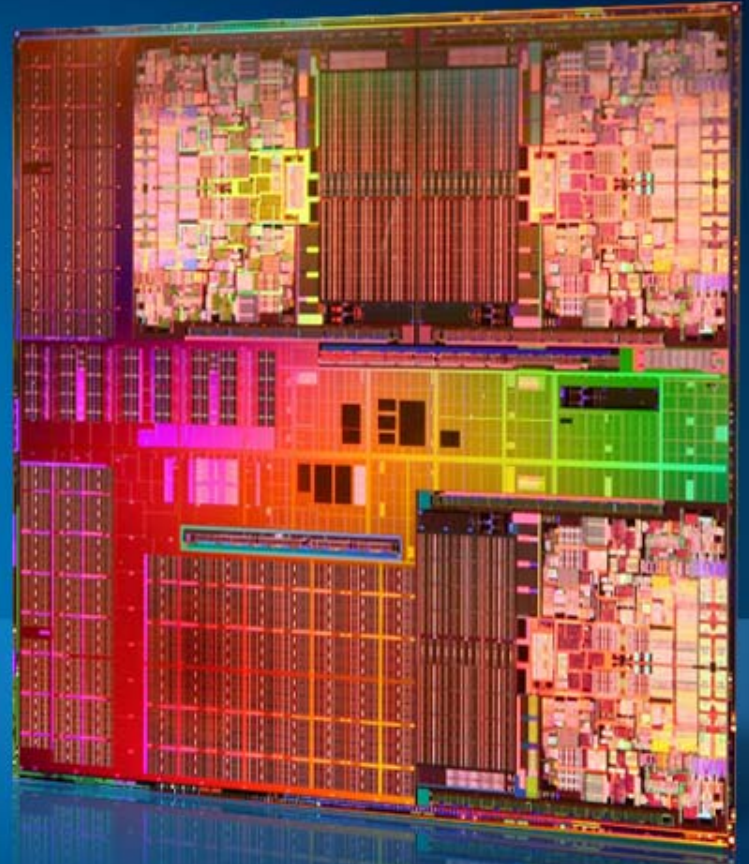


# *Introducing the* **Intel® Xeon® Processor 7400 Series**

**Tom Kilroy**

Vice President & General Manager  
Digital Enterprise Group

September 15<sup>th</sup>, 2008



# Intel® Xeon® 7400 Series

- 45nm Hi-k manufacturing process
- ~50%\* more performance and 10% lower power \*\*
- Critical new virtualization features
- Leading OEM's delivering innovative products



\*\*Compared to the Intel® Xeon® 7300 series

\* Up to approximately 50% performance result based on TPC\*-E improvement compared to prior generation.

For details visit [http://www.intel.com/performance/server/xeon\\_mp/summary.htm](http://www.intel.com/performance/server/xeon_mp/summary.htm)

# High-End Enterprise Trends

## Data Demanding Performance

Corporate Data Growing 50X in 3 Years (source IDC)  
Unstructured Data Proliferation

## Flexible Resource Utilization

Virtualization the engine for better utilization  
Shift to Virtualization 2.0

## Standardization

TCO is the primary motivator  
Xeon® Cost and Flexibility Advantages

## Energy Efficiency

Power and Cooling growing to >50% of OpEx  
Low Voltage, Energy Efficient designs

Focusing on "what matters" to IT



# Intel® Xeon® 7400 Series

## Technology Advantages

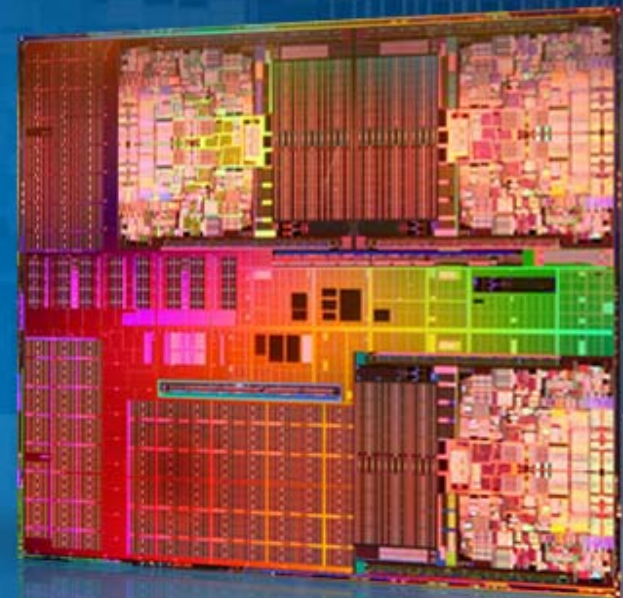
- 45nm Hi-K process
- 6-cores
- 16MB Shared L3 Cache
- Intel® VT FlexMigration
- LV Options at 50W
- Socket Compatible with Intel® 7300 platform

Performance

~%50\*

%10

Power



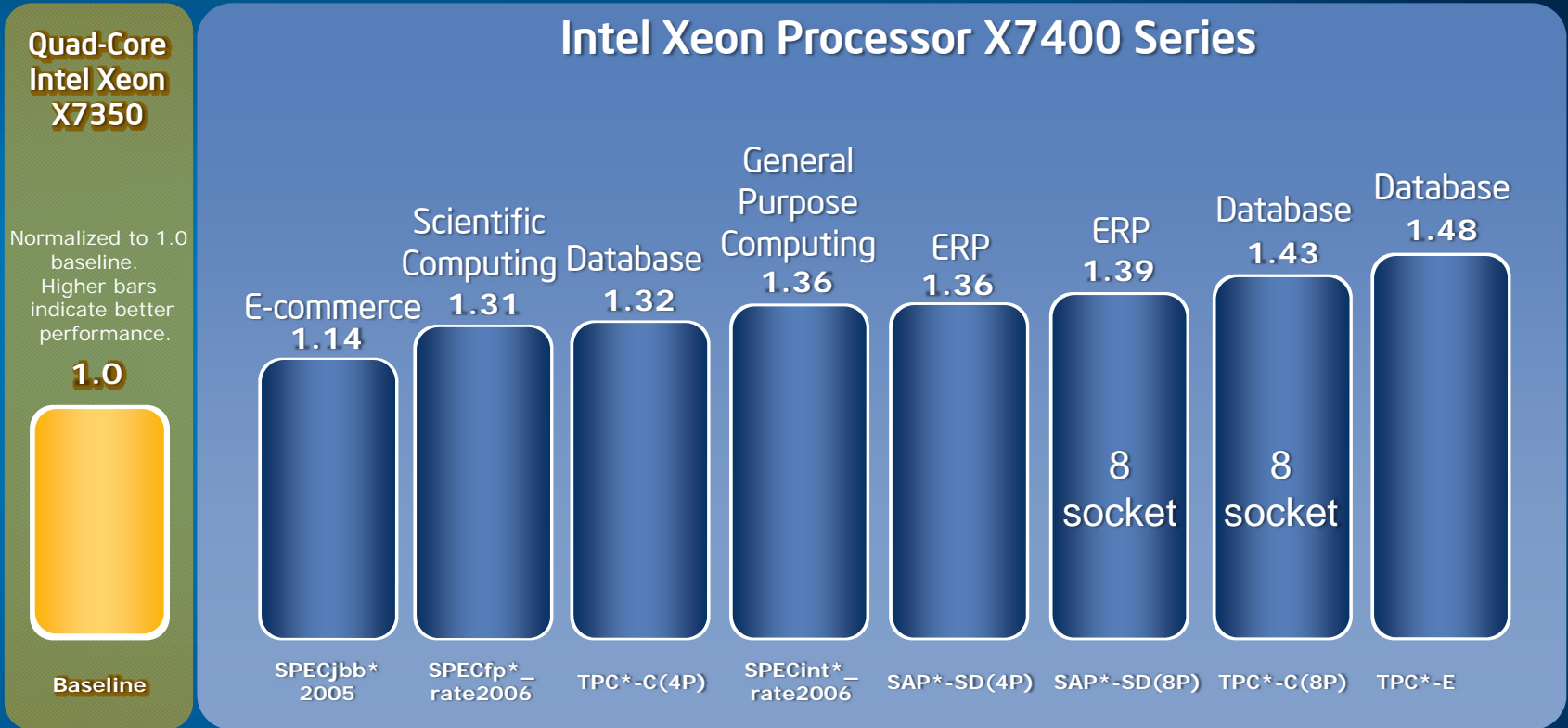
*Extending MP Leadership*



\* Up to approximately 50% performance result based on TPC\*-E improvement compared to prior generation.  
For details visit [http://www.intel.com/performance/server/xeon\\_mp/summary.htm](http://www.intel.com/performance/server/xeon_mp/summary.htm)

# Intel® Xeon® 7400 Boosts Performance

Comparison to Current Generation Quad-core Intel® Xeon® 7300 Series



+ Source: Submitted, published, or Intel internally measured results, 15 August 2008. See backup slides for details.  
X7350 published with 128 GB of memory and X7460 was published with 256 GB memory.

Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel products as measured by those tests. Any difference in system hardware or software design or configuration may affect actual performance. Buyers should consult other sources of information to evaluate the performance of systems or components they are considering purchasing. For more information on performance tests and on the performance of Intel products, visit <http://www.intel.com/performance/resources/limits.htm> Copyright © 2008, Intel Corporation.

\* Other names and brands may be claimed as the property of others.



# Enterprise Performance Records

8S TPC Benchmark\* C-DB2 1,200,632 tpmC  
**First 1M+ TPC-C database result for x86**



8S SAP\*-SD 2 Tier  
**9200 Users**



4S TPC Benchmark\* C  
**684,508 tpmc**



4S SAP-SD 2 Tier  
**5155 Users**



TPC Benchmark\* E  
**729 tpsE**



SPECjbb\*2008  
**531,669 bops**



VMware\*Vmmark  
**18.49 Score**



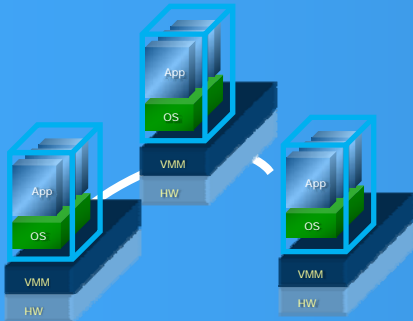
SPECint\*\_rate2006  
**291 peak score**



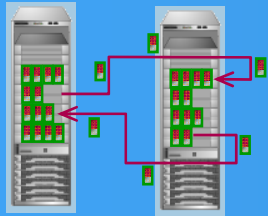
\*Other names and brands may be claimed as the property of others



# Virtualization 2.0



Resource Pools



VM Migration  
over the network

## Flexible Workload Management

Investment protection, across all segments  
Enabled with Intel® VT FlexMigration

## I/O tuned for Virtualization

Network and Storage Virtualization  
Intel leadership with new innovations

## HW-SW Compatibility

Broad portfolio of investment and collaboration  
Enable the ecosystem with new platform capabilities



# Virtualization Platform of Choice



vmware™

ESX v3.5.0

VMware\*  
VMmark\*  
4S Score

**#1** 18.49 at  
14 Tiles



Windows Server® 2008

Hyper-V

VIRTUALIZATION  
PERFORMANCE Vs.  
Previous Gen Xeon 7300

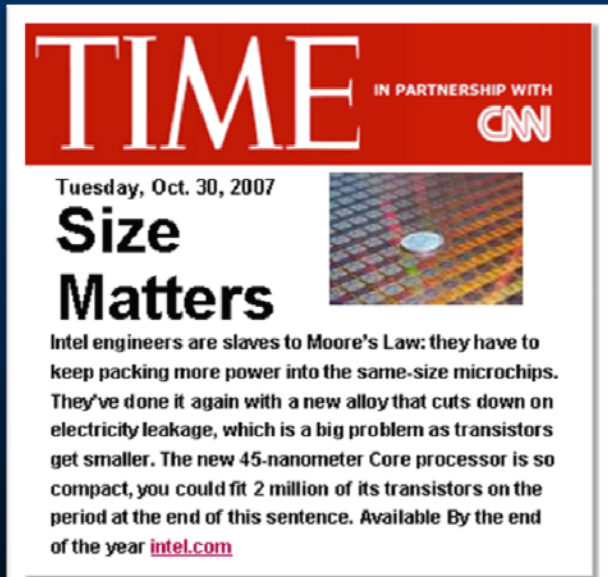
**40%**





# 45nm Energy Efficiency Advantages

One of Time\* Magazine's  
"Best Inventions" of the Year



## Intel® Xeon® 7400 Processor

- Over 50% better performance/watt\*
- 10% less system power vs. 7300\*
- 3 LV Processor Options

Lowest watts per core of any MP platform



\* Compared to previous Generation Intel Xeon 7300

Source: [http://www.time.com/time/specials/2007/article/0,28804,1677329\\_1678130\\_1678116,00.html](http://www.time.com/time/specials/2007/article/0,28804,1677329_1678130_1678116,00.html)

# Innovative Platforms

4 Socket



ProLiant  
DL580 G5



ProLiant  
BL680c G5



System  
x3850 M2



ES7000  
Model 7600R



SunFire  
x4450



Sun Blade  
x6450



SuperServer  
8045C-3RB



Up to 16  
Socket

IBM System  
x3950 M2



Unisys ES7000  
Model 7600R



NEC Express 5800  
Scalable Server



# Introducing End-User Panel

**Diane Bryant** *MODERATOR*  
*Intel Vice President & Chief Information Officer*



**Bohen Chen**  
*VP Yahoo Database*



**Campbell Webb**  
*VP Oracle Collaboration Suite IT*



**John Bosco**  
*Principal Engineer*



**Richard Buckingham**  
*VP of Technical Operations*

