Operational Description

Keyboard: (1) Once a key or multi keys of keyboard are pressed or released, the signal change will be detected by MCU.
(2)The MCU converts these signals into HID data packet.
(3)The MCU send HID data packet to Bluetooth Module via uart interface.
(4)The BT module transmits the modulation signal on frequency of 2.4GHz using FHSS modulation.

Music: (1) Once the receiver receives the modulation signal, it will demodulation the signal through Bluetooth Chip and will respond with signal to Bluetooth Stack.
(2)The BT Stack converts the signal into an acceptable format received by PC.

The USB interface of this product is used for charging and discharging purpose only without data exchange function.

The following pertains to both FHSS transmitters contained within this device

a. When power on, this device will loop scan the whole frequency until a connection command from the partner is received.

b. This device transmits a response signal.

c. The partner receives the response signal and recognizes it, then send a connection command to establish the connection.

d. each frequency is used equally on the average by each transmitter that each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous transmission event.

e. After the connection establish successfully, the data transmission is beginning. At the same time, the partner and this device will shift frequencies in synchronization per a same pseudo randomly ordered list of hopping frequencies, the hopping rate is 1600 times per second. This device conform to the criteria in FCC Public NoticeDA00-705.

f. The bandwidth of the this device, which is set to a fixed width by the software, match the hopping channel bandwidth of their corresponding partner. This device is a true frequency hopping system and does not have the capability to be coordinated with other FHSS systems in an effort to avoid the simultaneous occupancy of individual hopping frequencies by multiple transmitters.

There are 79 channels in total. The channels hopping from one channel to another channel during the pseudorandom selection process. The hopping interval is 12 millisecond. This system frequency hops between 79 channels. If it is

determined that one of the 79 hopping channels is found to be noisy or poor due to other RF interference, then a new channel is selected from the 78 unused channels and the one noisy channel is released to the unused group. This repeats whenever a noisy or poor channel is detected. For example, for the hop pattern of 2414MHz,2434MHz,2444MHz,2434MHz,2451MHz,2441MHz,2454MHz,2434MHz, 2427MHz,2461MHz,2461MHz,2444MHz,2414MHz,2448MHz,2451MHz,2417MHz, 2478MHz,2469MHz,2473MHz,2403MHz,etc. The sequential hops can not follow any order, is completely random.

The antenna supplied with PCB antenna with a max gain of 0 dBi. The antenna is an integral part of the device.

The peak power of the transceiver is approximately 8.295 dBm, and the maximum EIRP is approximately 8.295 dBm.