

Adaptive Routing in NoC-Based Heterogeneous MPSoCs

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Abstract : In this paper, we propose adaptive routing that considers the routing of communications in order to optimize the overall performance. The routing technique uses a newly proposed Algorithm to route communications between the tasks. The routing we propose of the communications leads to a better optimization of several performance metrics (time and energy consumption). Experimental results show that the proposed routing approach provides significant performance improvements when compared to those using static routing.

Keywords : multi-processor systems-on-chip (mpsoCs), network-on-chip (noc), heterogeneous architectures, adaptive routing

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