

Seminar

A Survey on Resource Management Strategies for Many-Processors

Embedded systems show an ever increasing demand for computational power in application fields such as robotics, telecommunication and autonomous driving. In order to meet this rising demand, many-core processors have been proposed, which rather consist of many simple cores instead of few high performance cores. Enabled by the continues technology scaling, this trend comes with challenges in high power densities and high operating temperatures that effect the performance and the reliability of the processor.

In order to minimize these undesirable side effects, thermal and resource management strategies need to be developed.

Example Paper:

Power-and Cache-Aware Task Mapping with Dynamic Power Budgeting for Many-Cores

Advisors

Marcel Mettler