

# SP3583-BKA Bluetooth microphone

This section describes the principle of the SP3583-BKA microphone

SP3583-BKA at 2402 ~ 2480 MHz, using AC6965E4 Bluetooth microphone, chip, antenna using onboard antenna, antenna gain is -0.58 dBi.

It supports BR+EDR specification. Support GFSK,  $\pi/4$  DQPSK, 8DPSK, clock frequency 24MHz.

## 1. Circuit description

The AC6965E4 is a Bluetooth microphone. The antenna part of Bluetooth chip adopts onboard antenna without antenna matching circuit.

The Bluetooth A2DP protocol handles the demodulation of audio signals and pushes the speaker directly through the chip's built-in DAC and amplifier.

External microphones support HSP/HFP protocol invocation.

The rated voltage of the power input is 5V DC. Connect to the 4054 charging chip via MicroUSB to charge the battery.

The circuit also supports serial communication of UART for debugging.

## 2. Function description

The SP3583-BKA microphone is a mono Bluetooth microphone that can be connected to a primary device such as a mobile phone or computer that plays music to the primary device.

SP3583-BKA microphone has 7 buttons, 2 potentiometers, complete the previous/next song: volume addition and subtraction: switch machine; Play/Pause operation. A potentiometer is used to adjust the volume of the mic, and a potentiometer is used to adjust the reverberation depth.

The two leds show different operating conditions. Charging red light long bright, full red light off. The blue light shines when switched on.