

## *Operational Description*

### **PS3 MiniKeyboard RX Dongle Operating Elements**

1. USB Port Circuit: USB\_PLUG, R1, C4 compose the USB port circuit which communication with PC and supply the power for all system.
2. Power Manage Circuit: U2, C1, C2 compose Power Manage and supply circuit. The Pin3 is 3.0V power output for RF Module.
3. RX HOST IC: U1 communicates with PC via USB port and communicates with RF IC.
4. LED indicator Circuit: D1, R2 compose the LED indicator circuit, when RX host IC is connecting with TX host IC, the LED will turn on.
5. RF Module Antenna Circuit: C121, C122, C123, C124, C131 and C132 compose antenna circuit. The RX HOST IC can receive or transmit data via the antenna circuit.
6. RF Module Crystal: C81, C101 and Y1 compose RF module crystal circuit, which supply the oscillate source to RF Module IC.
7. RF Module IC Circuit: U3, R171, C3, C51 compose RF Module IC circuit, which receive and transmit data with RX HOST IC via PIN1,2,3,7 and then receive in and send out the data via Antenna Circuit.

Our product mini PS3 wireless keyboard 8829 is a hopping system, it sets in the 74 channels working range from 2410MHz to 2470MHz. And the system will hop at random on every channel when in the process of being used, each channel used on average will be guaranteed. The system complies with the requirement 15.247(a)/RSS-210 A8.1.

While system sets in the process of searching, the transmitter will create a random code to the receiving end. When the two sides connect successfully, both of their random codes shall be the same. While system sets in the process of communicating as a benchmark of 2410MHz frequency, random code will create one more random code in accordance with the same formula to reach an offset frequency. Then the offset frequency plus base frequency works out the final frequency, at the same time ensuring the final frequency will range within 2410MHz and 2470MHz. Thus System hops randomly in such an approach in 74 channels to spread messages probably 100 times in a second time, and each one channel shall be surely used at least once. The system complies with the requirement 15.247(g)/RSS-210 A8.1.

Cause our product is a random hopping system, it doesn't have any mechanic procedure to automatically control to hop any frequency or close any frequency on the next second. It does not have the ability to be coordinated with other FHSS systems in an effort to avoid the simultaneous occupancy of individual hopping frequencies by multiple transmitters. The system complies with the requirement 15.247(h)/RSS-210 A8.1.