

1. Key components:

CSR BlueCore 02 External BC212015B, Bluetooth Single Chip
AMD AM29LV800B, Flash Memory
XC6204B32MR, High Speed LDO Regulators

2. Operation Principle

CSR BlueCore 02 External BC212015B, Bluetooth Single Chip

BlueCore2-External is a single chip radio and baseband IC for Bluetooth 2.4GHz systems.

It is implemented in 0.18um CMOS technology. When used with external flash containing the CSR Bluetooth software stack, it provides a fully compliant Bluetooth system for data and voice communications.

Operation at 2.7 ~ 3.3V supply.

Operation clock is provided by a 16MHz oscillator.

3. Specifications

Standard

- ⊙ Fully compliant with Bluetooth™1.2 Standard
- ⊙ USB UHCI/OHCI spec 1.1 compliant

Output Power

- ⊙ 4 dBm max with power control

Frequency band

- ⊙ 2.402GHz ~ 2.480GHz

Modulation

- ⊙ GFSK

Sensitivity

- ⊙ -80 dBm

Data Rate

- ⊙ Asynchronous: 723.2kbps/57.6kbps
- ⊙ Synchronous: 433.9kbps/433.9kbps

Interface

- ⊙ A-Type USB Connector

Operating systems

- ⊙ Windows 98SE
- ⊙ Windows Me
- ⊙ Windows 2000
- ⊙ Windows XP

Ground

The ground line of USB adaptor is connected to one of the host computer via metallic enclosure of USB connector.

Integrated Antenna

- ⊙ Peak Gain @ 2.45GHz : 2.0dBi

Coverage

- ⊙ 10m ~ 20m
(Varies depending on use environment)

Dimension

- ⊙ Length : 56.85mm
- ⊙ Width : 16.5 mm
- ⊙ Height : 8.1 mm

Weight

- ⊙ 6 g

Operating Voltage

- ⊙ 5V DC +/- 10%

Power Consumption

- ⊙ Peak RF current during TX burst : 75.5mA
- ⊙ Peak RF current during RX burst : 68mA

LED Indicators

- ⊙ Transmit / Receive (Flashing Blue)

Temperature

- ⊙ Operation temperature : -10°C ~ +70°C
- ⊙ Storage temperature : -30°C ~ +75°C

