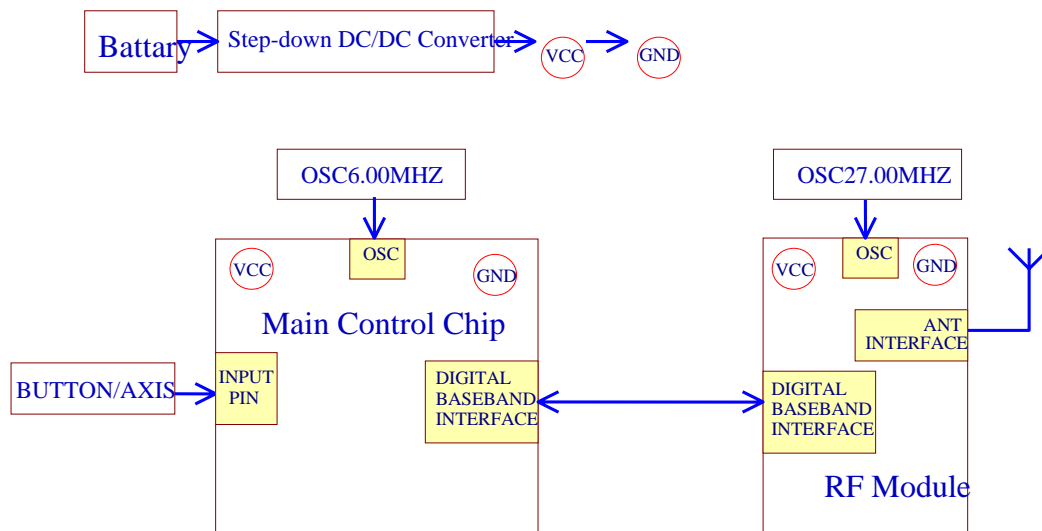# 2.4GHz RF PS2&PC Wireless Controller Working Principle

It is a 2.4G RF product. It works at the frequency range of 2433MHz to 2481MHz. There are up to 16 channels, and the frequency interval between each channel is 3.0MHz. The modulation type is MSK.

The "device" have three subsections. 1: Main control chip. 2. RF Module.3.The power supply circuit

Subsection 1:

The main control chip working procedures:
a) When power on, the main control chip will search all of the channels, to see whether there is a Host .
b) If it can connect to the Host, then the main control chip will respond to the Host.
c) The main control chip read the Axes and Buttons value.
d) The main control chip sends the Axes and Buttons value to host.

Subsection 2:

RF module working procedures:
a) Send "Device" main control chip Data to "Host"'s by modulate RF signal.
b) Example: The Device's Module sends the Axes and Buttons value to the Host's Module.

Subsection 3:

The power supply circuit is mainly consist of one LDO converter AIC1734-33; 4.5V DC voltage from the battery can be convert to 3.3V DC; it can supply to RF module and Main control chip and circuit to work.