## Bluetooth ® Module

# Rayson

#### **BC05-MM Class2 Stereo Module**

#### **BTM-760**

This is a Bluetooth Class2 (max 4dBm) module with on board antenna. The on board antenna eliminate the need of matching circuit on the main board and therefore save the costs of production test. It is based on CSR Bluecore 5 (BC5)-MM chip set. It's fully qualified with Bluetooth v3.0 system. The Embedded Kalimba DSP Co-Processor supports the advanced features such as echo cancellation, noise reduction and stereo audio (A2DP profile) communications. Thanks to the 16M bits program flash memory, the module can be integrated with fruit of Bluetooth profiles stack to meet various kinds of application. The integrated stereo DAC provide high quality audio performance with SNR up to 95dB. Support digital audio bus such as PCM, I<sup>2</sup>S or SPDIF. And the on chip Switched-Mode Regulator and Li-ion battery charger eliminate the needs of external components and costs. The host Interfaces include USB and UART, that are programmable for data communication, module control or firmware upgrade.

The powerful and flexible design allows the module to support HSP/HFP/A2DP/AVRCP SPP, PBAP,...all kinds of Bluetooth profiles.

#### **Features**

- The module is a Max.4dBm( Class2 ) module.
- Fully Qualified Bluetooth v3.0 system.
- Integrated Switched-Mode Regulator.
- Integrated Battery Charger.
- Embedded Kalimba DSP Co-Processor.
- Integrated 16-bit Stereo Audio CODEC 95dB SNR for DAC.
- Enhanced Audibility and Noise Cancellation.
- Integrated with 16M bits flash memory.
- Support Host Interface: USB or UART.
- Support Digital Audio Bus : PCM, I<sup>2</sup>S or SPDIF.
- HSP/HFP/A2DP/AVRCP profiles support.
- Integrated chip antenna ( or W.FL connector)
- RoHS compliant.
- Small outline. 16.0 x 23.9 x 2.6 mm.

### **Applications**

- High Quality Stereo Wireless Headsets.
- High Quality Mono Headsets.
- Hands-Free Car Kits.
- Wireless Speakers.
- VOIP Handsets.
- Analogue and USB Multimedia Dongles.
- Bluetooth-Enabled Automotive Wireless Gateways.

#### **Outline**

