Abstract

With onset of paradigms of System On Chip (SOC) to design a module for real time applications or voice codec’s, The SOC’s have different requirements for operands precision we propose a reusable FFT [2] using reconfigurable multiplier [6]. However, the FFT perform either combining N and N/2 bit multiplications in the same N bit tree multiplier. The key challenges in designing a reusable FFT are to limit the impact of flexibility on power operations that are needed for FFT butterfly to perform better than a conventional, dedicated FFT butterfly.

Reference

Reconfigurable FFT System on Chip (SOC)

- Matlab version 7.1.
- Modelsim SE PLUS 6i.
- PrimeTime Users Guide X-2005.06.

Index Terms

Computer Science
Integrated Circuits

Key words

System on Chip
Reconfigurable
reusable
Butterflies