Abstract

Today’s system requirement is higher bandwidth for wireless communications. To meet the requirements new systems are being implemented. These systems are specified by multi carrier frequencies, high data transmission rate and mobility and are implemented with MIMO OFDM (Multiple Input Multiple Output Orthogonal Frequency Division Multiplexing). Integration of STBC to MIMO OFDM over frequency selective channel is adopted to improve further performance which convert frequency selective channel to several flat fading channels thereby
eliminating ISI. But the multicarrier technique STBC MIMO-OFDM has high Peak-to-Average Power Ratio (PAPR). To achieve better performance this PAPR has to be reduced. In this paper, the effect on PAPR by variation of different parameters like number of subcarriers, OFDM symbols has been presented. Simulation Results show that PAPR performance is improved with increase in number of transmitting antennas. But there is only small difference in PAPR reduction for different subcarriers and when OFDM symbols are varied, there is recognizable reduction in PAPR. Thus, different subcarriers have minimum influence on PAPR performance compared to OFDM symbol variation.

References

- Shang-Kang Deng, Mao-Chao Lin, "Recursive Clipping and Filtering with bounded


Index Terms

Computer Science

Wireless

Keywords

Ofdm  Mimo  Stbc  Modified Pts  Isi  Qpsk.