

Wireless System-An Overview

Wireless system consists of three main basic subsystem viz. Baseband, RF and A-D/D-A converters.

Baseband Part:

Base band part mainly helps retrieve information correctly at the other end and also make it feasible to transmit through the channel.

It consists of Source Encoder, Forward error correction module (CC or CTC) and Base band Modulator (BPSK, QPSK, 16QAM, 64QAM)

A to D and D to A converters:

It converts Digital data into Analog form at the Transmitter. The output is modulated IQ data at IF Frequency. This will be the input to RF Up converter. At receiver ADC is used which converts modulated IQ data at IF into digital data.

RF Part:

It consists up converter/power amplifier at the transmitting end and LNA / down converter at the receiving end. Antenna is used to convert signal into electro-magnetic form and vice versa to Transmit/Receive the signal in to the air. OMT makes it possible to use the same antenna for both transmit and receive OMT is basically a transmit reject filter which blocks signal to be transmitted while Antenna is receiving the signal from the other end.

