

Heuristic for Accelerating Run-Time Task Mapping in NoC-Based Heterogeneous MPSoCs

Authors : M. K. Benhaoua, A. K. Singh, A. E. H. Benyamina, A. Kumar, P. Boulet

Abstract : In this paper, we propose a new packing strategy to find free resources for run-time mapping of application tasks on NoC-based Heterogeneous MPSoCs. The proposed strategy minimizes the task mapping time in addition to placing the communicating tasks close to each other. To evaluate our approach, a comparative study is carried out. Experiments show that our strategy provides better results when compared to latest dynamic mapping strategies reported in the literature.

Keywords : heterogeneous MPSoCs, NoC, dynamic mapping, routing

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