Operation Methodology

The U1 CPU encoder generates a pulse code serially transmit (typical designation) inside the U1. This pulse signal mixed with the carrier at modulator(inside U1) stage by way of FSK mode frequency modulation. The modulation depth is designed such as ± 5KHz in this application, that means the pulse(may be at high level state or low level state) will trigger the oscillator to generate a frequency at a specified fundamental frequency +5KHz or −5KHz, depended on the designation. For example, if the carrier frequency defined as fundamental frequency +5KHz at high level state, then the alternative carrier frequency will be fundamental frequency −5KHz at low level state.

Then the U1 modulator(mixer) will output a modulated signal to the transmit antenna.