

Efficient Sample Rate Conversion For Software Radio Systems

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Summary

An efficient sample rate conversion (SRC) method for software radio (SWR) systems is proposed. The proposed method modifies conventional single- or multistage SRC processes such that the computation of the output of a particular stage is performed in a hierarchical fashion. This SRC method consumes fewer computations than traditional SRC methods over a range of SRC factors and is especially suitable for SWR base station transmitters. The computational requirements of the proposed SRC method and conventional SRC methods are compared and simulation results of the proposed method are discussed.

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