17A-MU

Microchip Technology, Inc

QFN48