Radicom Research, Inc.

671 E. Brokaw • San Jose, CA 95112 Tel: 408-383-9006 • Fax: 408-383-9007 www.radi.com



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 HCl Dongle Dongle size (LxWxH): 0.78 x 0.59 x 0.33 inch

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
- HS-UART interface for Bluetooth data transmission compliant H5 specification
- 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
- Enhanced BT/Wi-Fi Coexistence Control to improve transmission quality in different profiles
- Operating voltage:4.75V to 5.25V
- Temperature range: 0°C to +70°C