Netbooks and Nettops

New category of emerging Internet Devices

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Agenda

- Background & Environment

- Netbook & Nettop Overview
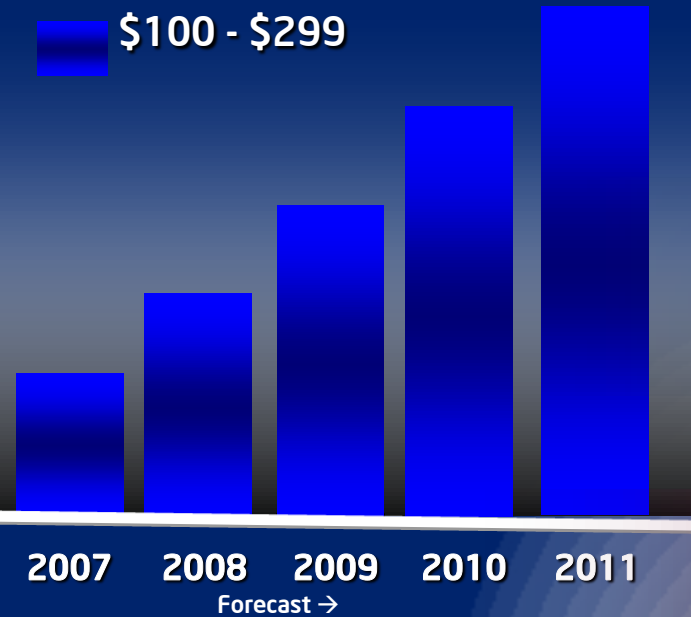
- Q&A

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Environment

- Internet based content, usage models exploding

- New category of devices emerging

- Opportunity to grow markets

- Strong interest in bringing technology to education

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Nettops & Netbooks

Nettop TAM

$100 - $299

2007   2008   2009   2010   2011
Forecast →

NetBook TAM

< $399

67% CAGR

2008e   2009e   2010e   2011e

Internet:
Connectivity is a Key Usage for Basic Computing

Low Cost Silicon:
45nm Diamondville Shipping in May*

Purpose Built Solutions:
Platform Optimized for Low BOM Cost

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Market Opportunities for Affordable Internet-Centric Devices

Top Emerging Markets
Top Mature Markets

Majority of households surveyed in emerging markets have zero PCs

First device per home (primary device)

Very few households surveyed in mature markets have > 1 PC

More devices per home (secondary device)

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Netbooks and Nettops

Simple
Affordable
Internet-Centric

Designed for content consumption, Internet usage models

New Processor, New Brand

Intel's smallest processor built with the world's smallest transistors

Intel® Atom™ Processor

- New architecture
- Designed from the ground-up
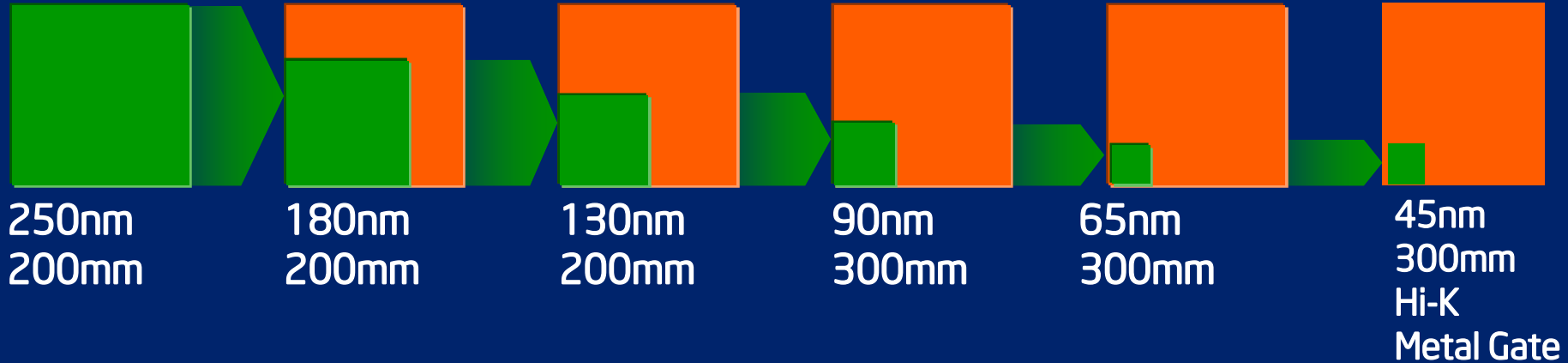- Uses Intel's industry-leading 45nm process

Enables:

- Affordable Price Points
- Adequate performance
- Low Power

Enabling new opportunities for innovation

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The Fundamental Cost Driver

250nm	180nm	130nm	90nm	65nm	45nm
200mm	200mm	200mm	300mm	300mm	300mm
					Hi-K
					Metal Gate

Twice the circuitry in the same space (architecture innovation)

OR

The same circuitry in half the space (cost reduction)

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Half the die size than in the prior process

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The Magic of 45nm

22mm

25.40mm

22.00 mm

25.76mm
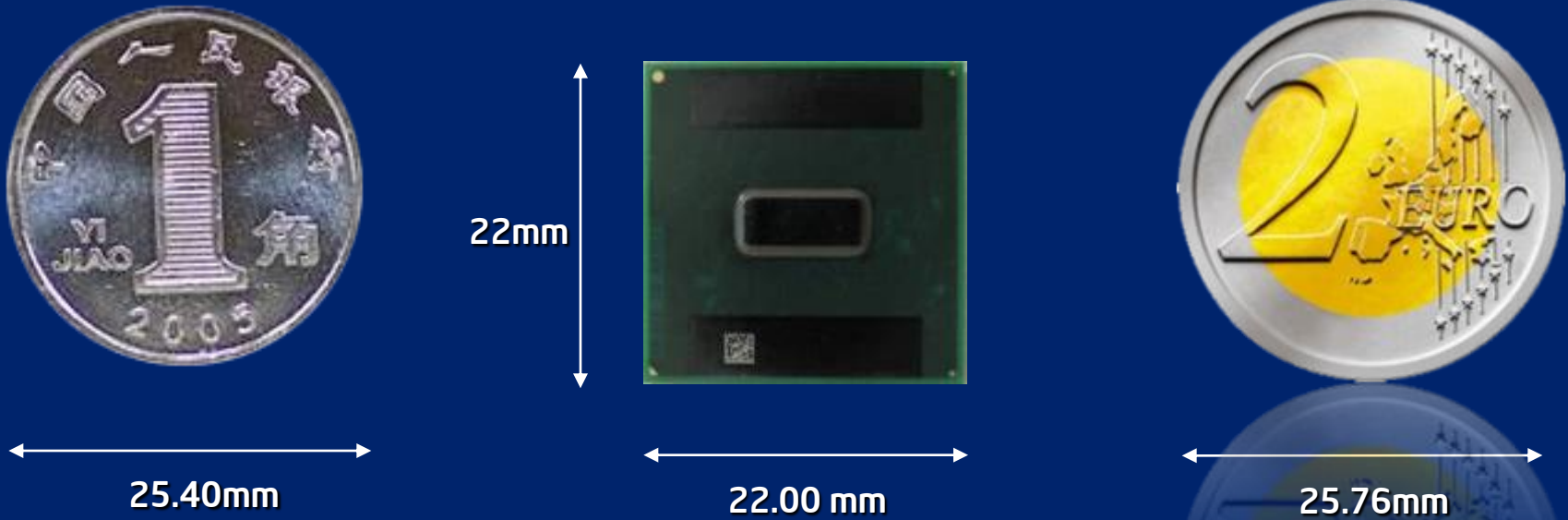
The New Intel™ Atom™ Processor

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Intel Processors Power a Range of Devices!

Want a simple and affordable device for Internet-centric usage models?

Netbook or Nettop

Want the "best internet experience in your pocket"?

Mobile Internet Device

Want a richer, fuller experience?

Notebook or Desktop

Today's Briefing

Internet Centric Computing

Communicate

Email

Instant Message

Voice Over IP (VOIP)

Watch

Photo Viewing

Streaming Video

Flash Video

Browse

Surf the Web

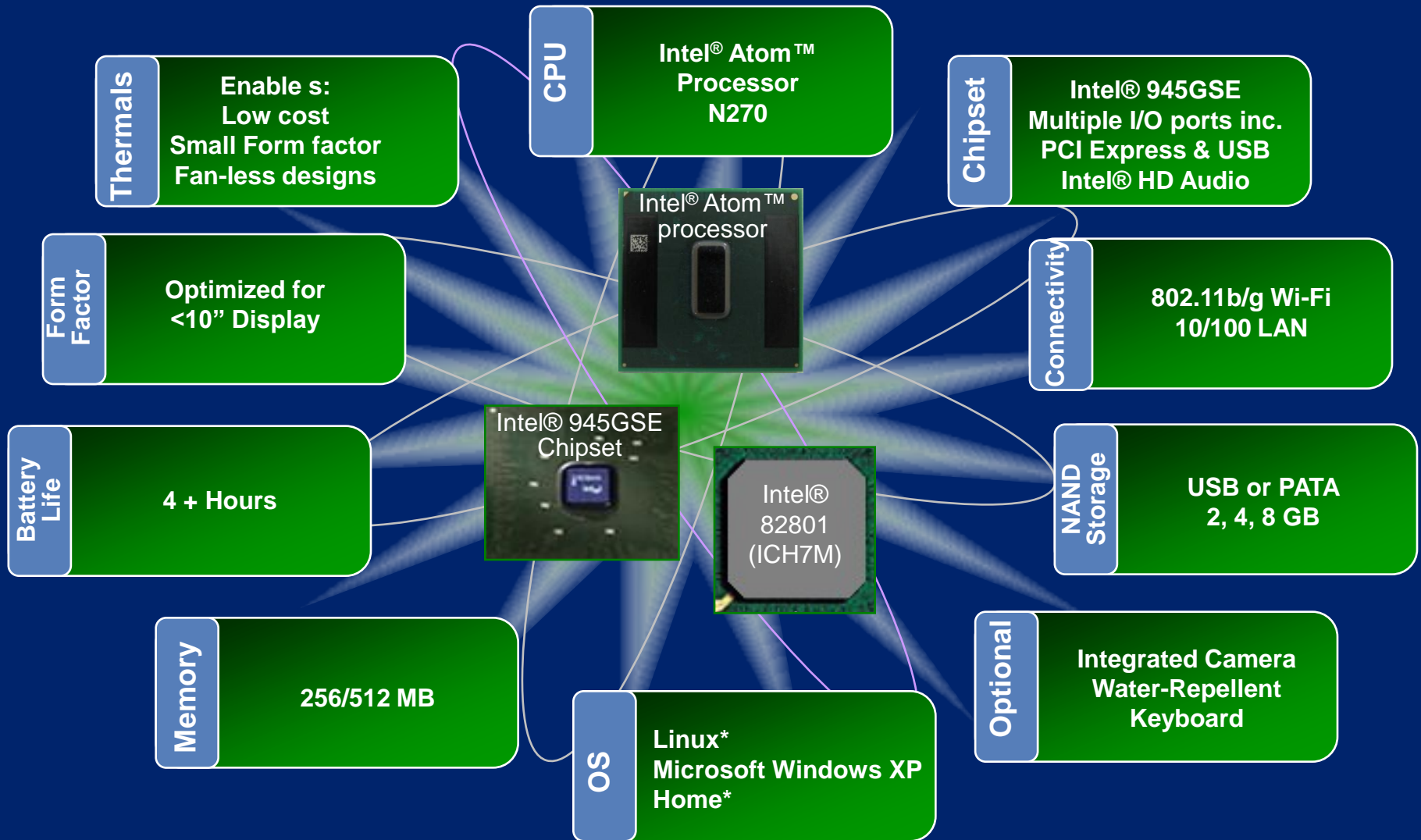Read the News

Search for Information

Listen

MP3

Streaming Audio

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Netbook Overview

Basic Mobile Platform '08 Summary

CPU
Intel® Atom™ Processor N270

Thermals
Enable s:
Low cost
Small Form factor
Fan-less designs

Chipset
Intel® 945GSE
Multiple I/O ports inc.
PCI Express & USB
Intel® HD Audio

Form Factor
Optimized for <10" Display

Connectivity
802.11b/g Wi-Fi
10/100 LAN

Battery Life
4 + Hours

NAND Storage
USB or PATA
2, 4, 8 GB

Memory
256/512 MB

OS
Linux*
Microsoft Windows XP Home*

Optional
Integrated Camera
Water-Repellent Keyboard

Intel® Atom™ processor

Intel® 945GSE Chipset

Intel®
82801
(ICH7M)

Flexibility to design simple, affordable netbooks ~$250 system price point

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Comparing Mobile Devices

Want the "Best Internet Experience in Your Pocket"

Want a platform at new Affordable Price Points?

Want More Than Basic?

Screen	MID: 4.5" - 6"	< 10"	= > 12"
OS	MID: Linux, XP	Linux, Windows	Windows
Key Usages	MID: Infotainment	Internet-centric	Office Productivity & Multitasking

Get A Mobile Internet Device

Get A Netbook

Get A Mainstream Notebook

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Differentiating Netbooks from Entry Notebooks on User Experience

Netbooks

- Use pre-loaded, web-centric applications
- Listen to Music
- Photo viewing
- Video Viewing (Streaming)
- Voice over IP
- Surfing the internet
- Instant Messaging
- Email
- Social Networking
- Play basic online games

Content Consumption

Entry (Value) Notebooks

- Use pre-loaded, web-centric applications
- Listen to Music
- Photo viewing
- Video Viewing (Streaming)
- Voice over IP
- Surfing the internet
- Instant Messaging
- Email
- Social Networking
- Play basic online games

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- Install software
- Download, store and listen to Music, play CDs
- Edit, Store photos, videos Watch DVDs
- Video Conferencing, Richer web surfing experience
- Open, edit, store large files, Play richer, interactive & installed games
- Multi-tasking

Content Creation/Editing

Richer User Experience; Do More, Faster

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Intel®-powered classmate PCs are purpose-built for education; manufactured by ODMs

Basic Mobile Platforms enable a simple and affordable platform for Internet centric usage models

Classmate PC Category is a sub-set of the Basic Notebook Platforms that is focused on a specific Usage Model area (Education)

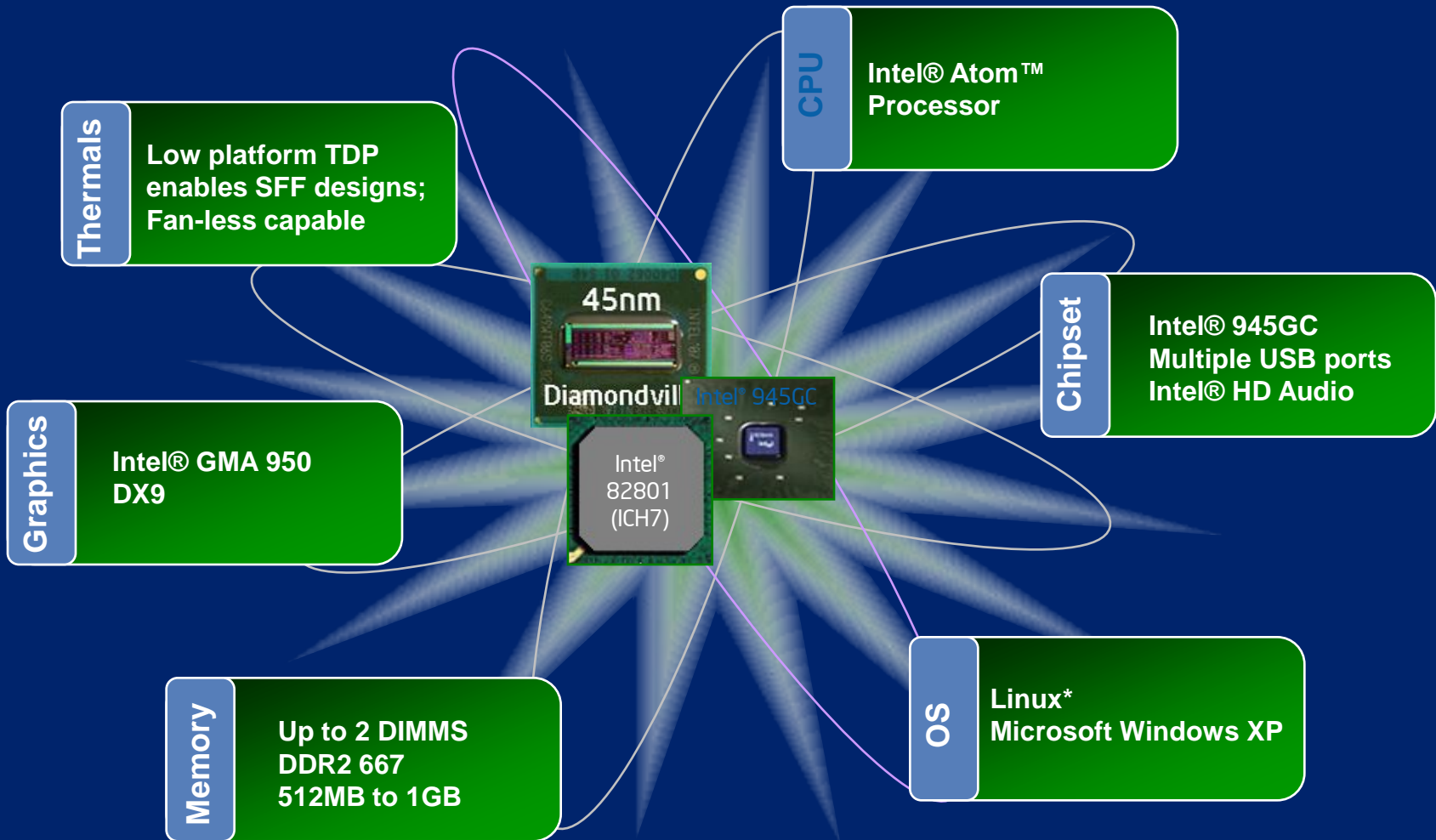| Kid/Classroom Friendly ID	Custom Education SW
Rugged Design	Water Repellent Keyboard

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Nettop Overview

Basic Desktop Platform '08 Summary

CPU
Intel® Atom™ Processor

Thermals
Low platform TDP enables SFF designs; Fan-less capable

Chipset
Intel® 945GC
Multiple USB ports
Intel® HD Audio

Graphics
Intel® GMA 950
DX9

45nm
Diamondville

Intel® 945GC

Intel®
82801
(ICH7)

OS
Linux*
Microsoft Windows XP

Memory
Up to 2 DIMMS
DDR2 667
512MB to 1GB

Enabling simple & affordable desktop systems

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Comparing Nettops and Desktops

	Nettop	Entry/Value Desktop	Mainstream Desktop
Usages			
Productivity	Web Browsing, Word Processing & E-Mail	Computational Spreadsheets & Databases	Premium office suites
Photo & Video	Photo & Video Viewing (Streaming)	Editing in Windows* Photo Gallery	Creates and manages Photos and Videos. Faster video encoding and DV editing
Video Playback	SD Playback (i.e. YouTube)	Capable of HD Playback	Full HD playback, PVR
Games	Legacy Online Games	Basic Online Games	Mainstream/Performance DX10 3D Games
System Attributes			
Discrete Graphics	No	Capable	Yes
CPU + CS TDP	12W - 26W	45W – 65W	65W +
System Price	<$299	>$300	>$999

Richer User Experience; Do More, Faster

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Desktop Differentiation

CONTENT CONSUMPTION

Basic computing applications

Listen to Music

Photo viewing

Video Viewing (Streaming)

Voice over IP

Surfing the internet

Instant Messaging

Email

Social Networking

Play basic online games

CONTENT CREATION EDITING

Install Advanced Software

Download, store and listen to Music, play CDs

Edit, Store photos, videos

Watch DVDs

Video Conferencing, Richer web surfing experience

Open, edit, store large files,

Play richer, interactive & installed games

Multi-tasking

Summary

❑ Environment offers new opportunities

❑ Netbooks/Nettops based on purpose built roadmaps

❑ Simple, affordable, low power, targeted performance

❑ Differentiated from notebooks and desktops
   ✓ Form factor, user experience & system price points

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Q & A

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