The working principle of Bluetooth headsets can be roughly divided into four steps as shown in the figure:



- 1. The decoding chipin the mobile phone decodes music files such as MP3, generates a digital signal and sends it to the Bluetooth headset via Bluetooth;
- 2. The Bluetooth headset receives the digital signal and converts it into an analog signal that can be understood by human ears through the digital-to-analog conversion chip (AC6969A) inside the Bluetooth headset;
- 3. The internal amplifier of the Bluetooth chip amplifies the analog signal;
- $4\sqrt{}$  The headphone unit receives the amplified signal and emits sound, and then the ear hears the sound of music.

Crystal oscillator: 24MHz

Frequency Range:2402-2480MHz