Intel Roadmap Overview
August 20th 2008

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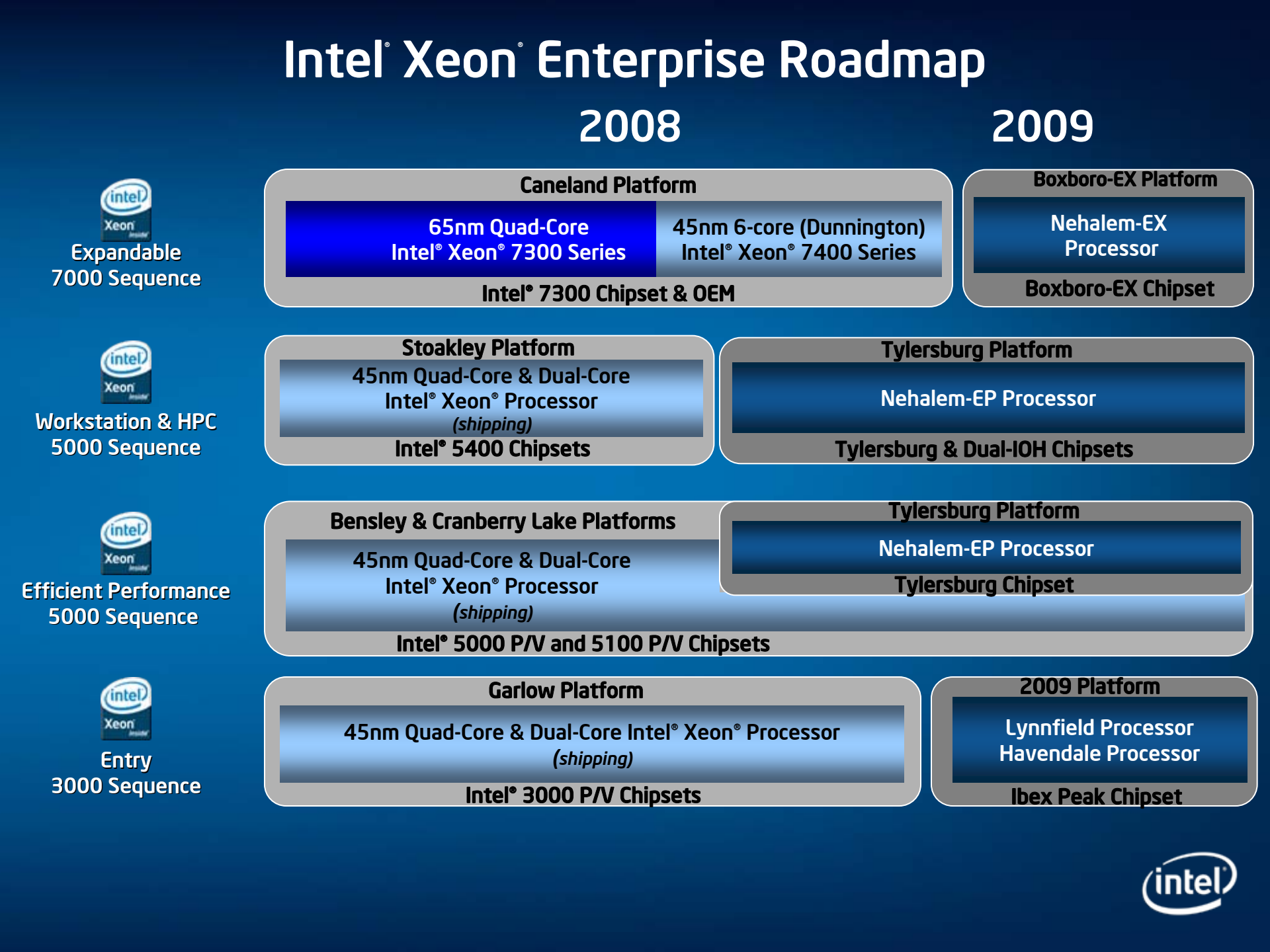
Agenda

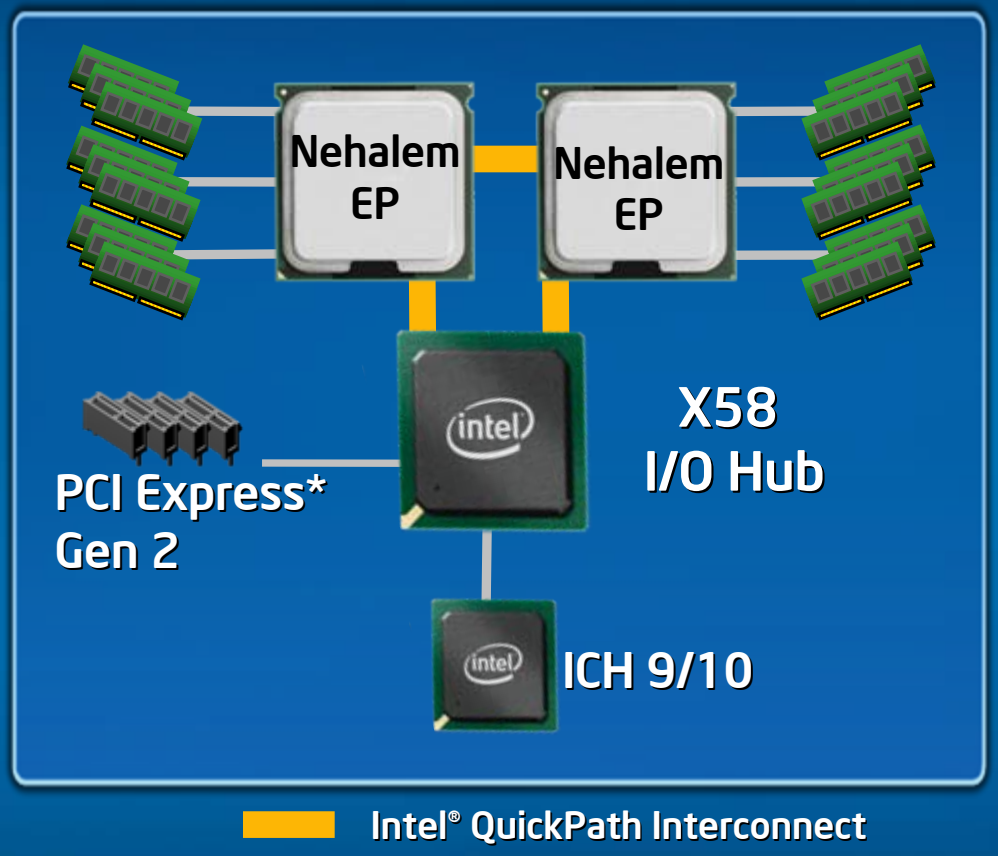
- Server Roadmap
- Client Roadmap
- Netbook / Nettop
- Ultra Mobile

Server Products

Intel® Xeon® Enterprise Roadmap



Enterprise: 2008 Nehalem Based
Two Socket System Architecture



Nehalem-EP Platform:

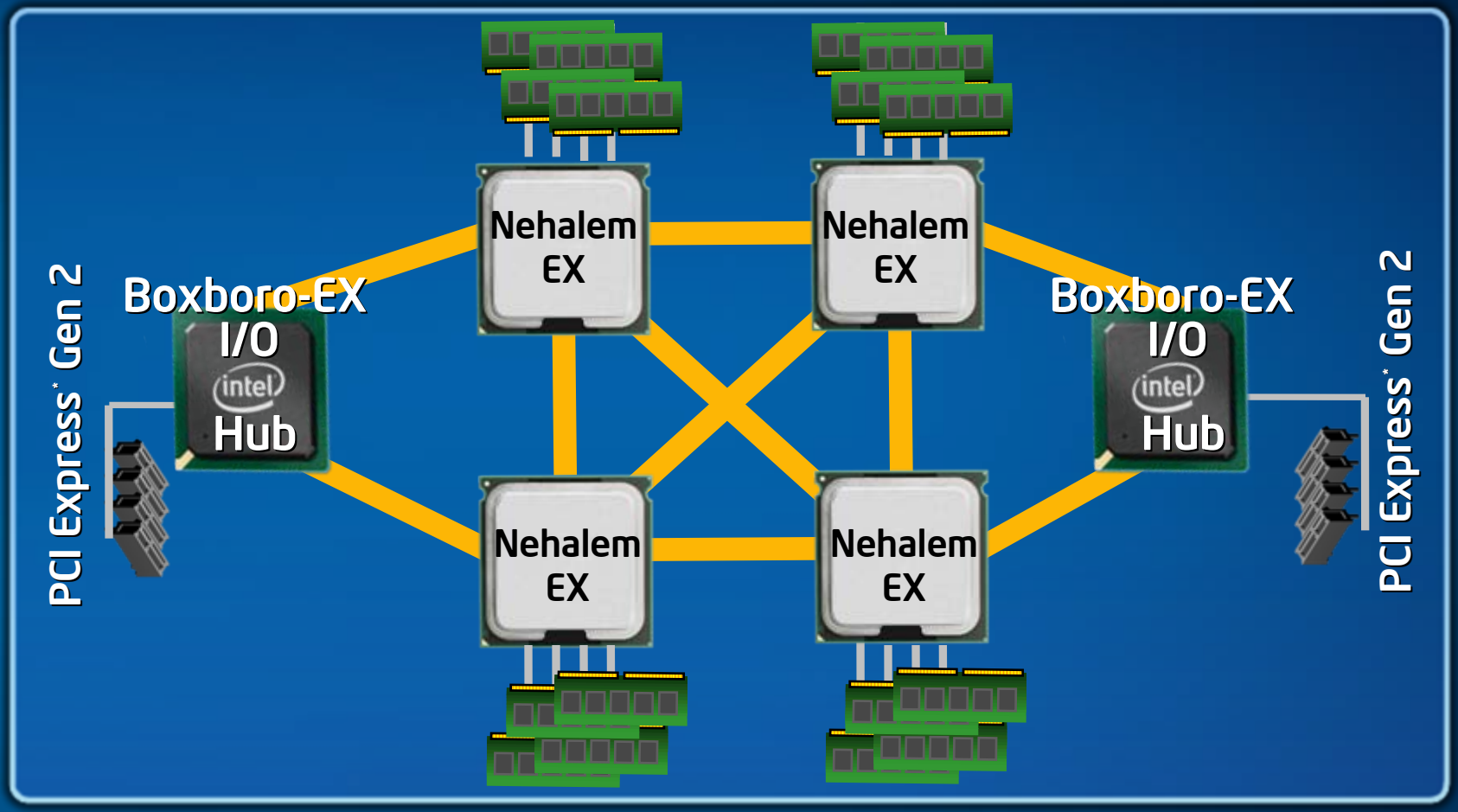
- Two sockets each with Integrated Memory Controller
- Turbo mode operation
- Intel® QuickPath Architecture
- DDR3 Memory: 3 Channel, 3 DIMMs per channel
- Intel® Virtualization Technology
- PCI Express* Gen 2

World's Most Adaptable Server Platform

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

Enterprise: 2009 Nehalem Based

Four Socket System Architecture



Boxboro-EX Platform:

Intel® QuickPath Interconnect

- Four processors with Intel® QuickPath Interconnects
- PCI Express* Gen 2, Integrated Memory Controller

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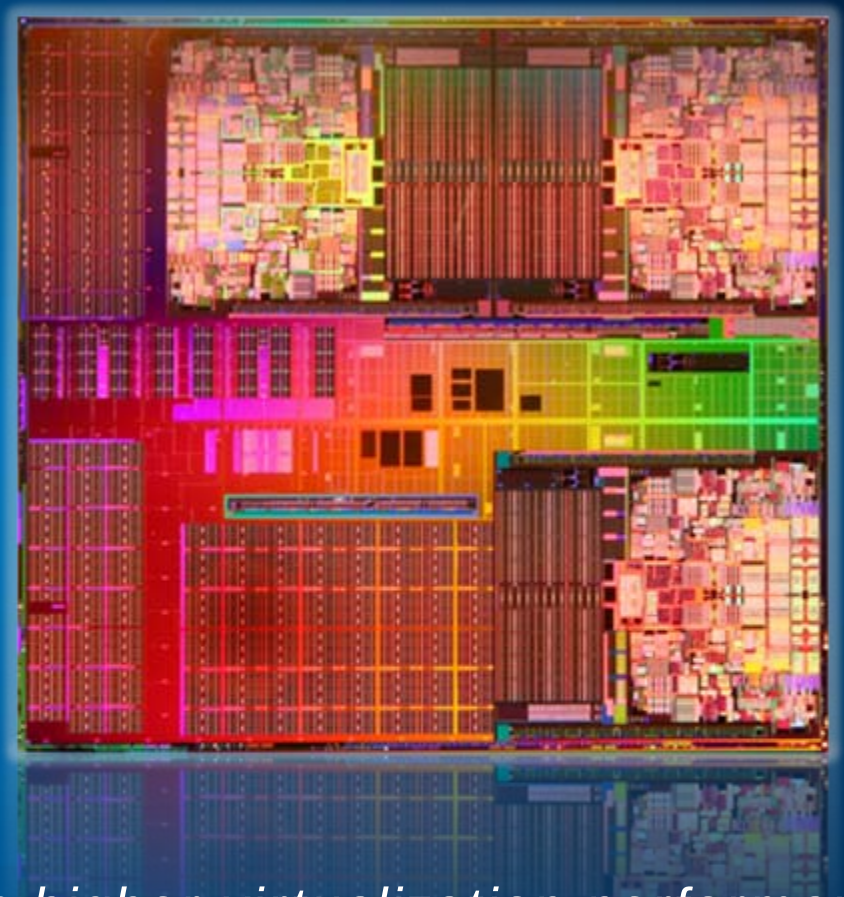
Intel® Xeon® 7400-based Server Platform Dunnington Extends Caneland Technology Leadership

- 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

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Intel® Xeon® 7400 Series (Dunnington)

Best-of-class benchmark performance

First 1 million+ TPC-C result for Xeon!

8S TPC Benchmark* C – DB2

IBM redhat

1,200,632 tpmC

8S/48C/48T, $1.99/tpcC - Availability December 10, 2008

TPC Benchmark* C – SQL Server*

hp Windows Server

634,825 tpmC

4S/24C/24T, $1.10/tpcC - Availability September 15, 2008

1 4-socket

SPECjbb*2005 – Java HotSpot JVM

Sun solaris

531,669 bops

1 4-socket

TPC Benchmark* E – SQL Server*

DELL Windows Server

671.4 tpsE

4S/24C/24T, $502/tpsE - Availability September 15, 2008

1 4-socket

vConsolidate - VMware* ESX

vmware

39% better**

SPECint*_rate2006

FUJITSU COMPUTERS SIEMENS SuSE

277 peak score

1 4-socket

**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

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Client Products

Intel Notebook / Desktop Roadmap

	2008	2009
Desktop Extreme / High-End Desktop	2007 and 2008 Desktop Platforms 45nm Intel® Core™2 Extreme proc. 45nm Intel® Core™2 Quad proc. *(shipping)* Intel® X48, X38, P45, and P35 Chipsets	X58 Platform Intel® Core i7 Extreme Processor (4C/8T) Intel® Core i7 Processor (4C/8T) Intel® X58 Express Chipset
Desktop Performance / Mainstream	2007 & 2008 Desktop Platforms 45nm Intel® Core™2 Quad and Duo processors *(shipping)* Intel® 3 and 4 Series Chipsets	Piketon / Kings Creek Platforms Lynnfield (4C/8T) Havendale (2C/4T) Ibex Peak
Mobile Extreme	Santa Rosa & Montevina Platforms 45nm Mobile Intel® Core™2 Extreme processors *(Dual-Core shipping today, Quad-Core Q3'08)* Intel® 96x and 4 Series Chipsets	Calpella Platform Clarksfield Processor (4C/8T) Ibex Peak-M
Mobile Performance / Mainstream	Santa Rosa & Montevina Platforms 45nm Intel® Core™2 Duo processors *(shipping)* Intel® 96x and 4 Series Chipsets	Calpella Platform Clarksfield (4C/8T) Auburndale (2C/4T) Ibex Peak-M

Nehalem Drives Next Wave of Leadership in the Client

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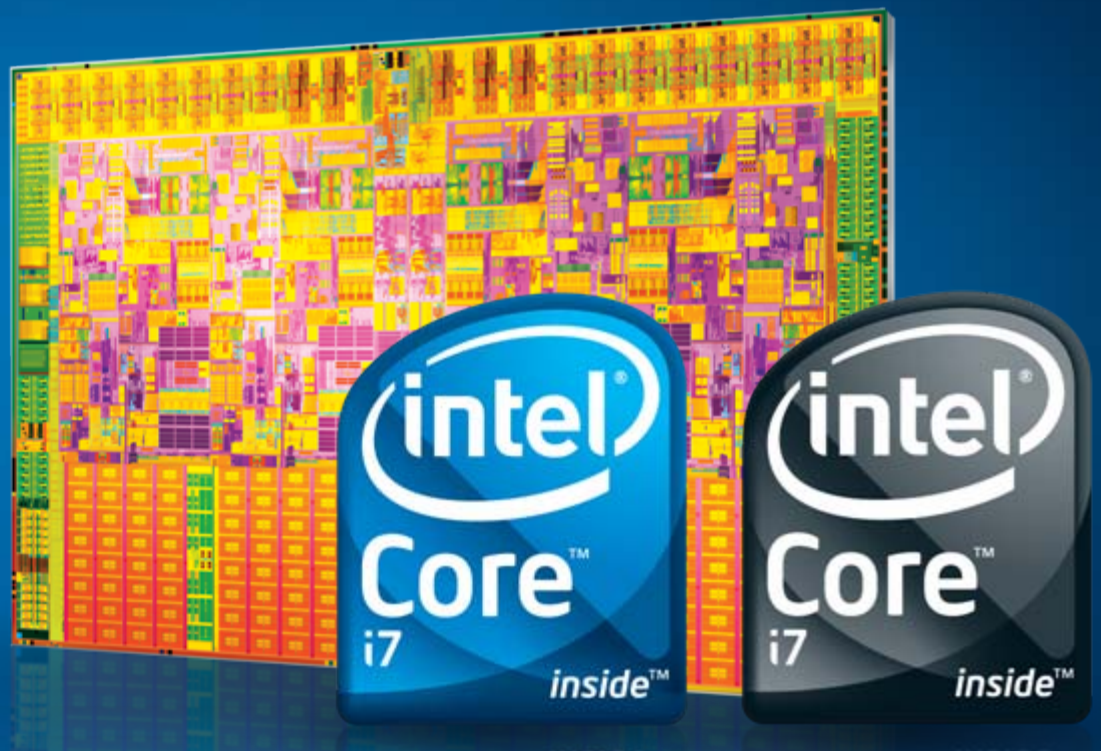
INTRODUCING

NEW INTEL® CORE™ PROCESSOR FAMILY

Intel's Most Advanced Processors Ever!



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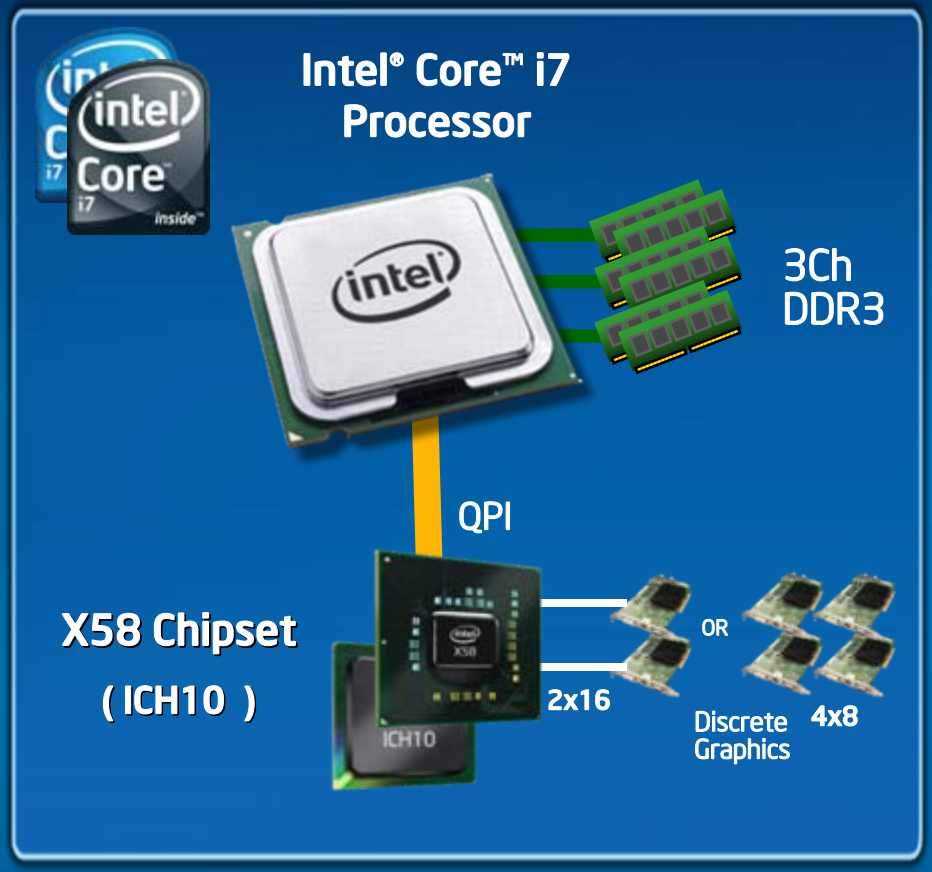
2008 Nehalem Desktop Platform



- 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[1]
- 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

[1]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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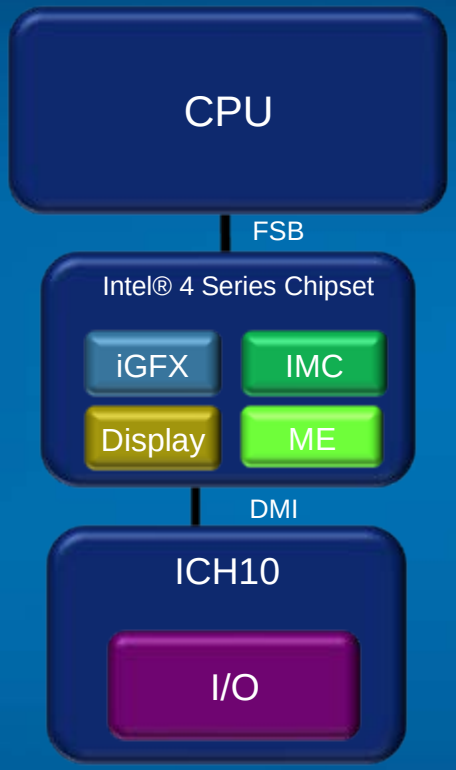
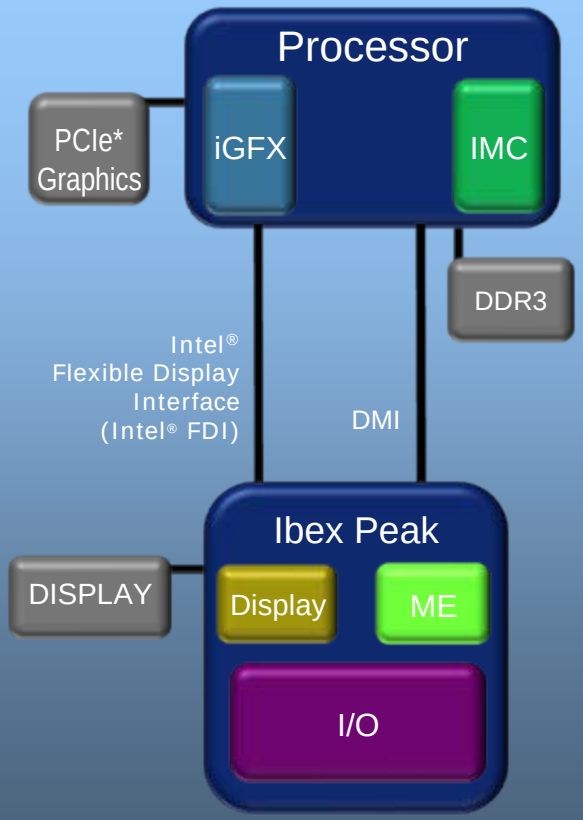
Mainstream Client Platform Partitioning

Today's 3-Chip Solution



New 2-Chip Solution



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)

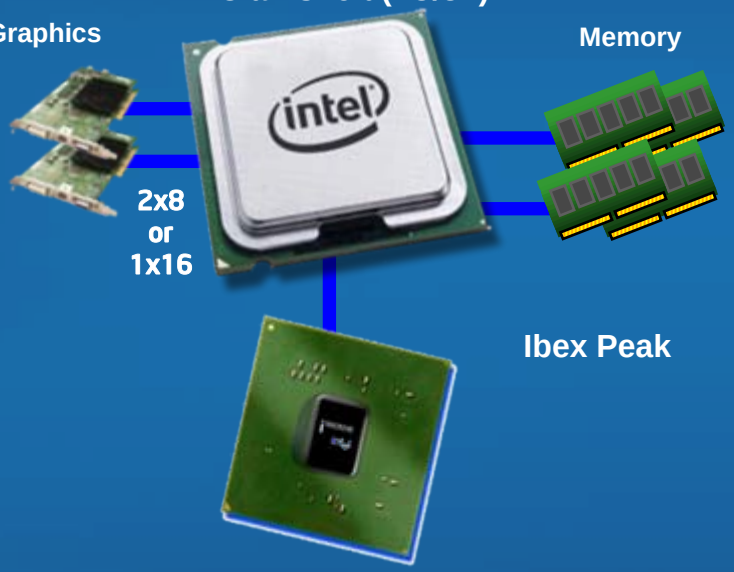
** 2009 mainstream Nehalem processors available with and without igfx

2009 Mainstream Client Processors

One Common Processor Socket & Platform

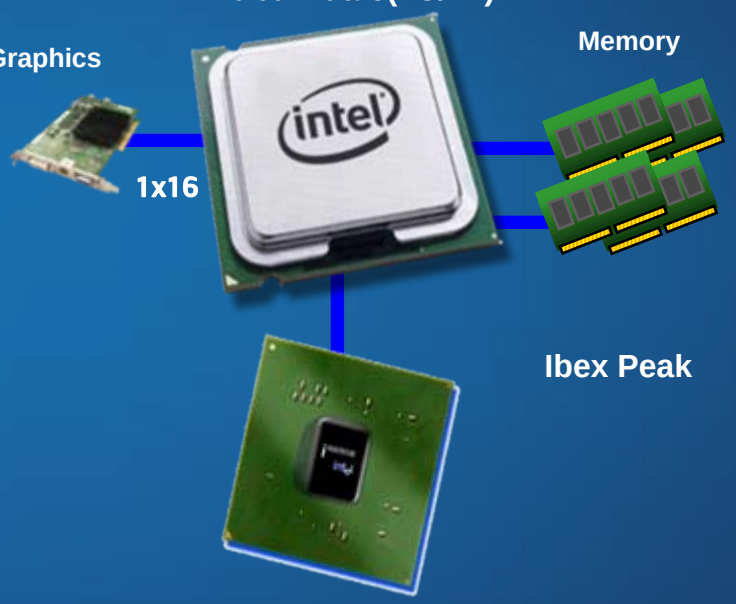
New 2 Chip: Discrete GPU

Lynnfield (4C/8T)
Clarksfield(4C/8T)



New 2 Chip: CPU/GPU OR Discrete GPU

Havendale(2C/4T)
Auburndale(2C/4T)



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

intel Atom inside

intel Centrino 2 inside

intel Core 2 Duo inside

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Nettop / Netbook Roadmap

2007

Celeron 220

65nm

Low Cost

Purpose Built Platform

2008

Intel® Atom

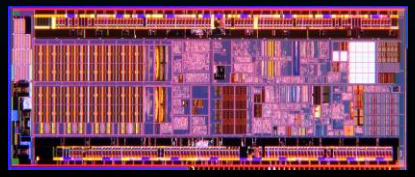
45nm

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!

intel

* DC on Nettop only

Ultra Mobile

Ultra Mobile Roadmap

2008

45nm

Silverthorne and Poulsbo

Responsive Internet Experience

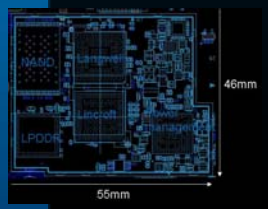
First Grounds Up Low Power CPU and Chipset

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