



Design Space Exploration and Resource Management of Multi/Many-Core Systems

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Message from the Guest Editors

Depending upon the application domain, multi/many-core systems demand energy efficiency, reliability and/or security. These demands can be fulfilled by exploring the design space by considering the software applications and the multi/many-core chips to find the design points leading to efficiency in all the required metrics. Considering varying workloads in the systems over time, efficient resource management methodologies need to be developed to meet the requirements that can perform resource management decisions online without any prior analysis or can exploit offline explore design space to take efficient run-time decisions.

Topics include but are not limited to:

- Design space exploration (DSE) techniques for multi/many-core systems;
- DSE considering optimisation for one or more metrics, such as accuracy, performance, energy consumption, reliability and security;
- Resource management considering various principles, e.g., machine learning and heuristics;
- Adaptive and hierarchical resource management;
- Approximate computing to achieve trade-offs for various metrics.





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Message from the Editor-in-Chief

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