A Review - Design of Area and Power Efficient Digital FIR Filter Based On Faithfully Rounded Truncated 12-Bit Constant

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Abstract

Finite impulse response (FIR) designs are given exploitation the conception of rounded truncated multipliers 12bit. we have a tendency to think about the optimization of bit width without sacrificing the frequency response and output preciseness. A smallest amount comes to of dissimilar pairs or groups of symbols and residues are often used to code a set of coefficients support on their likelihood and conditional probability of occurrence. This ingenious idea permits the notion of entropy to be applied as a quantitative measure to evaluate the coding density of various compositions of symbols towards a set of coefficients. No uniform constant quantization with correct filter order is projected to attenuate total region expenditure. Multiple invariable multiplication/increase during an exceedingly direct FIR structure is implemented exploitation an improved version of truncated multipliers. Multiple constant multiplication/accumulation during an exceedingly direct FIR structure are synchronized using an improved version of truncated multipliers.

References


Index Terms

Computer Science

Power Electronics

Keywords
Finite impulse response (FIR), multiple constant multiplications (MCM), digital signal processing (DSP)