



SYMPOSIUM'16

AMERICA – EUROPE – ASIA

THE ASIAN SPEC SYMPOSIUM ON SERVER EFFICIENCY



Enabling Efficiency Measurement

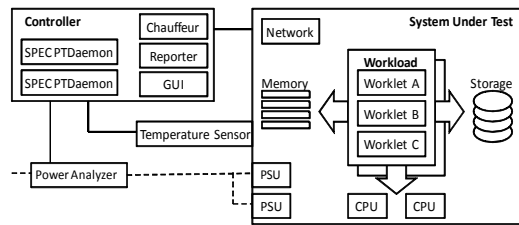
SPEC Power Temperature Daemon (PTDaemon)

A Power and Temperature Measurement Harness

- Infrastructure software to connect, control, and collect data from power and temperature measurement devices
- Enables standardized power and temperature measurements
- Utilized by benchmark organizations to add energy efficiency to their benchmarks

Utilized by multiple products from different organizations

- SPECpower_ssj2008
- SPECvirt_sc2013
- SPEC OMP2012
- SPEC ACCEL
- TPC-Energy
- Server Efficiency Rating Tool (SERT)
- Chauffeur Worklet Development Kit (WDK)
- VMware VMmark



HW / SW Overview

Power Analyzer Acceptance

- Defined acceptance process to assure that supported analyzers deliver data within reasonable accuracy criteria (http://www.spec.org/power/docs/SPEC-Power_Analyzer_Acceptance_Process.pdf)
- Vendor neutral (more than 30 analyzers from 10 different vendors):
 - Chroma, Hioki, Infratek, Instek, Newtons4th, Tektronix, Voltech, Xitron, Yokogawa, and ZES Zimmer

Temperature Sensor Acceptance

- Digi, Temperature@lert, and iButtonLink

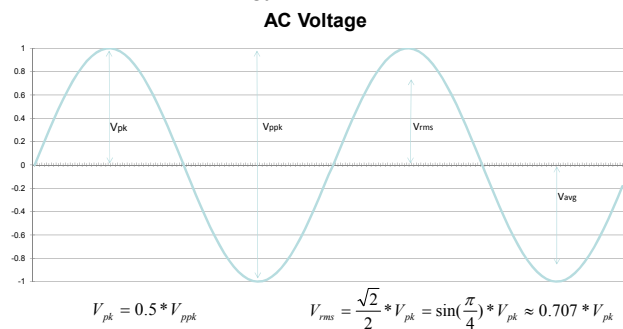
Power & Performance Benchmark Methodology

Best practices guide for benchmarks measuring performance and power

- http://www.spec.org/power/docs/SPEC-Power_and_Performance_Methodology.pdf

Purpose

- Introduction to understanding the relationship between power and performance metrics in benchmarks
- For performance benchmark designers who want to integrate power measurement
- Applies to existing benchmarks and the design of new benchmarks
- AC and DC



Independently utilized by:

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