Abstract

Orthogonal Frequency Division Multiplexing (OFDM) is a well-known modulation technique for transmission of large amount of digital data with high data rate in both wired and wireless communication systems. High peak-to-average power ratio (PAPR) is the main problem of OFDM system which can be improved by using single carrier frequency division multiple access (SC-FDMA) technique. A new scheme using LFDMA and IFDMA technique is proposed for further reducing the peak-to-average power ratio (PAPR). It transforms the SC-FDMA signal by properly choosing the transform parameters for achieving a favorable tradeoff between PAPR reduction and bit error rate (BER) performances. The simulation results show better performance of the proposed scheme than the existing technique. In this paper, we have improved the PAPR performance of single carrier frequency division multiplexing (SC-FDMA) using LFDMA and IFDMA with and without pulse shaping.
Performance Improvement of IFDMA and LFDMA using NCT Technique


Index Terms

Computer Science
Software Engineering

Keywords
Orthogonal frequency division multiplexing Peak to average power ratio Location based frequency division multiple access
interleaved frequency division multiple access.