OFDM is combined with channel coding scheme i.e. FEC (Forward Error Correction) called CODED OFDM or COFDM is especially suitable for high speed environment because it provides data transfer at higher speed with reliable transmission. Main focus of this paper is to design COFDM transceiver which operates with FEC, scrambling, block interleaver with conventional OFDM system to overcome the problem in wireless link i.e. ISI, ICI, fading etc. In this paper, COFDM transceiver designing details and simulation results are discussed after that COFDM modulator is compared with previous work which ensures present work is better than previous work. COFDM Transceiver is designed and synthesized using Xilinx Project Navigator XILINX ISE 9.1i and simulated using ModelSim 5.8c simulator.

**Index Terms**

Computer Science  Communication Systems
Key words

COFDM
OFDM
FEC
Convolution Encoder
Viterbi Decoder