Examine the impact of Modulation Order and Sub-bands on PAPR Reduction Techniques using Various Modulator

Abstract

In the modern era of communication Orthogonal Frequency Division Multiplexing (OFDM) technique is the most widely used in wireless technology. With some advantage come few issues such as Peak to Average Power Ratio (PAPR) that leads High Power Amplifiers (HPA) to be worked in nonlinear region which causes inter-modulation distortion and out of band radiation. To overcome with this problem, several techniques were used. Whereas, this paper uses most efficient signal scrambling technique, Partial Transmit Sequence (PTS) and Selected Mapping (SLM) to be worked with various modulators such as Orthogonal Quadrature Phase Shift Key (OQPSK) and Quadrature Amplitude Modulator (QAM) and Binary Phase Shift Key (BPSK). Under different modulator and different parameters like Sub-Band, Modulation factor, these techniques were analyzed and compared.

References

- C. Nade, P. N. Landin, W. V. Moer, N. Bjorsell, and P. Hande, "Performance


Index Terms

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