Abstract

Orthogonal frequency division multiplexing (OFDM) is an modulation and multiplexing technique preferred in present wireless environment. One of the issues to be addressed in OFDM is high peak to average power ratio (PAPR) of the received signal which may cause power amplifiers at receivers to go into saturation. In this paper a selective mapping technique (SLM) associated with Reed Solomon (RS) code and $\mu$ law Companding is proposed to reduce PAPR in OFDM
system. The simulation results shown with CCDF graphs indicate improved performance in PAPR with RS coding and companding as compared to conventional method. Further the advantage gained with using Reed Solomon (RS) coding is good error correcting capability in multipath environment.

References

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Index Terms

Computer Science
Electronic Design And Signal Processing
Keywords
Papr Reduction; Rs Coding; Companding Transform; Ccdf