

**spec**<sup>®</sup>

**SPEC 2016亚洲峰会**  
**SPEC 2016 ASIA SUMMIT**

# **Symposium on Server Efficiency**

**Klaus-Dieter Lange**  
**SPECpower Chair**



# Agenda - Thursday October 27



- 13:00 **Welcome to the SPEC Symposium'16 on Server Efficiency**  
Klaus-Dieter Lange (HPE), SPECpower Chair
- 13:20 **Designing a Good Benchmark – Part 2**  
Jeremy Arnold (IBM), SPECpower Architect
- 14:00 **Server Efficiency Rating Tool (SERT) Overview (Design, Metric)**  
SPECpower Committee
- 15:00 **Tea Break**
- 15:30 **ISO and Global Government Programs**  
Henry Wong (ISO)
- 16:00 **Trends in Server Efficiency and Power Usage in Data Centers**  
Sanjay Sharma (Intel), SPECpower Vice-Chair
- 16:30 **The Future of Server Efficiency and how it will be measured**  
Klaus-Dieter Lange (HPE/SPEC), Henry Wong (ISO),  
David Reiner (AMD/TGG), and Sanjay Sharma (Intel)
- 17:30 **Closing Remarks**

# Industry Challenge



Server Option	Platform A 18,831,605,760*
CPU	<b>44 combinations</b> 22 types, 1 or 2 populated
Memory	<b>144 combinations</b> 6 types, 1 to 24 populated
Internal Storage	<b>1440 combinations</b> 80 types, 1 to 18 populated
Additional Card	<b>172 combinations</b> 43 types, 4 slots
PSUs	<b>12 combinations</b> 6 types, 1 or 2 populated

\*Realistic combinations

# SPECpower Committee



## **Working Group was established on January 26, 2006**

Create SPEC products and assist other subcommittees, groups and organizations in creating products for fairly and consistently reporting system energy or power usage.

Group was granted committee status on 4/27/2006

## **Development Team**

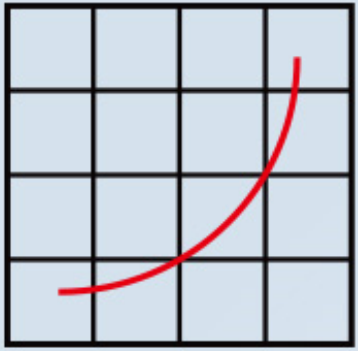
Ashok Emani, Cloyce Spradling, Greg Darnell, Hansfried Block, Jeremy Arnold, Jóakim von Kistowski, John Beckett, Karin Wulf, Klaus-Dieter Lange, Mike Tricker, Sanjay Sharma, Van Smith

## **Administrative and Development Support**

Bob Cramblitt, Cathy Sandifer, Diana Cercy, Dianne Rice, Elden Sodowsky, Jason Glick, Chris Chan-Nui, Hideyuki Koinuma, John Hitt, and Shreeharsha G. Neelakantachar

## **Academic and Corporate Support over the years**

ARM, AMD, Dell, Fujitsu, Hewlett Packard Enterprise, Intel, IBM, Microsoft, Oracle, and the University of Würzburg

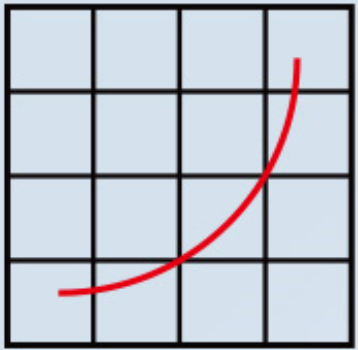


**spec**<sup>®</sup>

**SPEC 2016亚洲峰会**  
**SPEC 2016 ASIA SUMMIT**

**Q&A**





**spec**<sup>®</sup>

**SPEC 2016亚洲峰会**  
**SPEC 2016 ASIA SUMMIT**

# Thank you!

[info@spec.org](mailto:info@spec.org)

[www.spec.org](http://www.spec.org)