Abstract

Orthogonal frequency division multiplexing (OFDM) is a promising multicarrier modulation technique for high data rate communication. Unless, OFDM faces the peak-to-average-power ratio (PAPR) problem that is a major drawback of multicarrier transmission system which leads to power inefficiency of high power amplifier (HPA) and also demands the large dynamic range of digital to analog converter (DAC) at the transmitter. A number of schemes have been proposed to reduce the PAPR problem. The Discrete Fourier Transform (DFT) Spreading is one of the scheme to reduce the PAPR Problem in OFDM system. This paper presents the DFT spreading technique to reduce the PAPR problem. The PAPR reduction capability of this technique is demonstrated by presenting simulation results of PAPR.

References

Performance Assessment of PAPR in OFDM System using Single Carrier - FDMA

- Manushree Bhardwaj, Arun Gangwar, &quot;An Overview: Peak to Average Power Ratio in OFDM system & its Effect&quot;; IJCCTS Volume 01 – No. 2, Issue: 02 September 2012.
- Vendee-Ramjee, &quot;OFDM for wireless multimedia communications&quot;.
- Yuan Fang, Li Tao and Nan Chi, &quot;Interleaved subcarrier allocation for DFT-spread OFDM to reduce PAPR&quot;; 17th opto electronics and communication conference (OECC 2012), July 2012, buasn korea.

Index Terms

Computer Science
Circuits And Systems

Keywords
Interleaved frequency division multiple access (IFDMA) Localized frequency division multiple access (LFDMA)
Orthogonal frequency division multiplexing (OFDM)

Peak to average power ratio (PAPR).