

Categories for Power Efficiency

- Category I: Uniquely Exascale (Meeting 20MW Goal)
 - Power Performance monitoring & aggregation that scales to 1B+ core system (common to perf tools)
 - Power Control system that can disseminate control decisions across 1B cores (common to perf tools)
- Category II: Exascale plus trickle down
 - Scalable control algorithms to bridge gap between global and local power models
 - Power-aware and scalable resource control & scheduling (different from Cloud DC algorithms)
- Category III: Primarily Sub-exascale.
 - Optimally tune system power based on control loop
 - Power instrumentation & control standardization