

1. Radio Frequency Module Circuit Board Section

An external power supply provides DC 4.5V voltage to the circuit board.

Matching Network — This matching network aligns the antenna impedance with the impedance of the chipset RF module and provides filtering functions in the RF path.

Antenna — A transceiver antenna interfaced with the IC via an L-C matching filter. It receives and transmits the modulated 2.4GHz RF signal through the air. Antenna gain: 2.92 dBi.

Modulation Types: GFSK

Bluetooth: AC695N_soundbox_sdk_release_3.1.0

24MHz Crystal Oscillator — Serves as an external component interfaced with the IC, providing the reference clock source required for internal operations.

Music playback is achieved by connecting via the antenna to external Bluetooth devices such as mobile phones and computers.

Using an external Bluetooth function button, users can switch between Bluetooth music playback mode and internal music playback mode.