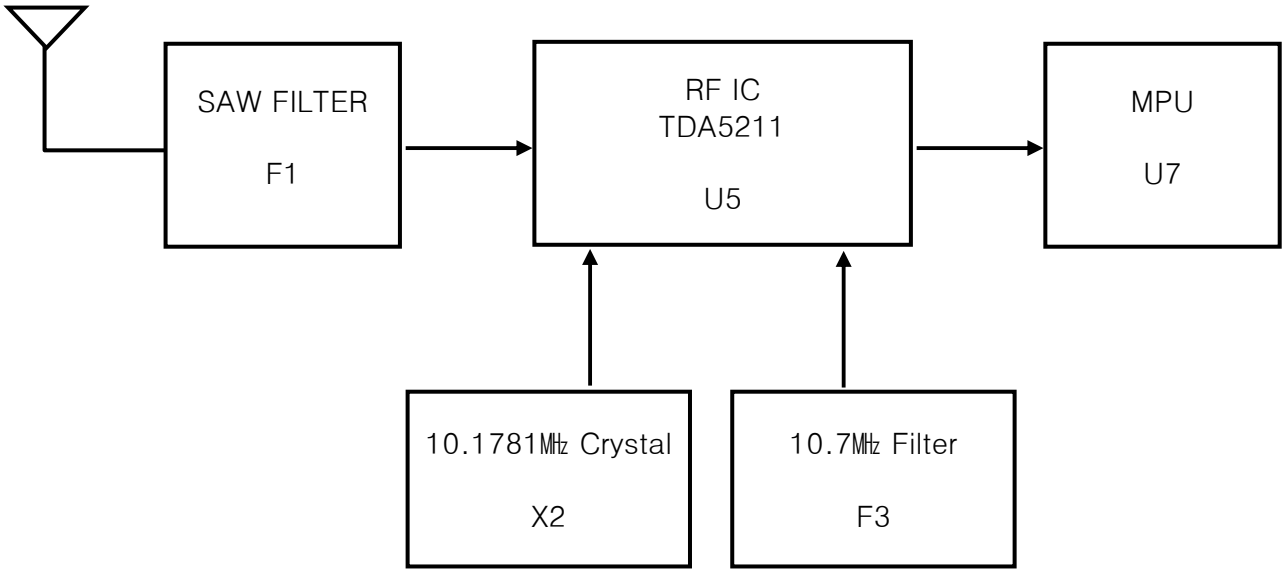
1. 315㎒ Receiver Block diagram



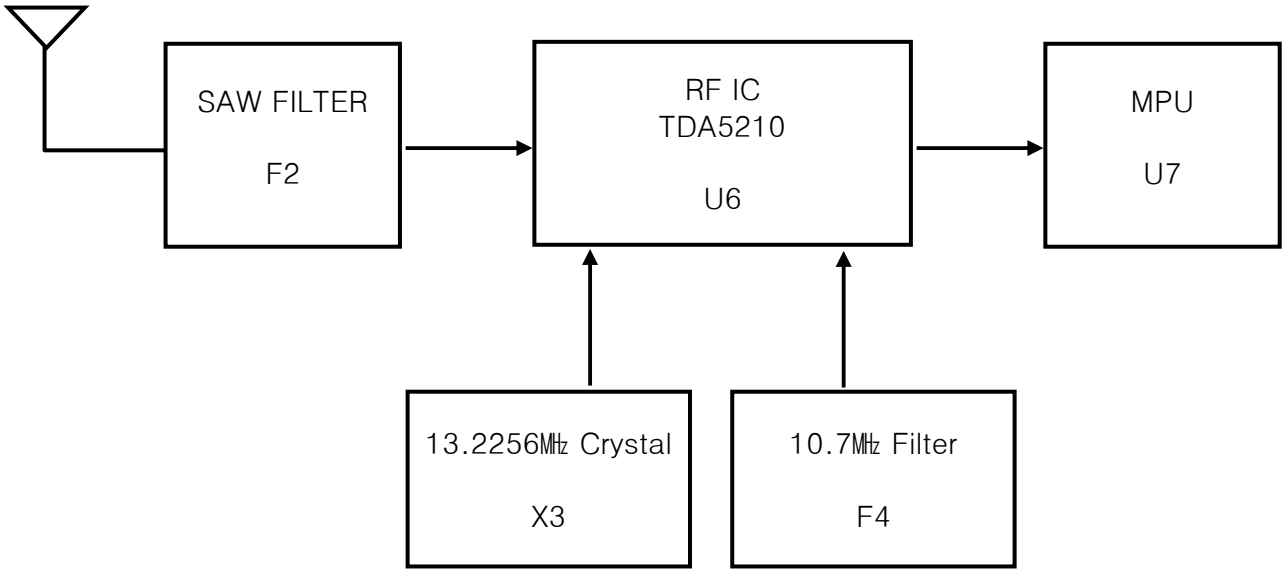
■ Circuit Description

1) SAW Filter
SAW filter F1 is band pass filter. It filters out desired signal and delivers it to the LNA

2) RF IC (TDA5211)
The TDA5211 is a very low power consumption single chip FSK/ASK superheterodyne receiver(SHR) for the frequency band 310 to 350MHz that is pin compatible with the ASK receiver TDA5201. The IC offers a high level of integration and needs only a few external components. The device contains a low noise amplifier(LNA), a double balanced mixer, a fully integrated VCO, a PLL synthesiser, a crystal oscillator, a limiter with RSSI generator, a PLL FSK demodulator, a data filter, a data comparator(slicer) and a peak detector. Additionally there is a power down feature to save battery life.

3) 10.1781㎒ Crystal & 10.7㎒ Filter
fc = (315㎒ + 10.7㎒) / 32 = 10.1781㎒

2. 433.92㎒ Receiver Block diagram



■ Circuit Description

1) SAW Filter
SAW filter F2 is band pass filter. It filters out desired signal and delivers it to the LNA

2) RF IC (TDA5210)
The TDA5210 is a very low power consumption single chip FSK/ASK superheterodyne receiver(SHR) for the frequency band 400 to 440MHz that is pin compatible with the ASK receiver TDA5200. The IC offers a high level of integration and needs only a few external components. The device contains a low noise amplifier(LNA), a double balanced mixer, a fully integrated VCO, a PLL synthesiser, a crystal oscillator, a limiter with RSSI generator, a PLL FSK demodulator, a data filter, a data comparator(slicer) and a peak detector. Additionally there is a power down feature to save battery life.

3) 13.2256㎒ Crystal & 10.7㎒ Filter
fc = (433.92㎒ + 10.7㎒) / 32 = 13.2256㎒

SYSTEM BLOCK DIAGRAM