Abstract

Network-On-Chip (NoC) provides a structured way of realizing communication for System on Chip (SoC) with many processing cores, which emphasize a communication-centric, as opposed to a computation-centric, design view. Network-on-Chip architectures have a wide variety of parameters that can be optimized according to the designer’s requirements. Exploration and optimization of these parameters is an active area of research and a large number of methodologies have been proposed for this. In this paper we study the existing techniques and categorize them on the basis of considered optimization objectives.
Analyzing Methodologies of Irregular NoC Topology Synthesis

References


**Index Terms**

Computer Science

Communication and Networks

**Keywords**

Network-on-Chip (NoC)  NoC communication graph  Genetic algorithm  Particle swarm optimization  Ant colony optimization