TETRACOM: Technology Transfer in Computing Systems

FP7 Coordination and Support Action to fund 50 technology transfer projects (TTP) in computing systems. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement n° 609491.

Power aware multicore software mapping

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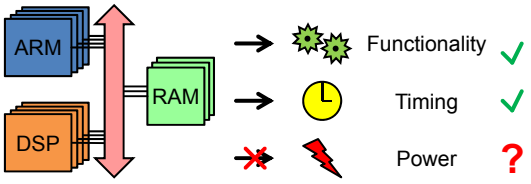
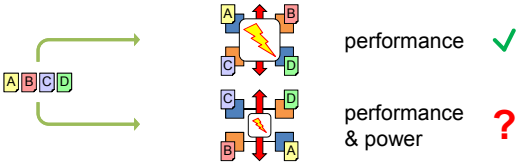
TTP Problem

Electronic System Level (ESL) Simulations



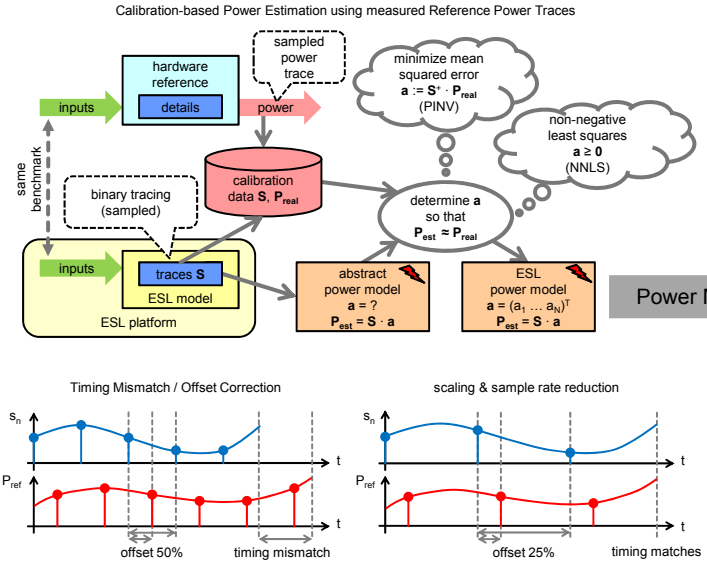
ESL Power Estimation including dynamic Power State switching

SLX Mapper by Silexica



SW task mapping optimally balanced between performance and power/energy consumption

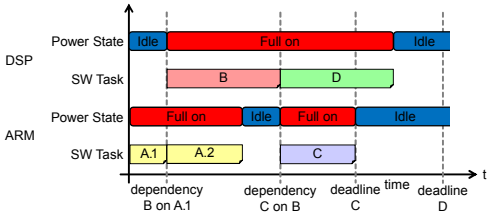
TTP Solution



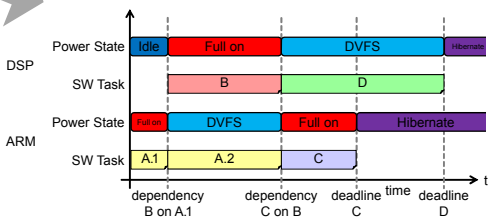
Power Model

Heuristic: Computational Segment Diffusion

performance optimized mapping

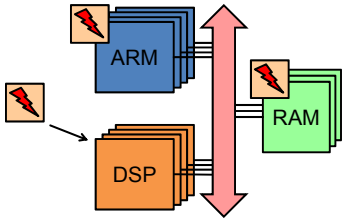


performance and power balanced



TTP Impact

ESL Power estimation



ESL Virtual Platforms used for verification of performance and power optimized SW task mapping

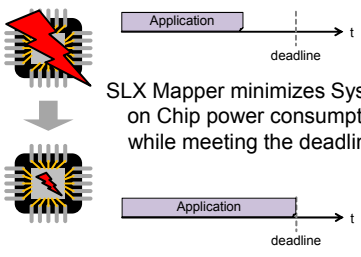
Verification

SW Tasks

SLX Mapper from Silexica

abstract power model

SW Task Mapping



SLX Mapper minimizes Systems on Chip power consumption while meeting the deadlines

TTP Facts

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SILEXICA multicore meets simplicity

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