



Transmitter

01. MCU will scan the button and optical sensor signal. If any signal change comes from above mentioned, it will turn on, convert the data package, check the low battery status data, and prepare to turn on the RF power, setting the channel switch (ch1 or 2), Touch link button link to receiver..
02. When MCU receives the signal of any key. Firstly, MCU will turn on the RF power, transmitter button or optical sensor data.
03. Power amplifier is to support enough current to drive the antenna.
- 04.. Matching circuit is to match the impedance between PA and antenna..

Receiver

01. When the PC powers on, the receiver will start the PnP process. No-matter the interface is PS2.
02. MCU will program power, If IC will perform the exact frequency, (27.5MHz or 27.55MHz) touch link button lock channel Frequency..
03. When the RF signal comes (27.045 or 27.095MHz), the low noise amplifier (LNA) will amplify the signal about 14 dB.
04. The added signal to pass through mixer I will generate 455KHz intermediate frequency (IF). It means that the original signal (27.045 or 27.095MHz) will down convert to 455KHz..
05. IF1 filter is performing a filtering function of 455KHz (IF1).
06. When the (L0 27.5MHz or 27.55MHz) signal passes through the 1st mixer, it will generate the 1st IF 455KHz.
07. After the IF1 amplifier will work for an AGC (auto gain control) function, and the signal more stable.
08. A 455KHz resonator will perform the LO function.
09. When the IF1 (455KHz) passes through discriminator, the demodulating signal will come out. We called it base band signal.
10. AF AMP will work as a data slicer, it amplifies the signal to 8-square wave digital signal.
11. This digital signal will send to MCU. MCU will sample the signal to check it is valid or not.
12. If the signal is valid, MCU will convert the signal of the interface to PC. No-matter is PS2 and USB let PC to do their exact activity.