

Complete solution provider

Accurate and reliable medical specifications

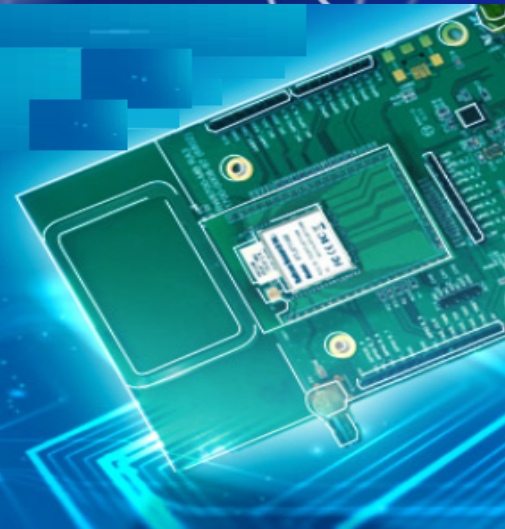
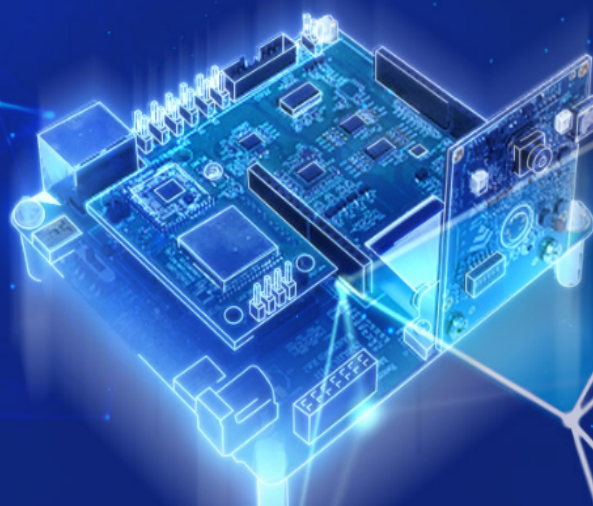


TABLE OF CONTENTS

Model No.	Type	Interface	WiFi 5	Bluetooth 5.3	WiFi 5/Bluetooth 5.3 Combo	Ethernet	Page
RTL8711AM	Serial to Wireless	SPI, UART, I2C, I2S, SPI, PWM	■				3
WiFiHu52	USB to Wireless	USB 3.0	■				4
PC104S-W7	Serial to Wireless	Serial and SPI	■				5
RB8762C	Serial to Wireless	I2S, PWM,, SPI		■			6
RB8762 Sensor	Bluetooth Body Temperature Sensor			■			7
RB8761BTV	UART			■			8
RB8761BUV	USB 3.0			■			9
TB8762LS	Serial to Wireless	Serial, GPIO		■			10
TB8762LR	Serial to Wireless	UART		■			11
RW8852B	PCIe	WLAN PCIe, USB			■ (WiFi 6)		12
RBW8852CE	PCIe	WLAN PCIe, USB			■ (WiFi 6E)		13-14
RW8300E	Serial to Wireless	RJ45, USB			■	■	15
RWLS8300	Serial to Wireless				■	■	16
RBW8362	Bluetooth Soil Sensor	USB 3.0, RJ45			■		17
RB8720D	Serial to Wireless	UART, USB, SPI			■		18
RA6000	Serial to Wireless	RJ45, USB, Arduino			■		19
RR1233U	Radar Sensor	SPI, USB					20
LSD8300S	Serial to Ethernet	RJ45, USB				■	21
LUHM325	Serial to Ethernet					■	22



Wireless technology solution /Networking/IOT

BluePacket dedicates not only at the industrial, medical, control applications but the product for personalization. We develop "BluePacket Advanced Development Platform" and provide one-stop-shopping totally solution for our customers to simplify their product launch processes and also to shorten the development lead time.

Founded in 2002, BluePacket manufactures, markets and supports high performance communications products that provides access and sharing of information in the forms of electronic data, fax and voice.

Products

BluePacket designs its products in compliance with all major international and domestic communications standards and protocols. Many of the products are designed using proprietary source codes to support CPU and DSP, allowing rapid modification of products features to meet specific requirements.

Business

Majority of our business come from OEM and private labels, many of our clients are the worldwide leaders in their industries. Flexibility, extensive data-communication engineering background, quick turn-around and highly competitive prices are key factors that stimulate the continuous growth of our OEM & Private-label business. We're currently shipping modems of various types to a wide range of well-known companies, including:

Our Sales Support, Technical Support and Research and Development activities are located both in San Jose, California and Taiwan. Primary manufacturing is in Taiwan where the facility can produce up to 300,000 modems per month.

Consult-

We're providing ways and solutions that meet the specific requirements of their application for each our high valued customers.

Design-

We see our Design Service as the core vital value that could bring so much more efficiency and effectiveness for your special customized solutions that together with our technology and application-focused engineers are vastly experienced.

Integrate-

With our leading-edge manufacturing capabilities, we are dedicated to provide innovative integration of technologies that commit to your own special application with integration and connection successfully with people, products, and processes for your best values with best quality of product & services. production

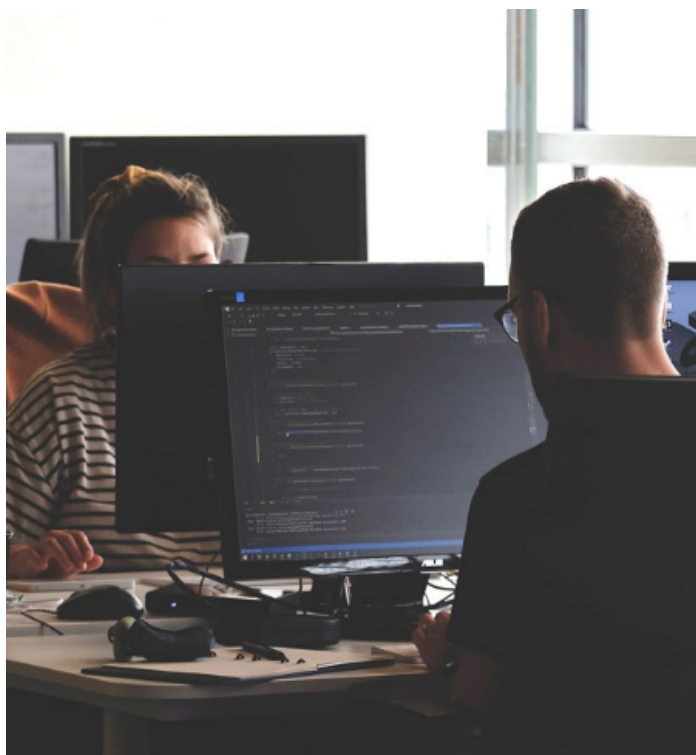
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Commitment

Bluepacket has strong commitment continuing its growth by expanding the OEM private labeling customer base as its primary goal. Aggressively increasing our investment on products development, sales, marketing and technical supports, We aim to become one of the leading providers of access information.



WiFi Module

Radicom Research, Inc.

671 E. Brokaw Road, San Jose, CA 95112

Tel: 408-383-9006 | Fax: 408-383-9007

<http://www.radi.com/>**Embedded WiFi Serial Module – RTL8711AM series****Serial/SPI Interface**

Radicom's RTL8711AM embedded WiFi module series use a serial interface to add state of the art data WiFi wireless operation to any system. The RTL8711AM WiFi module integrates an ARM processor, RF, 802.11b/g/n MAC and baseband. Featuring a self-contained WiFi subsystem, streamlined and simple connectivity and complete software development environment, the RTL8711AM allows OEM integrators to incorporate WiFi wireless technology into a broad range that previously did not feature networking capabilities. It is designed to fully support **IEEE802.11b** Draft 2.0, **IEEE802.11g** and **IEEE802.11n** standards.

The RTL8711AM is available in surface mount (SMD) or through-hole (DIP) hardware designs. The surface mount model is RTL8711AM. The through-hole model is RTL8711-HM. Combine RTL8711-HM with RTL8711-MB, which is designed for RS232 DB9 directly plug-in. This series also have RTL8711-HM and RTL8711-MB for testing purpose. If you need more information, please contact Radicom.

Application:

- WiFi Gadget
- WiFi Video Camera
- WiFi AP
- WiFi Client
- IoT Internet of Thing

Features:

- Interfaces: UART, SPI, I2S, I2C, PCM, ADC, DAC, PWM
- IEEE 802.11b/g/n compatible WLAN
- HTTPS/SSL, TCP/UDP, ARP, ICMP,
- Built in RTOS
- mDNS
- WiFi WPS support
- WiFi Direct support*
- 1T1R
- 20MHz and 40MHz bandwidth transmission
- Maximum 21 GPIO pins available
- NFC support*



RTL8711AM



RTL8711AM-HM



RTL8711AM-MB



RTL8711AM-83



RTL8711AM-MB3

- RTOS and TCP/IP support
- Configurable through AT commands
- Low power 3.3V operation
- Extended operating temperature: -40 to 105 degrees
- Small size
RTL8711AM SMD module: 22.25mm x 19.0mm
RTL8711AM-HM dip module: 46.0mm x 31.0mm
- Support WiFi Client (Station) and Host (Access Point) modes
- No powerful host processor required
- Custom I/O available to meet OEM requirements
- Firmware upgradeable through serial port
- Support power saving mode
- Integrated ARM Cortex-M3 processor and on chip memory for complete WLAN subsystem functionality
- OTA over the air programming
- FCC/IC/CE, TELEC, KC, SRRC, CB, NCC, AS/NZS etc.
- RoHS compliant

Support:

- IEEE 802.11b/g/n compatible WLAN
- IEEE 802.11e QoS Enhancement (WMM)
- IEEE 802.11h TPC, Spectrum Measurement
- IEEE 802.11i (WPA, WPA2), Open, shared key, and pair-wise key authentication services
- Contact Radicom for the details

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www.radi.com**USB WiFi Modules– WiFiHU52 Series****USB Interface**

The Radicom Research WiFiHU52 series is a 5G/2.4GHz WiFi module that easily adds connectivity to virtually any processor-based device. The module is IEEE802.11 b/g/n/ac™ 1T1R WLAN with USB 2.0 interface.

With reliable transmissions, this USB Wireless Ethernet (WLAN) device has extended transmission and receiving ranges with good minimum sensitivity. For legacy compatibility, Direct Sequence Spread Spectrum (DSSS), Complementary Code Keying (CCK) and OFDM baseband processing are included to support all IEEE 802.11a, 802.11b and 802.11g data rates. The compatible coding rate of 1/2, 2/3, 3/4, and 5/6 provides up to 433.3Mbps for IEEE 802.11ac with MIMO-OFDM.

The WiFiHU52 family supports fast receiver Automatic Gain Control (AGC) with synchronous and asynchronous control loops among antennas, antenna diversity functions, and adaptive transmit power control functions to obtain better performance in the analog portions of the transceiver.

The WiFiHU52 series feature Soft AP support. It can turn your Internet connected PC or Laptop into a WiFi Wireless Access Point. So any nearby WiFi devices such as iPhone, iPod, PDA, can connect to the Internet through your sharing.

The WiFiHU52 protects the host with compliance of WPA/WEP/WEP2 security protocols. The module is power efficient.

Models:

- WiFiHU52M : WiFi SMD Module for external antennas
- WiFiHU52M-a/c : WiFi SMD Module with dual on board chip antennas/U.FL connectors
- WiFiHU52S-a/c : WiFi SMD Module with dual on board chip antennas/U.FL connectors
- WiFiHU52-HM-a/c : WiFiHU52M-a/c module mounted on carry board for DIP (through-hole) interface.
- WiFiHU52-NE1-a/c : WiFiHU52-HM-a/c installed in Base Board with USB B Jack.
- WiFiHU52-NE2-a/c : WiFiHU52M-a installed in Base Board with mini USB A Jack.
- WiFiHU52E : WiFi module in Plastic Enclosure with embedded on-board antennas and mini USB A jack
- WiFiHU52E-T : WiFi module in Plastic Enclosure with pig tail USB A type cable
- WiFiHU52D : WiFi dongle with chip antenna and USB A type connector
- WiFiHU-CB1 : Base Board for WiFiHU52-HM DIP module

**Application:**

- Ethernet USB adapter
- Remote connectivity
- Remote monitoring and control
- Test and measurement equipment
- Network gateway adapter

Features:

- Small size: 0.59" x 0.56" x 0.11"(H)
- Extended temperature
- Complies with USB 2.0 for WLAN
- Complete 802.11n MIMO solution for 2.4GHz and 5Ghz band
- Support 802.11ac 1x1, Wave-2 compliant with MU-MIMO STA mode
- Maximum PHY data rate up to 86.7Mbps using 20MHz bandwidth, 200Mbps using 40MHz bandwidth, and 433.3Mbps using 80MHz bandwidth.
- Backward compatible with 802.11a/b/g devices while operating at 802.11n data rates
- Fast receiver Automatic Gain Control (AGC)
- WiFi security using WEP, WPA and WPA2
- Linux 4.4.x up to 5.x support
- Soft-AP Support
- Windows Win7. Win10 .Win11 support
- LED output for visual monitoring of link and activity
- FCC/IC/CE certified (pending)
- SAR
- RoHS 3 compliant

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www.radi.com**PC104S WiFi Modem Adapter Board – PC104S-W7 Series**

Radicom PC104S-W7 WiFi Modem. We are committed to providing you quality service and technical support. This Modem family is the perfect solution for integrating Wi-Fi wireless applications into PC104 embedded host. The PC104S-W7 WiFi Modem integrates a powerful ARM CORTEX M3 processor with WiFi transceiver. Featuring a self-contained WiFi subsystem, simple connectivity and complete AT command set for different applications, the PC104S-W7 allows OEM integrators to incorporate WiFi wireless technology into a broad range that previously did not feature networking capabilities. It is designed to fully support IEEE802.11b Draft 2.0, IEEE802.11g and IEEE802.11n standards.

This document is a guideline to help you design the PC104 modem into your system. If further information is needed please contact us and we will provide any additional help you may need.

The PC104S-W7 with PC104S + WiFi 802.11b/g/n through hole pin Module

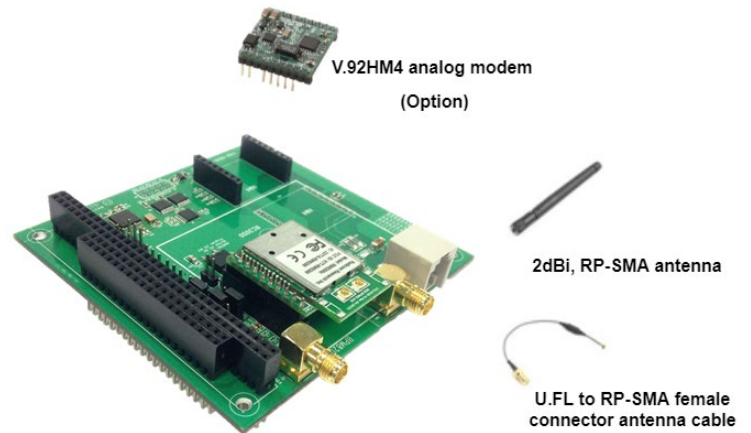
- PC104S : with one SPI interface for RW8711-HM (Default)

WiFi module on adapter board:

- RW8711HM-a : DIP Module with on-board chip antennas
- RW8711HM-c : DIP Module with U.FL connectors for external antennas)

Analog modem:

- V92HM4 : 1" x 1" x 0.3" (H) module only (Option)

**Features:**

- PC/104 interface
- Support PC/104 8bits/16bits connectors
- Support Com Port 1~4, IRQ3~7, IRQ9~12, and IRQ15
- Support Serial and SPI interface
- IEEE 802.11b/g/n compatible WLAN
- WiFi Security Station Mode: WEP-64, WPA-TKIP, WPA-AES, WPA2, WPA2-TKIP
- WiFi Security Access Point Mode: WPA2, WPA2-TKIP
- Support WiFi Client (Station) and Host (Access Point) modes
- No powerful host processor required
- Integrated TCP/IP stack
- Configurable through AT Commands or TCP/IP port
- Extended operation temperature range of -40°C to +85°C
- FCC/IC/CE Certified (on WiFi module)
- SIA Protocol & Ademco Contact ID Support. IEC60601-1 (Medical) Complaint (on modem module)
- RoHS 3 Compliant

Bluetooth Module

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www.radi.com**Embedded Bluetooth BT5.3 Module – RB8762C series****UART/SPI/I2S/PWM Interface**

Radicom RB8762C embedded Bluetooth module series uses as simple as a Serial interface to add state of the art data/audio/key scan BT 5.3 wireless operation to any system. The RB8762C BT Module integrates an ARM processor, RF, baseband, ADC, and embedded flash memory. Featuring a self-contained BT5.1 subsystem, streamlined and simple connectivity and complete software development environment with varieties multi-I/O interfaces, the RB8762C allows OEM integrators to incorporate BT wireless technology into a broad range that previously did not feature wireless capabilities. It is designed to support interfaces, such as UART, SPI, I2S, PWM and GPIOs.

The RB8762C series is available in surface mount (SMD) or through-hole (DIP) hardware designs.

Models: (x) Represented different applications:

RB8762C(x)F-a-(RA): SMD module with antenna onboard.

RB8762C(x)F-c-(RA) : SMD module with connector for external antenna.

-(J): Joystick

-(K): Keyboard

-(M): SIG MESH

-(RA) Module added 2.54 Double rows pin header

RB8762CS: Tiny module for Data Transfers

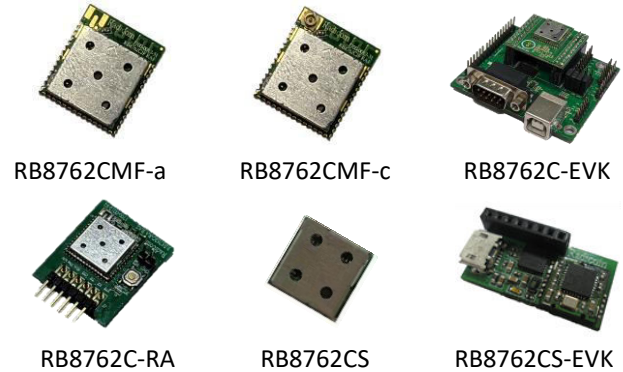
RB8762C-EVK : RB8762CS-EVK

Application:

- Remote Controller
- Toy
- Beacon
- Home Automation
- Key Fob
- Wristband & Wearable Device
- Long range audio

Features:

- BT 5.3 core specification
- Ultra low power consumption with intelligent PMU
- LE advertising extension
- LE long range
- LE L2CAP Connection Oriented Channel Support
- Support LE low duty directed advertising
- Support GAP, ATT/GATT, SMP, L2CAP



- Operates in 2.4GHz frequency range
- Generic Applications for GAP Central, Peripheral, Observer and Broadcaster Roles
- Support OTA (Over-the-Air) programming
- Support internal 32KHz OSC or external 32KHz clock input for low power mode
- Low power 3.3V operation
- Operating temperature: -40°C ~ +85°C
- Small size: RB8762C: 0.59" x 0.69" x 0.11" (WxLxH)
RB8762CS: 0.40" x 0.40" x 0.11" (WxLxH)
RB8762C-RA: 0.97" x 1.22" x 0.40" (WxLxH)
- No powerful host processor required
- Firmware upgradeable through serial port or OTA
- Integrated ARM processor and on chip memory for complete Bluetooth Smart device subsystem functionality
- High receive sensitivity
- FCC/IC/CE certified (pending)
- RoHS 3 compliant

Support:

- AES128/192/256 encrypt/decrypt engine
- Maximum 34 GPIO pins available
- 3 configurable LED pins
- Embedded IR transceiver
- Real-time counters (RTC)
- 4 wire master/slave SPI, UART x 2
- I2C x 2, PWM x 8, Timer x 8
- 8 channel low power comparator
- 8 channel AUXADC
- Hardware Key scan and Quad-decoder
- 2Mbps LE
- I2S/PCM interface for external audio mode
- Support I8080 for LCD interface

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Embedded BLE-Temperature sensor system – RB8762 sensor series

Radicom RB8762 Sensor System including low energy temperature and accelerator tags and an internet gateway device uses as a complete long time monitoring and recording from remote as well as can be immediately accessed from a smart phone to add state of the art noncontact short distance or long range remote monitoring application. The RB8762 Sensor tags integrate a low power ARM processor, RF, baseband, and 256KB embedded flash memory. Together with RB8762 internet gateway which is embedded a long range WiFi capability featuring a self-contained monitoring subsystem, streamlined and simple connectivity. With the smart phone APP and easy software development environment for remote monitoring, the RB8762 sensor system allows OEM integrators to incorporate wireless and sensor technology into a broad range application that previously did not feature wireless sensing capabilities. It is designed to support single or multi-sensing system. The RB8762 thermometer tag is available in a standalone or PCBA which can be integrated into other system board easily for all kinds of different application.

Models:

RB8762-T: Patch temperature sensor.

RB8762-R: Sensor receiver gateway.

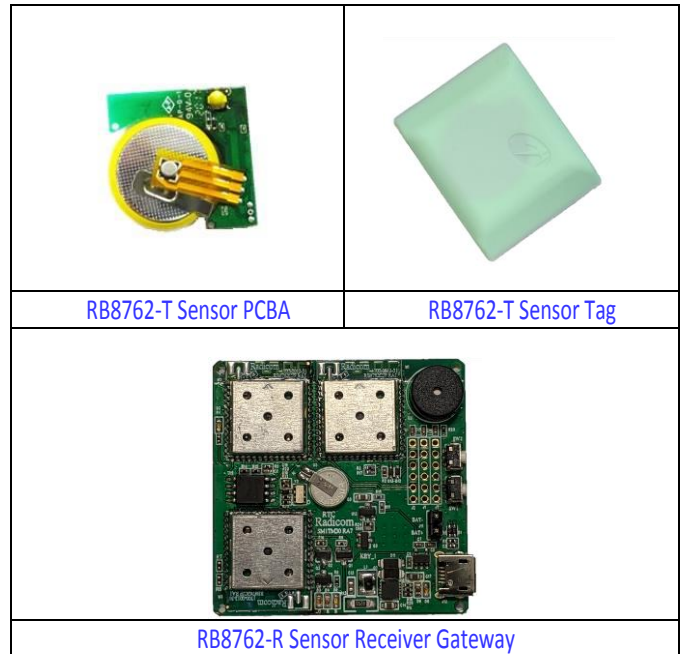
RB8762-I: Internet gateway of RB8762 system.

Application:

- Temperature/and other sensor recorder.
- Low energy monitoring tag
- Home care monitoring tag
- Health tracking tag
- Wristband, wearable or patchable device

Features:

- Various sensor measurement and long term recording transmitter
- Smartphone APP configuration and receiver
- Power saving mode: up to 120 day records
- Single or multiple sensors in a device
- Ultra low power consumption with intelligent PMU



- Support OTA (Over-the-Air) programming
- Support internal 32KHz OSC or external 32KHz clock input for low power mode
- Configurable through smart phone APP
- RB8762-T size : 1.26" x 1.57" x 0.24"
 - CR2032 3V battery power input
 - Storage temperature: 25°C±5°C .Humidity <70% RH
 - Operating temperature: -20°C ~ +60°C
 - Waterproof level IP 21
- RB8762-R size : 1.80" x 1.78" x 0.39"
 - Li-ion 3.7V battery power input
 - Storage temperature: -55°C ~ +125°C
 - Operating temperature: -40°C ~ +85°C
- No powerful host processor required to read from tag
- FCC/IC/CE/NCC (pending)
- RoHS 3 compliant

Support:

- WiFi , BLE and other wireless applications
- Internet capability
- Support SIG MESH function
- Real-time counters (RTC)

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**Bluetooth Smart Ready Module / HCI Dongle****UART/USB Interface**

Radicom's RB8761B series with a UART RB8761BTU / USB RB8761BUV interface Bluetooth module and RB8761BUV dongle. It combines BT Protocol Stack (LM, LL, and LE), BT Baseband, modem, and BT RF in product.

The RB8761B series Bluetooth solution complies with Bluetooth core specification v5 and supports dual mode (BR/EDR + Low Energy Controllers). It is compatible with previous versions, including v2.1 + LE. For BR/EDR, it allows multiple active links in either slave mode or master mode. For Low Energy, it supports multiple states and allows multiple active links in slave mode. A BR/EDR link and an LE link can be active at the same time

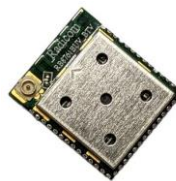
With software stacks, profiles and commands built in, the RB8761B series is capable of communicating with both single mode Bluetooth Smart devices, such as watches, heart-rate monitors, trainers, etc., as well as the dual mode 'classic' Bluetooth devices that act as hubs for sensor information.

Models:

- RB8761BTU : Bluetooth 5.3 HS-UART interface module
- RB8761BUV : Bluetooth 5.3 USB interface module
- RB8761BUV dongle: Bluetooth 5.3 USB interface
Smart ready HCI dongle
- RB8761-EVK: RB8761 Series Evaluation kit, which is
Designed for testing purpose

Applications:**Computing devices add-on including:**

- PCs
- All-in-Ones
- Laptops
- Netbooks



RB8761BTU/RB8761BUV

RB8761BUV HCI Dongle
Enclosure can be custom made.

RB8761-EVK

FEATURES:**Bluetooth 5 specification compliant**

- Single-end RF radio output with high performance 10dBm of BR transmitter power and -94.5dBm 2M EDR receiver sensitivity.
- Supports Bluetooth classic (BR/EDR)
- Supports Bluetooth Low Energy (BLE)

Host Interface

- RB8761BUV Complies with USB1.1 full speed mode.

Bluetooth Controller

- Compatible with Bluetooth v2.1 Systems
- Integrated MCU to execute Bluetooth protocol stack
- Supports all packet types in basic rate and enhanced data rate
- Supports Secure Simple Pairing
- Supports multiple Low Energy states
- Supports TX +7.5dBm maximum output power for Bluetooth EDR
- Operating voltage: 4.75V to 5.25V
- Temperature range: 0°C to +70°C

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**Bluetooth Smart Ready V5.3 HCI Dongle****USB Interface**

Radicom RB8761BUV Bluetooth dongle incorporates with Realtek highly integrated single-chip Bluetooth 5 controller with USB interface. It combines BT Protocol Stack (LM, LL, and LE), BT Baseband, modem, and BT RF in a single chip.

The RB8761BUV Bluetooth solution complies with Bluetooth core specification v5 and supports dual mode (BR/EDR + Low Energy Controllers). It is compatible with previous versions, including v2.1 + LE. For BR/EDR, it allows multiple active links in either slave mode or master mode. For Low Energy, it supports multiple states and allows multiple active links in slave mode. A BR/EDR link and an LE link can be active at the same time..

With software stacks, profiles and commands built in, the RB8761BUV is capable of communicating with both single mode Bluetooth Smart devices, such as watches, heart-rate monitors, trainers, etc., as well as the dual mode 'classic' Bluetooth devices that act as hubs for sensor information.

Applications:**Computing devices add-on including:**

- PCs
- All-in-Ones
- Laptops
- Netbooks
- Tablets

Embedded devices including:

- Digital TVs
- Set-top Boxes
- Medical Device
- Remote controller



RB8761BUV Bluetooth 5.3 HCI Dongle
 Dongle size (LxWxH): 0.78 x 0.59 x 0.33 inch
 w/o USB connector

* Enclosure can be custom made.

FEATURES:**Bluetooth 5 specification compliant**

- Single-end RF radio output with high performance 10dBm of BR transmitter power and -94.5dBm 2M EDR receiver sensitivity.
- Supports Bluetooth classic (BDR/EDR)
- Supports Bluetooth Low Energy (BLE)

Host Interface

- RB8761BUV Complies with USB1.1 full speed mode.

Bluetooth Controller

- Compatible with Bluetooth v2.1 Systems
- Integrated MCU to execute Bluetooth protocol stack
- Supports all packet types in basic rate and enhanced data rate
- Supports Secure Simple Pairing
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Bluetooth Relay Module-TB8762LS

Serial/GPIO

Radicom's TB8762LS BLUETOOTH V4.2 Relay Module is designed with the RB8762 BLUETOOTH Module with an ARM processor, RF, baseband, ADC and embedded flash memory and the 2.5A Relay employing optically coupled MOSFET technology with 1500V of input to output isolation. It is ideal for controlling your device over BLUETOOTH link with a serial interface to add state of the art data with GPIO interface for your easy controlling the terminal devices.

Featuring with streamlined and simple connectivity and as well as completed software development environment with varieties multi-I/O interfaces. It is great for your home automation applications, industrial automation that can seamlessly fit on your devices with easy access for serial data transmission & receiving through App that connects to your mobile phone.



TB8762LS

Support:

- BLUETOOTH V4.2
- Load Voltage: 40V
- Load Current: 2.5A
- LED Indication for Relay & Power Supply
- MCU Firmware Updated
- 4MB SPI Flash

Application:

- Telecommunications (PC, Electronic notepad)
- Measuring and Testing Equipment
- Industrial Control
- Security Equipment
- High Speed Inspection Machine
- Home Automation
- Smart Factory
- Lighting Control
- Gardening Equipment Control

Features:

- Operates in 2.4GHz Frequency Range
- Low Power Consumption: 3.3V
- High Receive Sensitivity
- LE Long Range
- Support OTA Programming
- No Powerful Host Processor required
- Integrated ARM processor and on chip memory for complete Bluetooth smart device system functionality
- G sensor for Anti-Theft Security Purpose
- 2 TTL (3.3) Compatible GPIOs
- 1 Analog Input Channel (Multiplexed with GPIOs) with 10-Bit Resolution.
- Supporting Windows XP and later
- Virtual COM Port Communications
- 2.5A Maximum Switching Current
- Temperature: -40 to +85 °C
- Low driver power requirements (TTL/ CMOS Compatible)
- High Reliability
- Dimension: 35*18.8mm
- FCC/CE/IC/BQB Certified
- RoHS 3 compliant

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Bluetooth Relay Module-TB8762LR

Radicom's TB8762LR BLUETOOTH V4.2 Relay Module is designed with a RB8762 BLUETOOTH Module with an ARM processor, RF, baseband, ADC and embedded flash memory and the 5A Relay with dielectric Strength up to 4,000VAC. It is ideal for controlling your device over BLUETOOTH link through the debugging UART interface for your easy controlling terminal devices that connects to MCU for transparent transmission.

Featuring with streamlined and simple connectivity and as well as completed software development environment with varieties multi-I/O interfaces. It is great for your home automation applications, industrial automation that can seamlessly fit on your devices with easy access for serial data transmission & receiving through App that connects to your mobile phone.



TB8762LR

Support:

- BLUETOOTH V4.2
- Load Voltage: 30V
- Load Current: 5A
- LED Indication for Relay & Power Supply
- MCU Firmware Updated
- 4MB SPI Flash

Application:

- Industrial Electronic Instrument, PLC, Timers
- Temperature Control & Measure
- White Goods
- Building Automation
- Air Conditioner
- Actuating Driver

Features:

- Operates in 2.4GHz Frequency Range
- Low Power Consumption: 3.3V
- High Receive Sensitivity
- LE Long Range
- Support OTA Programming
- No Powerful Host Processor required
- Integrated ARM processor and on chipmemory for complete BLUETOOTH smart device system functionality
- Supporting Windows XP and later
- 5A Maximum Switching Current
- Low coil power consumption 200mW
- Dielectric Strength up to 4,000VAC
- Low profile 10.5 mm
- Clearance more than 5.0 mm
- Virtual COM Port Communications
- Temperature: -40 to +85 °C
- Low driver power requirements
- High Reliability
- Easy to use
- Dimension: 24.9*34.8mm
- FCC/CE/IC/BQB Certified
- RoHS 3 compliant

Ethernet+WiFi
Combo Module

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www.radi.com**Wifi 6 M2 PCIe Module – RW8852B****USB/WLAN**

The RW8852B Wifi 6 M2 PCIe module with external antenna integrates an ARM processor, RF and can fully support with 802.11b/g/n/ac/ax protocol at the same time with latest Bluetooth technology 5.2 for a breakthrough in high performance with the Wi-Fi 6/6E connection.

Featuring a self-contained WiFi subsystem, streamlined and simple connectivity and complete software development environment, the RW8852B allows OEM integrators to incorporate WiFi wireless technology into a broad range. Software wise WNFT-238AX(BT) supports Microsoft Windows 10, the OS support enables WNFT-238AX(BT) capable to run both x86 platform, and ARM based platform*. The RW8852B is designed with WNFT-238AX(BT) that can support 2 spatial streams concurrently (2T2R, or 2x2) in MU-MIMO mode. With a standard M.2 A/E key 2230 form factor, WNFT-238AX(BT) can accommodate to all existing platform that has M.2 Adaptor pre-integrated, no extra work with platform design. Features: WNFT-238AX(BT) capable to run both x86 platform, and ARM based platform*. The RW8852B is designed with WNFT-238AX(BT) that can support 2 spatial streams concurrently (2T2R, or 2x2) in MU-MIMO mode. With a standard M.2 A/E key 2230 form factor, WNFT-238AX(BT) can accommodate to all existing platform that has M.2 Adaptor pre-integrated, no extra work with platform design.

Features

- M.2 2230 AE Key form factor
- High speed wireless connection, WI-FI 6E
- Low power consumption and high performance
- Fully qualified Bluetooth 5.2
- Solid design with external antenna diversity
- Antenna: 2 x IPEX MHF4 connectors
- Operating Frequency: : 802.11ax/ac/a/b/g/n ISM Band 2.412GHz~2.484GHz 5.150GHz~5.850GHz

*Subject to local regulations

- Host Interface WLAN: PCIe, Bluetooth: USB

Application

- Tablet
- Notebook
- Advertising machine
- OTT Box
- Doorbell / Smart TV
- Wireless storage
- Printer
- POS machine
- Vehicle mounted



RW8852B

- Continue TX Power Consumption: 860 mA
- Continue RX Power Consumption: 450 mA
- Environmental Operating Voltage: DC 3.3V
- Environmental Temperature Range: 0 ~ 70°C (Operating Temp.)
-40 ~ 85°C (Storage Temp.)
- Humidity (Non-Condensing): 5 ~ 90% (Both Operating & Storage)
- Size: 0mm(±0.15mm) x 22mm(±0.15mm) x 2.24mm(±0.3mm)
- Weight: 2.5g
- Driver: Windows 10 & Linux (Open Source), Recommended Kernel 5.4+
- Security: 64/128-bits WEP, WPA, WPA2, WPA3, 802.1x

Support

- IEEE 802.11i (WPA, WPA2). IEEE802.11a/b/g/n/ac/ax,
- M.2 AE Key, PCIe, WiFi+BT, Combo, Wifi 6 Wireless LAN & Bluetooth 5.2
- 802.11b DSSS (DBPSK, DQPSK, CCK)
- 802.11g OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11n OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
- 802.11a OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
- 802.11ac OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
- 802.11AM, 64-QAM, 256-QAM)
- Bluetooth Header: GFSK
Payload 2M: $\pi/4$ -DQPSK
Payload 3M: 8-DPSK
- FCC/IC/CE/TELEC/KC/EAC/ANATEL/NCC/SRRC...etc.
- RoHS compliant

Radicom Research, Inc.

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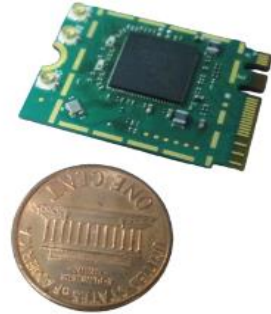
www.radi.com**WiFi 6E M.2 PCIe combo BT 5.3 Module – RBW8852CE**

The RBW8852CE WiFi 6E M.2 PCIe module with external antenna integrates an ARM processor, RF and can fully support with 802.11a/b/g/n/ac/ax protocol at the same time with latest Bluetooth technology 5.3 for a breakthrough in high performance with WiFi 6E tri-band frequencies at 2.4GHz, 5GHz & 6GHz.

Featuring a self-contained WiFi subsystem, streamlined and simple connectivity and complete software development environment, the RBW8852CE allows OEM integrators to incorporate WiFi wireless technology into a broad range.

The RBW8852CE is designed to support 2 spatial streams concurrently (2T2R, or 2x2) in MU-MIMO mode with a standard M.2 A/E key 2230 form factor that with M.2 Adaptor pre-integrated and no extra work required for platform design.

Supporting Microsoft Windows 10, the OS supports with both x86 platform and ARM based platform*.

**RBW8852CE****Features:**

- M.2 2230 A-E Key form factor
- High speed wireless connection: WIFI 6E
- Low power consumption and high performance
- Solid design with external antenna diversity
- Antenna: 2 x IPEX MHF4 connectors
- Operating Frequency: 802.11ax/ac/a/b/g/n ISM Band 2.412GHz~2.484GHz, 5.150GHz~5.850GHz, 5.925GHz~7.125GHz *Subject to local regulations
- Continue TX Power Consumption: 860 mA
- Continue RX Power Consumption: 450 mA
- Environmental Operating Voltage: DC 3.3V
- Environmental Temperature Range: 0 ~ 70°C (Operating Temp.) -40 ~ 85°C (Storage Temp.)
- Humidity (Non-Condensing): 5 ~ 90% (Both Operating & Storage Humidity)
- Size: 30mm(L) x 22mm(W) x 2.24mm(H)
- Weight: 2.5g
- Driver: Windows 10 & Linux & Recommended Kernel 5.4+
- Security: 64/128-bits WEP, WPA, WPA2, WPA3, 802.1x
- WiFi Band: 2.4GHz, 5GHz & 6GHz
- FCC/IC/CE Pending
- RoHS 3 compliant

- Support 802.11ax 2x2, with OFDMA and MU-MIMO, by 4 types PPDU format, such as HE-SU-PPDU, HE_ER_SU_PPDU, HE-MU-PPDU, and HE-TB-PPDU.
- Complete 802.11n MIMO solution for 2.4GHz and 5GHz and 6GHz band.
- Maximum PHY data rate up to 286.9 Mbps using 20MHz bandwidth, 573.5Mbps using 40MHz bandwidth, and 2402Mbps using 160MHz.
- Backward compatible with 802.11a/b/g devices while operating at 802.11n data rates.
- Backward compatible with 802.11a/n/ac devices while operating at 802.11a data rate.

Host interface

- Compatible with PCI-Express Base Specification Revision 2.1.
- Compatible with USB2.0 FS-mode Specification for Bluetooth
- PCIe LTR/L1 Off state supported
- USB Selective Suspend Supported

Standards Supported

- IEEE802.11 a/b/g/n/ac/ax compatible WLAN
- IEEE 802.11e QoS Enhancement (WMM)
- IEEE 802.11i (WPA, WPA2, WPA3). Open,shared key, and pair-wise key authentication services
- IEEE802.11h, DFS, TPC, Spectrum Measurement
- IEEE 802.11k Radio Resource Measurement
- WAPI (Wireless Authentication PrivacyInfrastructure) certified.

WLAN

- CMOS MAC, Baseband PHY and RF in a single chip for IEEE 802.11a/b/g/n/ac/ax compatible WLAN
- Support 802.11 ac/ax 2x2, Wave-2 compliant with MU-MIMO

MAC Features

- Frame aggregation for increased MAC efficiency (A-MSDU, A-MPDU)

- MU/RU/SU decision path by firmware
- Low latency immediate Block Acknowledgement (BA)
- PHY-level spoofing to enhance legacy compatibility
- MIMO power saving mechanism
- Support TWT function for power saving
- Channel management and co-existence
- Multiple BSSID feature allows the RTL8852CE-CG to assume multiple MAC identities when used as a wireless bridge
- Transmit Opportunity (TXOP) Short Inter-Frame Space (SIFS) bursting for higher multimedia bandwidth
- WiFi Direct supports wireless peer to peer applications. Support BSR and queue size of Qos.
- Support MU EDCA feature.
- Support DFS, Channel info, PPDU state by Rxpat

Other Features

- Supports Wake-On-WLAN via Magic Packet and Wake-up frame
- Transmit Beamforming
- Support S3/S4 AES/TKIP group key update
- Support Dual band concurrent. (2.4G/5G)
- FTM support distance measurement
- Support Network List Offload
- CCA on secondary through RTS/CTS handshake.
- Compliance with Windows Operating System host-implemented FIPS 140-2 Security Requirements
- Support TCP/UDP/IP checksum offload
- 802.11i (WPA2) compliant
- WPA3-Enterprise compliant
- WPA3 Enterprise 192-bit Security Based on AES-GCMP-256 & BIP-GMAC-256
- Encryption WEP 40/104 CCMP-128
- 802.1X (EAP-TLS, TTLS, PEAP, LEAP, EAP-FAST), (EAP-SIM, EAP-AKA)-with OS Supports
- Authentication protocols: PAP, CHAP, TLS, GTC, MS-CHAP, MS-CHAPv2 with OS supports

Peripheral Interfaces

- Up to 15 General Purpose Input/ Output pins.
- Two configurable LED pins
- Crystal frequency support 40MHz
- Generates 40MHz clock for peripheral chip.
- Single external power source 3.3V only.

PHY Features

- IEEE 802.11ax MIMO OFDM/OFDMA
- IEEE 802.11ac MIMO OFDM
- IEEE 802.11n MIMO OFDM
- Two Transmit and Two Receive paths
- 20MHz / 40MHz/ 80MHz/ 160MHz bandwidth transmission

- Support 2.4GHz, 5GHz, 6GHz band channels
- Short Guard Interval (0.4us) for non-HE. 1xLTF and 0.8us guard interval for HE SU/ERSU. 4x LTF and 0.8us guard interval for HE MU
- DSSS with DBPSK and DQPSK, CCK modulation with long and short preamble
- OFDM with BPSK, QPSK, 16QAM, 64QAM and 256QAM and 1024QAM modulation. Convolutional Coding Rate: 1/2, 2/3, 3/4, and 5/6.
- Maximum data rate 54Mbps in 802.11g, 300Mbps in 802.11n and 866.7Mbps in 802.11ac, 2402Mbps in 802.11ax.
- OFDM / DSSS/ CCK receive diversity with MRC using up to 2 receive paths.
- Support STBC.
- Support LDPC.
- Hardware antenna diversity.
- Maximum-Likelihood Detection (MLD)
- Fast receiver Automatic Gain Control (AGC)
- On-chip ADC and DAC.
- Build-in both 2.4GHz and 5GHz PA.
- Build-in both 2.4GHz and 5GHz LNA.

Bluetooth Controller

- Support Bluetooth 5 system (BT 5.3 Logo Compliant)
- Compatible with Bluetooth v2.1+EDR
- Integrated MCU to execute Bluetooth protocol stack
- Supports Secure Simple Pairing
- Supports multiple Low Energy states
- Dual Mode Support: Simultaneous LE and BR/EDR
- Enhanced BT/WIFI Coexistence Control to improve transmission quality in different profiles.
- Supports all packet types in basic rate and enhanced data rate

Bluetooth Transceiver

- Fast AGC control to improve receiving dynamic range
- Supports Enhanced Power Control
- Integrated internal Class 1, Class 2, and Class 3PA
- Supports Bluetooth Low Energy
- Integrated 32K oscillator for power management

Application:

- Rear Terminal UAV Robot
- Vehicle mounted front Advertising machine
- OTT Box
- Doorbell / Smart TV
- Wireless storage
- Printer

*WiFi+Bluetooth+Ethernet
Combo Module*

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www.radi.com**Universal USB/WiFi/LAN/Bluetooth LE Adapter – RW8300-B1 series****WiFi/BLE/RJ45 and mini USB**

Radicom RW8300-B1 WiFi single port router + Bluetooth Low Energy series is designed to fully integrate Ethernet LAN, Bluetooth V4.0 Smart® and Wi-Fi **IEEE802.11n™**, **IEEE802.11e™** and **IEEE802.11i™** standards. The RW8300-B1 series offers router or hotspot capability from Ethernet to WiFi as well as WiFi or Ethernet adapter from WiFi or Ethernet to USB interface. It can turn any Ethernet LAN port to a WiFi hotspot or connect PC or Laptop into a WiFi Wireless Access Point. It is a full embedded system for various Wi-Fi applications and doesn't require extra CPU host. RW8300-B1 also embeds the entire protocol stack of Bluetooth Low Energy for single mode Smart devices. It provides AT-Command set for communications. This versatile RW8300-B1 series of products offers configuration options to meet the specific system requirements.

RW8300 Series:

- RW8300M-B1: module with pin headers
- RW8300NE-B1: module with RJ45, mini USB connector
- RW8300E-B1: RJ45, mini USB connector with enclosure

Application:

- Single port router
- Hot spot sharing
- USB Ethernet adapter
- WiFi dongle
- LAN to WLAN adapter
- WLAN Bridge
- Bluetooth V4.0 Smart device

Features:**Wi-Fi**

- IEEE 802.11b/g/n compatible WLAN
- WiFi AP/Client
- Router capability
- WiFi USB adapter, USB Ethernet adapter
- 20MHz and 40MHz bandwidth transmission
- Backward compatible with 802.11b/g devices while operating at 802.11n data rates
- Frame aggregation for increased MAC efficiency (A-MSDU, A-MPDU)

**RW8300E-B1****RW8300NE-B1**

- Support WPS mode
- Low latency immediate High-Throughput Block Acknowledgement (HT-BA)
- Long NAV for media reservation with CF-End for NAV release
- PHY-level spoofing to enhance legacy compatibility
- Channel management and co-existence
- Support Wake-On-WLAN via Magic Packet and Wake-up frame
- Transmit Opportunity (TXOP) Short Inter-Frame Spaces (SIFS) bursting for higher multimedia bandwidth
- Short Guard Interval (400ns)
- DSSS with DBPSK and DQPSK, CCK modulation with long and short preamble
- Selectable digital transmit and receive FIR filters
- Built-in TCP/IP stack
- Support DHCP for LAN

Bluetooth 4.0 Smart (single mode)

- Bluetooth V4.0 single mode Smart device
- Support Host and client modes
- Integrated Bluetooth Low Energy stack: ATT, GATT, SMP, L2CAP, GAP
- Serial interface (UART/ SPI/ I2C) supported
- 12 digital PIOs, 3 analog AIOs
- 10-bit ADC embedded
- Support wake-up interrupt and watch dog timer
- Support passthrough data mode
- Options for on-board antenna or external antenna

General

- Operates in 2.4GHz Frequency Range
- Firmware upgradable
- Extended temperature of -40°C to +85°C
- FCC/IC/CE (pending), RoHS compliant

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www.radi.com**WiFi/LAN to Serial/USB/BLE Adapter – RWLS8300 Series****WiFi/RJ45/Serial/USB/BLE Interface**

The RWLS8300 industrial WiFi/LAN to Serial/USB/BLE product line is all new wireless to wire gateway solution. With built-in powerful CPU to process all necessary functions and features, RWLS8300 series product line is perfect solution for remote data communication through WiFi/Ethernet to Serial Port or USB port in a single platform. The networking capability provides many functions, such as TCP/IP, SLIP, ICMP, ARP, DHCP client, DNS, FTP client, POP3, SMTP, Telnet server and UDP and powerful security features.

RWLS8300 series offers various solutions for a Wireless to Wire interface. It provides RS232/RS422/RS485 for various serial interfaces and also provides WiFi/BLE/Ethernet communication. The RWLS8300BW is full features including BLE5.3 master to link to all BLE devices. The RWLS8300W is with WiFi AP router or device capabilities. RWLS8300 is perfect solution for all serial/USB interfaces to WiFi/LAN.

The onboard LAN functions are designed to meet the widely adopted **IEEE Std. 802.3™** with automation and buffering. The integrated serial port includes standard serial terminal features such as flow control, character length and a DTE speed of 921Kbps. The RWLS8300 series includes Flash memory allowing for updating firmware with the latest enhancements and for custom applications.

Models:

- RWLS8300: LAN-to-Serial Adapter.
- RWLS8300BW: RWLS8300+WiFi+BLE
- RWLS8300W: RWLS8300+WiFi solution
- RWLS8300B: RWLS8300+BLE module
- RWLS8300NE: No enclosure of RWLS8300BW

Application:

- Ethernet/WiFi/USB/Serial adapter
- Remote connectivity
- Monitoring and control
- Test and measurement equipment
- WiFi Network gateway adapter

**RWLS8300NE****RWLS8300BW****LAN Features:**

- Designed to meet **IEEE Std. 802.3™**
- Supports IEEE 802.3az energy efficient Ethernet ability for 100Base-TX in full duplex operation and 10Base-T in full/half duplex mode
- Supports Green Ethernet
- Cable length power saving
- Link down Power saving
- Supports TCP/IP over SLIP.
- LED I/O to reflect LAN connection and link activity

WiFi/BLE wireless Features

- 802.11b/g/n compatible WLAN
- Supports TCP/IP, ICMP, ARP, DHCP client, DNS, FTP client, POP3, SMTP, Telnet server and UDP protocols
- Single port AP router
- AT command or Web-based configuration
- BLE master or slave
- WPA, WPA2, Open Shared Key security mode.

Serial Port Features:

- High speed (921.6Kbps) UART (with modem control)
- Baud rates: 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800, 921600.
- Parity Bits: Odd, Even, None, Space, Mark
- Data Bits: 5, 6, 7, 8 ~ Stop Bits: 1, 1.5 or 2
- Hardware (RTS/CTS) flow control
- Remotely access serial port via Internet application
- 640/576 bytes Transmit/Receive FIFO buffer

*WiFi+Bluetooth
Combo Module*

Radicom Research, Inc.

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www.radi.com**Low energy sensor recorder system – RBW8362 Wireless sensor recorder gateway series**

Radicom RBW8362 sensor recorder system including low energy sensor tags and an internet gateway device uses as a complete long time monitoring and recording system from remote end as well as can be immediately accessed from a smart phone to add state of the art noncontact short distance or long range remote monitoring application. The RB8762 sensor tags runs under Ultra low power and integrates a powerful ARM processor, RF, baseband, and 256KB embedded flash memory. Together with RW8300E-B3 internet gateway which is embedded a long range WiFi and LAN remote capability featuring a self-contained various long term monitoring/recording system. With smart phone APP and web configuration, the system can be easily adapted to a broad range application that previously did not feature wireless sensing capabilities. It is designed to support single or multi-sensing system.

Models:

RW8300E-B3: Internet gate way of RB8762 system.

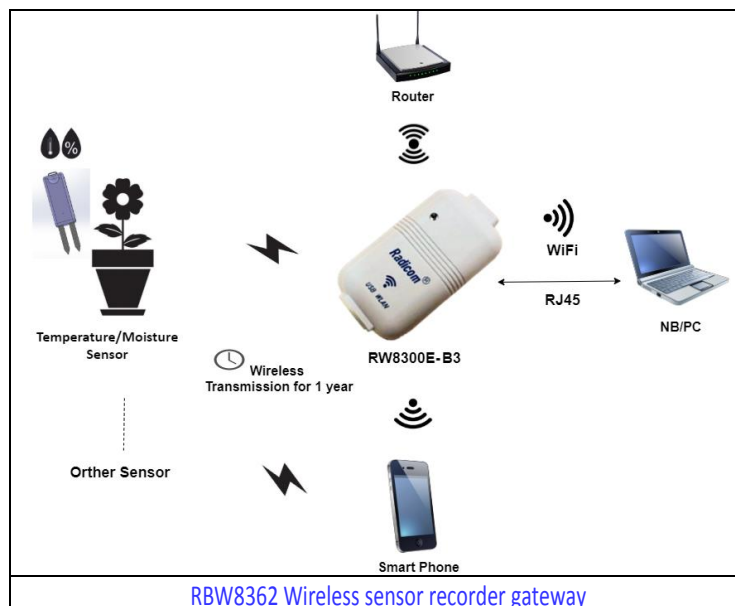
- RBW8362-0: RW8300E-B3+RB8762C SAA0 with Temperature/Soil Humidity sensor
- RBW8362-1: RW8300E-B3+RB8762C SAA1 with Temperature/Soil Humidity/CO2 sensor

*Other sensor applications. Please contact Radicom***Application:**

- Plant moisture and temperature monitoring and recorder device
- Home monitoring/recording device
- Low energy monitoring tag

Sensor Features:

- Various sensor measurement and long term recording transmitter
- Ultra low power sensor operation AA battery power input for sensors up to one year records
- Operating temperature: -20°C ~ +60°C
- Waterproof level IP 21
- Single or up to 256 multiple sensors monitoring
- Support OTA (Over-the-Air) programming



RBW8362 Wireless sensor recorder gateway

- No powerful host processor required to read from tag
- Configurable through smart phone APP or AT commands from RW8300E-a-B3 gateway
- FCC/IC/CE (pending)
- RoHS 3 compliant

Sensor Gateway features:

- Ethernet LAN
- IEEE802.11 b/g/n WiFi + BT5.3 BLE
- TCP/IP port accessibility
- Web configurable
- Firewall protection

General:

- Wireless sensor recorder applications
- Internet capability
- Security protection
- Smart phone App

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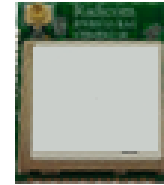


Embedded Low Energy WiFi/BT Serial Module

Serial/UART/USB Interface

Radicom's RW8720D WiFi and Bluetooth V5.3 embedded module series use a serial interface to add state of the art data with UART interface to any system. The RW8720D WiFi module integrates an ARM processor, RF, 802.11b/g/n and baseband. Featuring a self-contained WiFi and Bluetooth V5.3 subsystem, streamlined and simple connectivity and complete software development environment, the RW8720D allows OEM integrators to incorporate WiFi wireless technology into a broad range that previously did not feature networking capabilities. It is designed to fully support **IEEE802.11b** Draft 2.0, **IEEE802.11g** and **IEEE802.11n** standards.

The RW8720D is available in surface mount (SMD) or through-hole (DIP) hardware designs.



RW8720D

Application:

- WiFi Gadget
- WiFi Video Camera
- WiFi AP
- WiFi Client
- IoT Internet of Thing
- Bluetooth V5.3 BLE

Features:

- 802.11 a/b/g/n 1x1, 2.4GHz & 5GHz
- Support low power Tx/Rx for short-range application
- Frame aggregation for increased MAC efficiency (A-MSDU, A-MPDU)
- 4x UART interface, baud rate up to 6MHzmDNS
- 2 x I2C, two speed modes: standard up to 10Kbps, fast up to 400Kbps
- 3 x SPI Master/Slave, baud rate up to 50
- 1 x USB 2.0 HS/FS/LS mode

- 11 x PWM with configurable duration and duty cycle from 0 ~ 100%
- GPIO:20
- Dimension: 19X25X2.4 mm
- Low Power 3.3V operation
- Ambient Operating Temperature: -20~85°C
- Storage Temperature: -40~125°C
- Internal or External Antenna
- Interface: UART/SPI
- Power Supply Voltage: 3.0~3.6V
- Speed: 125Kbps, 500Kbps, 1Mbps, and 2Mbps
- Support LE secure connections
- Support LE scatternet
- Support 3 Master links/1 Slave link

Support:

- IEEE 802.11b/g/n compatible WLAN
- IEEE 802.11e QoS Enhancement (WMM)
- IEEE 802.11h TPC, Spectrum Measurement
- IEEE 802.11i (WPA, WPA2), Open, shared key, and pair-wise key authentication services
- Co-existence RF design between Wi-Fi and Bluetooth

Radicom Research, Inc.

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www.radi.com**Wireless AI camera sensor EVK RA6000 Series****Serial/BLE/WiFi/Ethernet Interface**

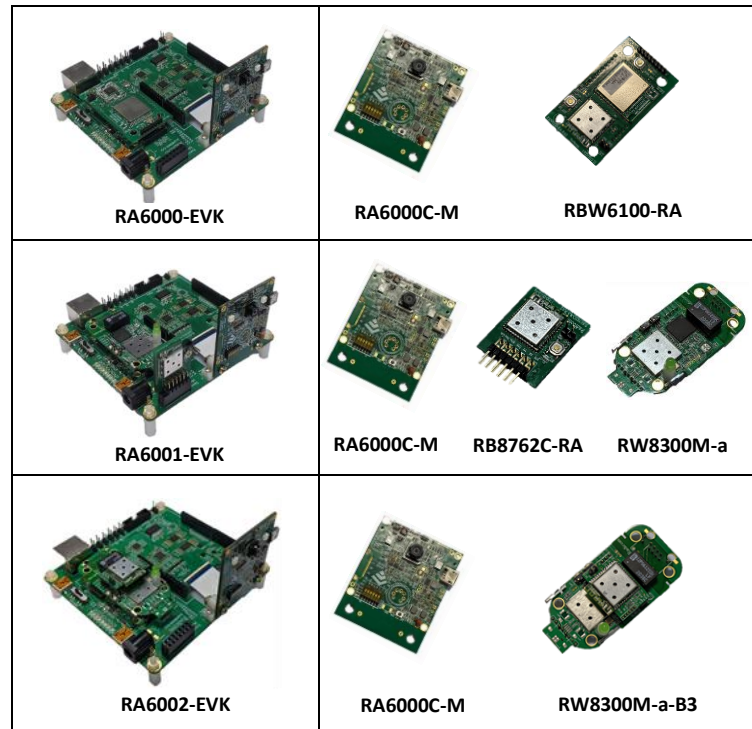
Radicom RA6000 series provides a reference design from AI camera to wire Ethernet & wireless WiFi/Bluetooth communication. The Evaluation Kit integrates a powerful low power CPU and an ultra low power camera module into WiFi, Ethernet LAN, Bluetooth modules. With many I/O ports, RA6000 series can support Arduino I/O interface plus I2C, SPI and UARTs ports at plug and play level which is very easy for developers to expand new features and capability. Featuring self-contained communication subsystem, streamlined and simple connectivity and complete software development environment, the Evaluation Kit allows embedded system integrators to incorporate all communication plus camera and sensors technology into one develop platform that previously may need many different platforms.

The RA6000 series is designed to fully support Radicom FCC/IC/CE certified communication modules supporting short range Bluetooth wireless, middle range WiFi wireless, or with wire Ethernet to reach worldwide communications, which can save developers' time and certification efforts. RA6000 series Evaluation Kit can be divided into the following categories

- **RA6000-EVK**
 - o RA6000MB: MB board with through hole (DIP) pins for module
 - o RA6000C-M: Camera module board
 - o RBW6100-RA: BT 5.1 + WiFi module
- **RA6001-EVK**
 - o RA6000MB: MB board with through hole (DIP) pins for module
 - o RA6000C-M: Camera module board
 - o RW8300M-a: WiFi module
 - o RB8762C-RA: BT 5.1 module
- **RA6002-EVK**
 - o RA6000MB: MB board with through hole (DIP) pins for module
 - o RA6000C-M: Camera module board
 - o RW8300M-a-B3: WiFi +BT 5.1 module

Application:

- Sensor AP or client station
- Camera signal router station



- Security monitoring solution
- Sensor signal preprocessing system
- POS with intelligent camera capability
- Remoter control/monitor system

Features:

- A very powerful DSP CPU
- GNU compiler supported
- Interface: USB, SPI, I2C, LAN, UART, J-TAG, ADC, GPIOs
- Embedded WiFi router/repeater
- Embedded Ethernet and switch
- Embedded BLE 5.1 with mesh capability
- Ultra low power camera module
- Support various sensors
- Easy module upgradable
- Support power 5V operation
- Industrial operating temperature range
- Small size for EVK: 3.94" x 3.5" x 2.1" (100x85x53.4 mm)
- Sensor add-on easily
- Firmware upgradable
- Support many FCC/IC/CE certified modules
- RoHS compliant

BluePacket is the sub-company to Radicom United States

Radar Module

Radicom Research, Inc.

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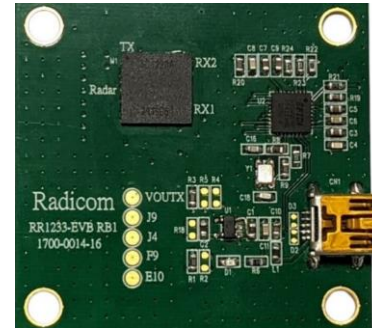
Motion Detection Low Power 24 GHz Radar Sensor USB Module– RR1233U

USB Interface Support

Radicom's **RR1233U** 24GHz low power & distance sensing radar module is designed with antenna offering 360-degree directional range motion detection that supporting different application requirements. It applies the USB to SPI converter interface connecting to radar module with simple connectivity to complete software development environment.

The **RR1233U** hosts with MCU connection through SPI interface for simple setting and data acquisition that goes with multi sensing modes such as motion detecting, distance detecting and angle detection for your wider area range coverage of detection options.

It as well as features easy installation without making any holes and can just right simply install this module on your terminal application device easily and quickly.



RR1233U

Application:

- Outdoor lighting
- Home Appliance
- Smart Speaker
- Tablet/PC
- Tab Water Sensing
- Smart Home
- IoT Internet of Thing
- Door Bell
- Cockpit/IVI

Features:

- Interface: SPI, USB
- ID Friendly
- Tx/Rx Channel:1-Tx/2-Rx
- FOV: x-y:120°/y-z: 110°
- Power Consumption: Peak 160mW (@1D) Avg.0.6mW
- Tx EIRP (typ):4.0 dBm
- Detection Mode: Distance 2D Detection
Azimuth angle 2D Detection
Motion Detection

- Size: 4.5cm (L)*4.3cm(W)*1.6cm(D)
- Intelligent Sequencer to control sensor mode & duty cycle
- Built-in autonomous 1D sensing algorithm without any external MCU calculations
- Up to 8m, 120° FOV(*1*2)/avg 0.5mW-suitable for battery operation
- Host MCU connection via I2C or SPI for setting & result acquisition
- All-IN-ONE & easy to detect Presence/Distance+2D Location
- Advanced 'RF-CMOS' Technology with intelligent sensing engine
- FCC/IC/CE, TELEC, KC, SRRC, CB, NCC, AS/NZS etc.
- RoHS compliant

Support:

- Wider detection area, Lower Power, Small-sized Package
- Integration: Antenna, RF, ADC, Digital F/E & SP, I/O
- Multiple sensing modes from 1D to 2D
- Robust Performance
- Bandwidth: up to 180MHz

Ethernet Adapter

Radicom Research, Inc.

671 E Brokaw Road | San Jose, CA 95112 USA

Tel: 408-383-9006 | Fax: 408-383-9007

www.radi.com**LAN to Serial / Modem Adapter Board – LSDB8300S Series**

Radicom LSDB8300S series offers an embedded solution for a **LAN to Serial or LAN to Modem** interface. The LSDB8300SM Module provides the reserved through hole (DIP) pin headers for the Serial Port TTL I/O and Ethernet pins that allow the Jacks to be placed in preferred locations. The TTL I/O can then be converted to RS232 signaling and connected to a DB9 connector to provide a fully compliant V24/V28, RS232 interface. This product allows serial data communication with any 10/100 Based-T Ethernet LAN.

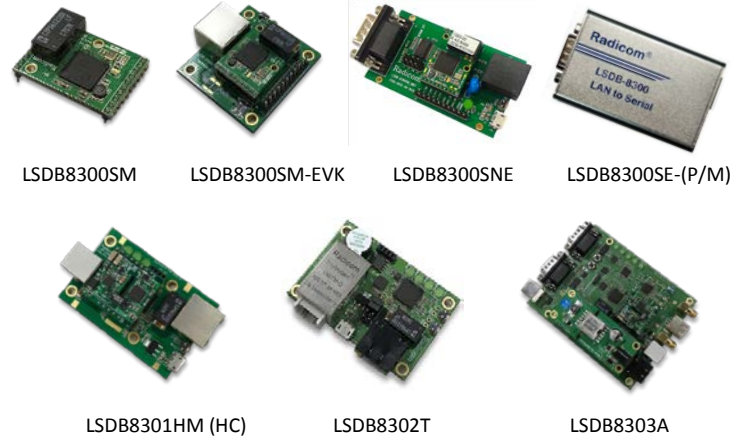
LSDB8300S family is available in various hardware designs. The LSDB8300SNE is a standalone product embedded with a RJ45 Ethernet jack to provide the LAN interface and DB-9 for RS232 direct plug-in. The LSDB-8302T is a standalone product provides easy connection to any standard LAN port and Tiny Modem dial-up network. The LSDB8303A is an All-in-one solution to provide POE, SIA alarm Modem, WiFi, RS232/485. LSDB8301HM is a small form factor of LAN to SIA alarm and LASDB8301HC is not only provide analog SIA modem as well as emulate central office with line current provided. The LSDB8300SM-EVK along with LSDB8300MB development board also provides RJ45 and DB9 connectors for LSDB8300SM module testing and developing purpose.

Models:

- LSDB8300SM : LAN-to-Serial Module with DIP pins for Ethernet and Serial port interface
- LSDB8300SM-EVK : LSDB8300SM + LSDB8300SM-MB-TTL Base board evaluation kit
- LSDB8300SNE : Embedded a RJ45 Ethernet jack that Provides LAN interface and DB-9
- LSDB8300SE : LSDB8300SNE + Enclosure
- LSDB8301HM : LAN to SIA alarm Modem standalone Device.
- LSDB8301HC : LAN to SIA alarm Modem standalone Device with central current provided
- LSDB8302T : LAN-to-Modem adaptor Board with On board RJ45 jack that allow the flexibility of Serial port cable length
- LSDB8303A : LAN to Serial and Modem standalone device

Application:

- Ethernet Serial adapter
- Remote connectivity
- Remote monitoring and control
- Test and measurement equipment
- Network gateway adapter

**LAN Features:**

- Designed to meet **IEEE Std. 802.3™**
- Supports IEEE 802.3az energy efficient Ethernet ability for 100Base-TX in full duplex operation and 10/100Base-T in full/half duplex mode
- Supports Green Ethernet
- Cable length power saving
- Link down Power saving
- Supports TCP/IP over SLIP.
- Ethernet port auto-crossover function.
- Complete Serial-to-LAN solution with network processor, MAC (media access controller) and PHY interface.
- Multiple IP Address Configuration Modes: DHCP / Static IP mode
- Supports TCP/IP, ICMP, ARP, DHCP client, DNS, FTP client, POP3, SMTP, Telnet server and UDP protocols
- 10/100Mbps Ethernet
- AT command or Web-based configuration
- LED I/O to reflect LAN connection and link activity

Serial Port Features:

- High speed (921.6Kbps) UART (with modem control)
- Baud rates: 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800, 921600.
- Parity Bits: Odd, Even, None, Space, Mark
- Data Bits: 5, 6, 7, 8 ~ Stop Bits: 1, 1.5 or 2
- Hardware (RTS/CTS) flow control
- Remotely access serial port via Internet application
- 640/576 bytes Transmit/Receive FIFO buffer
- FCC/IC/CE certified (pending)
- RoHS 3 compliant

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www.radi.com**2.5Gbps USB/LAN module – LUHM325 series****USB/LAN Interfaces**

Radicom Research Inc. LUHM325 Low-power USB 3.0 to 10/100/1000M/2.5G Gigabit Ethernet adapter is a high performance and highly integrated device which enables a small form factor, and simple plug-and-play 2.5 Gigabit Ethernet network connection capability for desktops, notebook PC's, Ultra-Mobile PC's, docking stations, game consoles, digital-home appliances, and any embedded system using a standard USB port.

The LUHM325 is equipped with a powerful pipeline RISC engine to handle protocols and control functions of 2.0 and 3.0 USB super/high/full Speed modes and 10/100/1000M/2.5G Gigabit Ethernet LAN as well as advanced power management features and Wake-on-LAN are implemented to make the LUHM325 become the best fit for all kinds of LAN accessibility applications.

LUHM325M: module type

LUHM325NE-B: USB to LAN converter with USB3.0 Micro B and RJ45 Jacks.

LUHM325NE-C: USB to LAN converter with USB Type C and RJ45 Jacks.

LUHM325E-B: LUHM325NE-B in Plastic Enclosure

LUHM325E-C: LUHM325NE-C in Plastic Enclosure

LUHM325E-B-T: USB to LAN converter built-in USB3.0 A type pig tail

LUHM325EVK-B: LUHM325 Evaluation kit, with USB3.0 Micro B and RJ45 Jacks.

LUHM325EVK-C: LUHM325 Evaluation kit, with USB3.0 Type C and RJ45 Jacks.

Features:

- Single chip USB 3.0 to 2.5 Gigabit Ethernet controller
- USB Device Interface
 - Integrates on-chip USB 3.0 PHY transceiver and controller to compliant to USB Spec 2.0 and 3.0.
 - Supports USB super/high/full speed modes.
 - Supports LPM (Link Power Management), U1/U2/U3 at super speed, and L1/L2 at High Speed
 - Supports CDC-NCM. CDC-ECM
- Gigabit Ethernet Controller
 - Integrates 10/100/1000M/2.5Gbps Transceiver
 - Supports 2.5G and LG Lite mode
 - IEEE 802.3, 802.3u, 802.3ab compatible
 - Supports pair swap/polarity/skew correction
 - Support cross over detection and auto correction
- Support Wake-on-LAN Function and RealWoW!

**LUHM325M****LUHM325NE(-B/-C)****LUHM325EVK(-B-C)****LUHM325E(-B/-C/-B-T)**

- Supports IPv4/IPv6 packet Checksum Offload Engine to reduce CPU loading, including IPv4 IP/TCP/UDP/ICMP/IGMP & IPv6 TCP/UDP/ICMPv6 checksum check & generation
- Advanced Power Management Features
- Auto detection with Extended Next Page capability (XNP)
- Compatible with NBASE-T Alliance PHY Specification
- Supports IEEE 802.1Q VLAN tagging
- Thermal management
- Support jumbo frame to 16k bytes
- Supports IEEE802.1P layer 2 Priority Encoding
- Supports power down/link down power saving
- Supports IEEE802.3az (Energy Efficient Ethernet)
- Integrated Power-on reset circuit.
- Supports IEC60601 2xMOOP and 2xMOPP
- FCC .IC .CE for medical Certification

Applications:

- UMPC, MID, Netbook, Ultra-slim NB
- USB-to-LAN Dongle, USB to Fiber Ethernet Dongle
- USB/ Ethernet Home Plug AV Adapter
- Docking Station, Port Replicator, Cradle
- UWB Docking Station, WiMAX-to-USB Modem, 3.5G Mobile Router
- Game Console
- Digital-home Application, Set-Top Box, PVR, PMP, IPTV
- Networked Digital Photo Frame, Digital Media Player
- Networked Printer, POS, Test Instruments



High quality in a cost effective and rapid time-to-market manner



Module (both of the Standard & customized Firmware included)

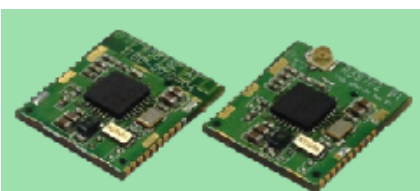


Module + Layout Service
(customized hardware PCBA design service)



Test fixture design for both of engineering testing, and mass production

Your Complete Solution Provider and Designer!!



5F-2, No. 12, Lane 270, Sec. 3, BeiShen Rd., ShenKeng District, New Taipei City 22205, Taiwan

www.bluepacket.net