

INTER-CARRIER INTERFERENCE REDUCTION IN OFDM SYSTEM

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ABSTRACT

The implementation of OFDM system suffers from the effect of phase noise generated by the local oscillator which disturbs the orthogonality among sub carriers and causes inter carrier interference (ICI). The ICI may also suffers due to insufficient cyclic prefix at the transmitter Self cancellation is the method is suggested for reducing the ICI. The frequency offsets between the transmitter and receiver is measured in terms of carrier to interference ratio (CIR) and bit error rate (BER).

KEYWORDS: Orthogonality, Self Cancellation, Inter Carrier Interference (ICI), Carrier to Interference Ratio (CIR)