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Agenda

- Server Roadmap
- Client Roadmap
- Netbook / Nettop
- Ultra Mobile
Server Products
Intel® Xeon® Enterprise Roadmap

2008

- **Caneland Platform**
  - 65nm Quad-Core Intel® Xeon® 7300 Series
  - 45nm 6-core (Dunnington) Intel® Xeon® 7400 Series

- **Stoakley Platform**
  - 45nm Quad-Core & Dual-Core Intel® Xeon® Processor (shipping)
  - Intel® 5400 Chipsets

- **Bensley & Cranberry Lake Platforms**
  - 45nm Quad-Core & Dual-Core Intel® Xeon® Processor (shipping)
  - Intel® 5000 P/V and 5100 P/V Chipsets

- **Garlow Platform**
  - 45nm Quad-Core & Dual-Core Intel® Xeon® Processor (shipping)
  - Intel® 3000 P/V Chipsets

2009

- **Boxboro-EX Platform**
  - Nehalem-EX Processor
  - Boxboro-EX Chipset

- **Tylersburg Platform**
  - Nehalem-EP Processor
  - Tylersburg & Dual-IOH Chipsets

- **Garlow Platform**
  - Lynnfield Processor
  - Havendale Processor

- **2009 Platform**
  - Ibex Peak Chipset
Enterprise: 2008 Nehalem Based
Two Socket System Architecture

Nehalem-EP Platform:
- Two sockets each with Integrated Memory Controller
- Turbo mode operation
- Intel® QuickPath Architecture
- DDR3 Memory: 3 Channel, 3 DIMMs per channel
- Intel® Virtualization Technology
- PCI Express* Gen 2

World’s Most Adaptable Server Platform

* Other names and brands may be claimed as the property of others
Boxboro-EX Platform:
- Four processors with Intel® QuickPath Interconnects
- PCI Express® Gen 2, Integrated Memory Controller

* Other names and brands may be claimed as the property of others
Intel® Xeon® 7400-based Server Platform Dunnington Extends Caneland Technology Leadership

- Latest Intel virtualization capabilities
- 6 cores, 16 MB L3 cache
  - 4-core/large cache versions available
- Socket compatible with Caneland platform
- 45nm Hi-K technology
- 1.9 billion transistors
- Introduction Sep. 2008

Caneland with Dunnington delivers higher virtualization performance for consolidation and data demanding applications offering more cores, cache and large memory footprint
Intel® Xeon® 7400 Series (Dunnington)
Best-of-class benchmark performance

First 1 million+ TPC-C result for Xeon!

**8S TPC Benchmark**
- **C** – DB2
- IBM
- 1,200,632 tpmC

**SPECjbb**
- Java HotSpot JVM
- Sun
- 531,669 bops

**vConsolidate**
- VMware* ESX
- 39% better**

**BENCHMARKS**

- **Benchmark**
  - **C** – SQL Server*
  - HP
  - 634,825 tpmC
  - 8S/48C/48T, $1.99/tpcC - Availability September 15, 2008

- **TPC Benchmark**
  - **C** – SQL Server*
  - Dell
  - 1,200,632 tpmC

- **TPC Benchmark**
  - **E** – SQL Server*
  - Fujitsu
  - 671.4 tpsE
  - 4S/24C/24T, $502/tpsE - Availability September 15, 2008

**SPECint**
- _rate2006*
- Siemens
- 277 peak score

**vConsolidate**
- VMware* ESX
- 39% better**

**Intel Xeon X7460 (16M cache, 2.66GHz, 1066FSB) 6-Core compared to Intel Xeon X7350 (4M cache, 2.93GHz, 1066FSB) Quad-Core.**

Expandable Server Leadership
Client Products
INTRODUCING

NEW INTEL® CORE™ PROCESSOR FAMILY

Intel’s Most Advanced Processors Ever!
2008 Nehalem Desktop Platform

- Intel® Hyper-Threading Technology
  - 4 cores, 8 threads
- Turbo mode enabled
- 8M Intel® Smart Cache
- Intel® QuickPath Interconnect
- Extreme SKU has overspeed protection removed for overclocking
- Integrated Memory Controller
  - 3 Channels of DDR3 Memory
  - 2 DIMMs per channel
- Dual x16 PCI Express* Gen 2 configurable as quad x8

The Intel® Core™ i7 Desktop Platform Architecture Delivers New Levels of Performance and Bandwidth

*Warning: Altering clock frequency and/or voltage may (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications.

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Mainstream Client Platform Partitioning

Today’s 3-Chip Solution

- CPU
  - FSB
  - Intel® 4 Series Chipset
    - iGFX
    - IMC
    - Display
    - ME
  - ICH10
    - I/O

New 2-Chip Solution

- Processor
  - PCIe* Graphics
  - iGFX
  - IMC
  - DDR3
  - DMI
  - Intel® Flexible Display Interface (Intel® FDI)

- Ibex Peak
  - Display
  - ME
  - I/O

- Graphics moves into Processor
- Memory Controller moves into the Processor
- Display moves into Ibex Peak
- Intel® Manageability Engine moves into Ibex Peak

Smaller boards, lower power, simplified power delivery

Greater performance via higher integration (igfx/IMC)

** 2009 mainstream Nehalem processors available with and without igfx
2009 Mainstream Client Processors

One Common Processor Socket & Platform

**New 2 Chip: Discrete GPU**
- Lynnfield (4C/8T)
- Clarksfield (4C/8T)
- Graphics: 2x8 or 1x16
- Memory: 1x16
- Ibex Peak

**New 2 Chip: CPU/GPU OR Discrete GPU**
- Havendale (2C/4T)
- Auburndale (2C/4T)
- Graphics: 1x16
- Memory
- Ibex Peak
Netbook / Nettop
A New Category of Devices

Want the “Best Internet Experience in Your Pocket”? Get a Mobile Internet Device
MID: Infotainment, On The Go

Want a Simple Device for Internet Use? Get a Netbook or Nettop
Internet use
Target SPP
Netbook: ~$249-349
Nettop: ~$199-299

Want a Richer, Fuller Experience? Get a Notebook or Desktop
Entertainment, Productivity and Multitasking

On The Go
Get a Mobile Internet Device
MID: Infotainment, On The Go

Want a Simple Device for Internet Use?
Get a Netbook or Nettop
Internet use
Target SPP
Netbook: ~$249-349 Nettop: ~$199-299

Want a Richer, Fuller Experience?
Get a Notebook or Desktop
Entertainment, Productivity and Multitasking

*Other brand and names are the property of their respective owners
Nettop / Netbook Roadmap

2007
Celeron 220
65nm
Low Cost
Purpose Built Platform

2008
Intel® Atom
45nm
Nettop Solutions
Lower Power
Lower Cost
Single and Dual Core Solutions

2009+
Continued innovation at the silicon and platform level

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* DC on Nettop only
For Netbook and Nettop Platforms

Intel® Atom™ Processor Based Platform

• New low-power architecture designed from the ground up to enable simple, purpose-built devices for the Internet
• Manufactured using Intel’s industry-leading Hi-K Metal Gate 45nm process technology
• Single core and Dual core proc*
• With Intel®945GC and 945GSE chipsets
• 50+ OEM & ODM design wins

Available Today!

* DC on Nettop only
Ultra Mobile
Ultra Mobile Roadmap

2008
- 45nm
- Silverthorne and Poulsbo
- Responsive Internet Experience
- First Grounds Up
- Low Power CPU and Chipset

2009/2010
- 45nm
- Projected >10X Reduction In Idle Power Compared to 2008 Platform
- First Entry Into Phone Form Factors

Future
- 32nm
- Higher Levels Of Integration
- Continued Benefits From Leading Edge Process

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Thanks

Q & A