

# **USB Bluetooth Adapter**

## **Operation Principle**

The USB Bluetooth Adapter is mainly composed by:

- BCM2045 single chip Bluetooth Transceiver and Baseband Processor
- Power Amplifier RFIC AP1110
- 2.4GHz Low Pass Filter
- EEPROM memory IC
- LED indicator
- 26MHz crystal
- PCB antenna
- 3.3V LDO regulator
- USB Male Connector

The BCM2045 is a monolithic single-chip, Bluetooth® 2.0-compliant, stand-alone baseband processor with an integrated 2.4-GHz transceiver. It is powered by the 3.3V LDO regulator which convert USB 5V to 3.3V. The 26MHz crystal provides the clock to BCM2045 and the EEPROM stores the firmware and MAC address information.

When the Adapter works, it receives data/command from USB and transmits them to other Bluetooth device by the PCB antenna and vice versa. The LED indicator will blink when there is any data/command sent or received by BCM2045.