

Operational Description

This product, EM-100, is an Ear Level Instrument based on the Bluetooth technology. The product operates in 2400 to 2483.5 MHz band. The channel is represented by a pseudo-random hopping sequence through the 79 channels. The channel is divided into time slots, with a nominal slot length of 625 μ s, where each slot corresponds to different RF hop frequencies. The nominal hop rate is 1600 hops/s. The symbol rate on the channel is 1 Ms/s.

The control signals and data in the BC02-HEADSET-EXTRA is modulated and processed and pass the PA in the chip. They output from the chip and through the BALUN and FILTER. Last they will be transmitted from ANT to another Bluetooth device.

The RF signal from other Bluetooth device is received via ANT. And they through FILTER and BALUN into the BC02-HEADSET-EXTRA chip. They are magnified by internal LNA in the chip.

Power source

The product is operated from DC 3.7V Li-Polymer battery that is rechargeable by the AC/DC adaptor.

Antenna

The product has a SMD Chip antenna manufactured by AMOTECH Co., Ltd., model ALA131C3 that has the directional gain of maximum 2.47 dBi. No external ground is required.