

Session 1: Energy Efficiency

Energy Efficiency in Multicore CPUs: Harnessing Voltage Margins

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Abstract

The talk will summarize recent findings in the characterization of pessimistic voltage margins in multicore CPUs employed on 64-bit ARMv8 servers and the variability of margins across cores, chips, and workloads. The power and energy savings when these voltage margins are harnessed at the system level will be also discussed.