In this paper, a model of radio transceiver for HF communication with Amplitude Modulation (DSBSC/SSBSC) using FPGA based on Software Defined Radio (SDR) technique is proposed. Due to the advantages of SDR technique, the transceiver can process directly and flexibly HF signal in digital domain and integrate with data processing software using standardized protocols. The results of transceiver's operational test with real-time voice signals which are analyzed based on experimental measurements demonstrate feasibility and scalability with customizable features for practical applications.

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Index Terms

Computer Science  Circuits and Systems

Keywords