Circuit Description of Transmitter(TX) (Ultra-e-2020)

Pushing one of 4 switches(SW1, SW2, SW3, SW4) on transmitter, voltage at the base of Transistor(Q1) is dropped and power is supplied into the RF Circuit(Q2, Q3).

At the same time, carrier frequency(308MHz) is generated by Crystal(XT) in the Oscillation Circuit.

This carrier frequency is going into Modulation Circuit through Condensor(C13) which mixes up and modulates the carrier frequency and pluse coded signal supplied from Encorder(U1).

This mixed up and modulated signal enter into Antenna Circuit which emits the carrier frequency through Matching Coil(L5) in the air.

The coding specification of Encorder IC is as following.

