Technical Description Document

- **Broadcom Bluetooth Single Chip : Braodcom BCM2035 B3 Rom version**

  Including Baseband and Logic , Microcontrollor , Synthesizer , Transmitter & Receiver

  1. Tx Mode

  Transmitting signals enter Bluetooth Single Chip through USB port of PC/NB. The digital signals are converted into analog I, Q signals by the baseband circuits, then modulated and up-converted to 2.4GHz RF signals by the RF Transceiver. Finally, the RF signals are amplified by the power amplifier and transmitted into the air through the antenna.

  2. Rx Mode

  The receiving signals received by the antenna are amplified by the low noise amplifier and enter BT Chip. The received RF signals are down-converted and demodulated by the Transceiver to analog I, Q signals. The baseband circuit converts the I, Q signals into digital signals and sends the I, Q signals to USB port.

- **Power Amplifier**

  The power amplifier increases the output power (about 0dBm) of BT chip to 15 dBm of bluetooth class 1 specification.

- **Miscellaneous**

  The crystal provides the whole circuit the standard reference frequency of 15.36 MHz .