



10 years of research on Power
Management
(now called green computing)

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- Introduction
- Power management in real-time systems
- Power management in multi-core processors
- Performance-Resilience-Power Tradeoff
- Management of memory power
- Phase Change Memory

Power management techniques



Two common techniques:

1) Throttling

Turn off (or change mode of) unused components (Need to predict usage patterns to avoid time and energy overhead of on/off or mode switching)

2) Frequency and voltage scaling

Scale down core's speed (frequency and voltage)

Designing power efficient components is orthogonal to power management