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## Abstract

This Paper describes the simulation & performance Evaluation of the WIMAX baseband processor. A MATLAB simulation is carried out in order to analyze baseband processing of the transceiver. Orthogonal Frequency Division Multiplexing (OFDM) is applied in this project according to the IEEE 802.16 standard, which allows Transmission of data rates from 6 Mbps up to 54 Mbps. Distinct modulation schemes as Binary Phase Shift Keying (BPSK), Quadrature Phase Shift Keying (QPSK) and Quadrature Amplitude modulation (QAM) are used according to differing data Rates for Signal visualization at each block of Transceiver. Simulation is carried to measure Bit Error Rate (BER), Symbol error rate & to measure Number of data bits, coded bits in OFDM symbol by using different modulation & Code rate. Pre implementation simulation for WIMAX system is developed to reduce system cost & to improve effective utilization with limited resources.

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### Index Terms

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### Keywords

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