

AMD Better by Design



Partner Event
May 2, 2007

The Clift Hotel
San Francisco





AMD Turion™ 64 Mobile Technology

Bahr Mahony
Director of Product Marketing,
Mobile Division, AMD

May 2, 2007

AMD Leadership Agenda



Lead the world to energy-efficient processing from datacenter to desktop

Relevant Innovations

The Customer-Centric Innovation Company

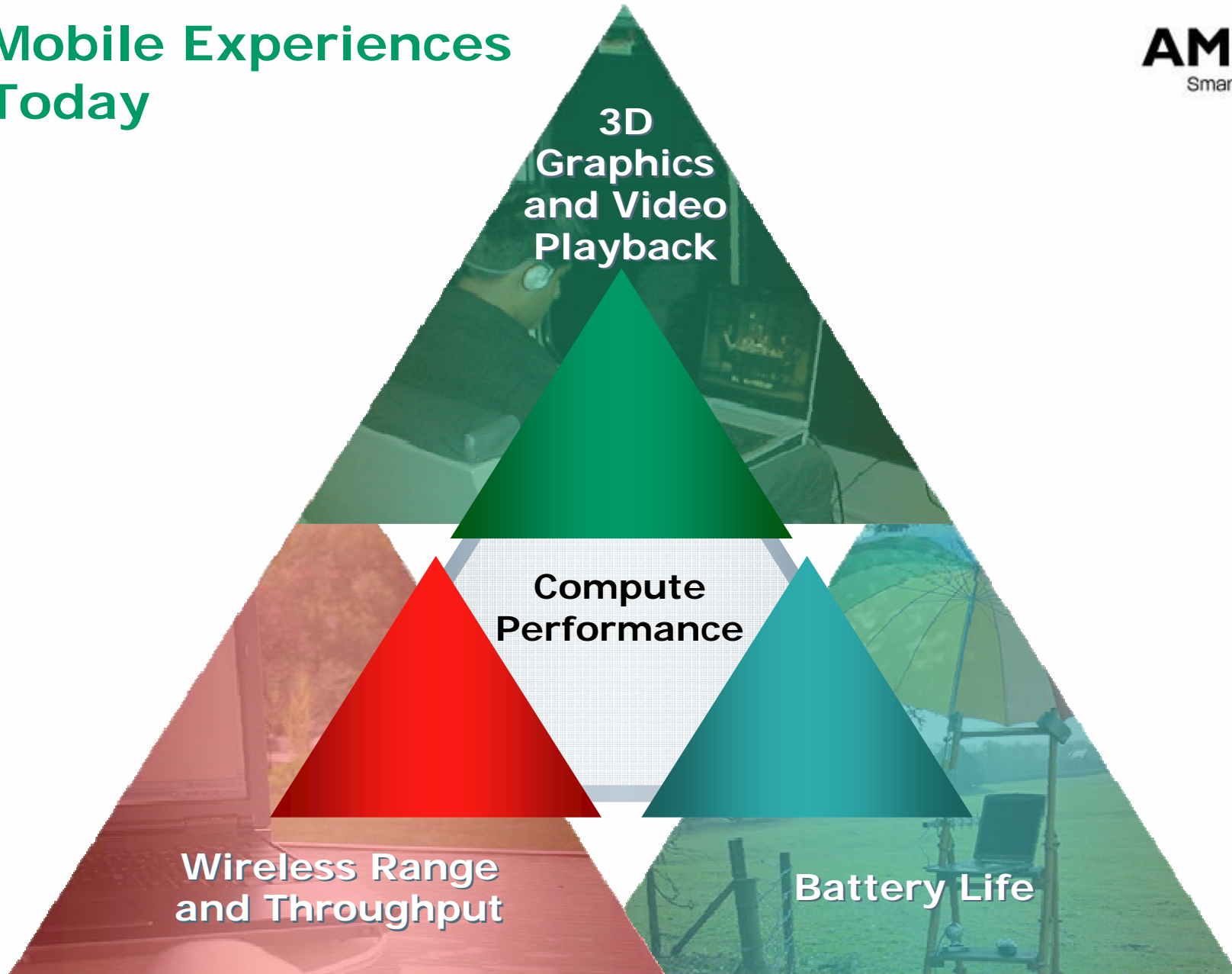
Compelling Experiences

Meaningful Differences

Enable the ultimate visual experience

Empower the world's population with affordable Internet access platforms

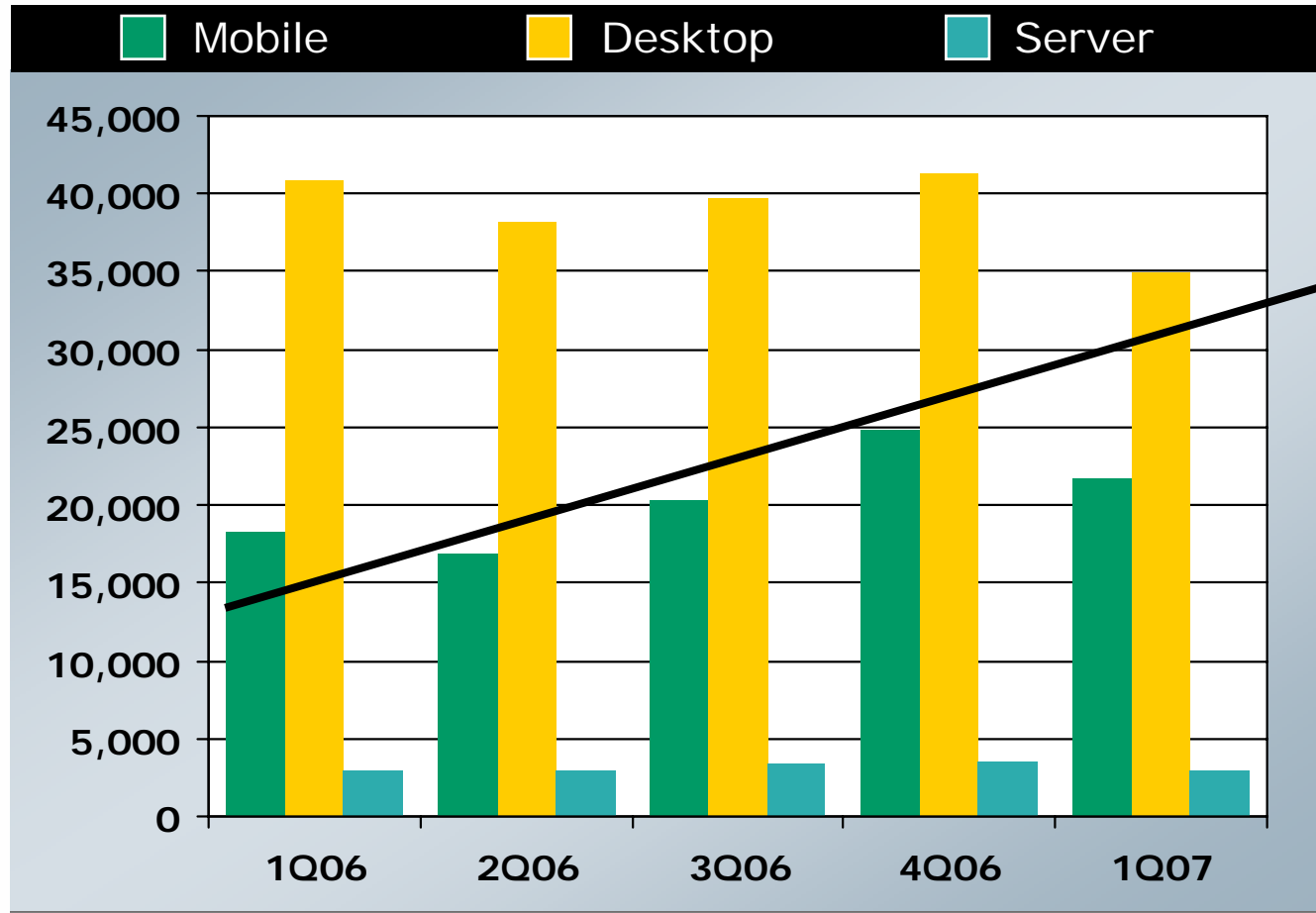
Mobile Experiences Today



Commercial and Consumer PC Markets: Going Mobile



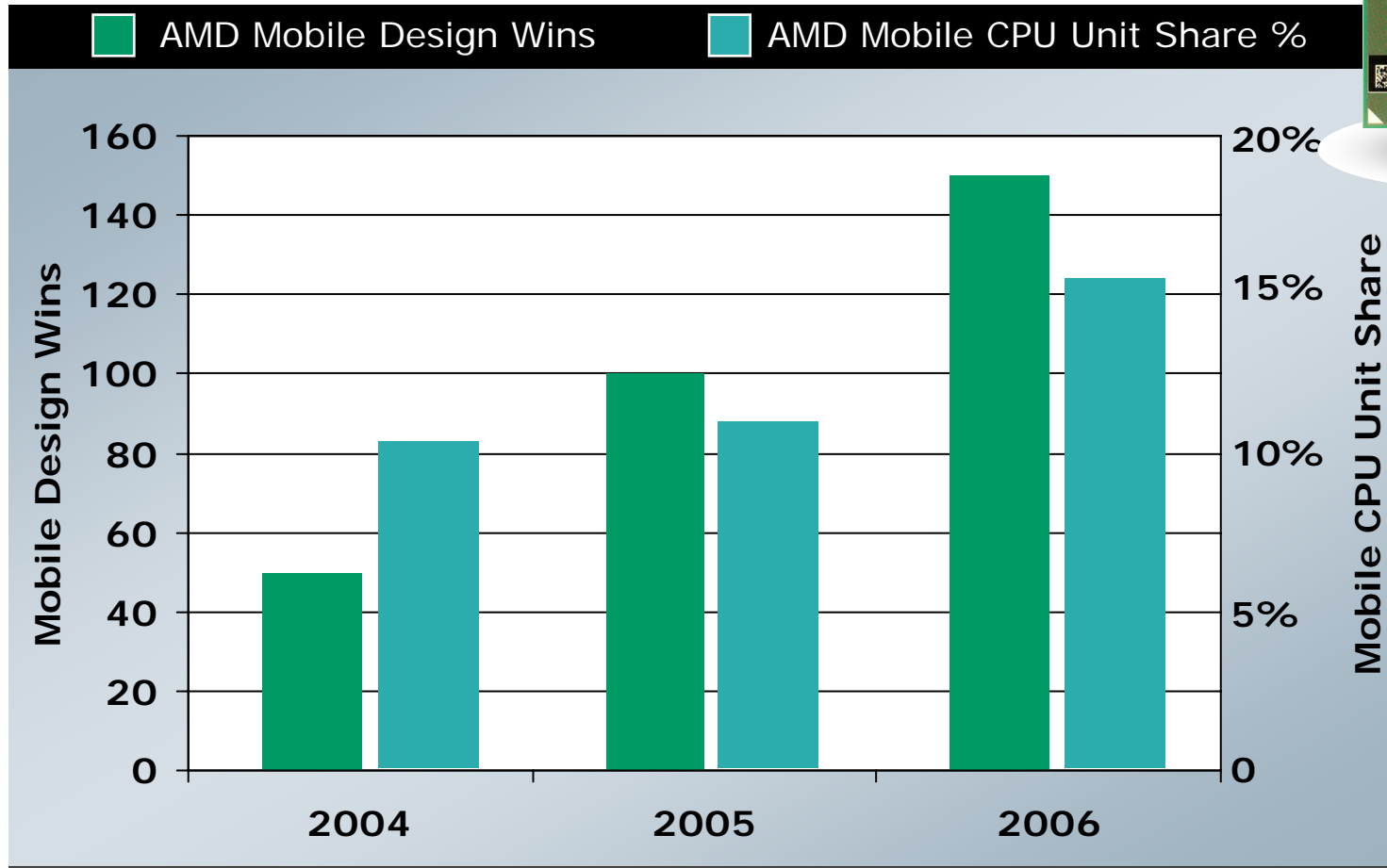
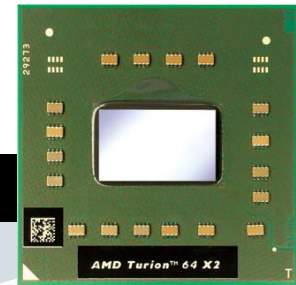
x86 CPU Shipments in Thousands



Mobile PCs growing in share of total x86 CPU volume

Source: Mercury Research

AMD Mobile Momentum



Source: Mercury Research

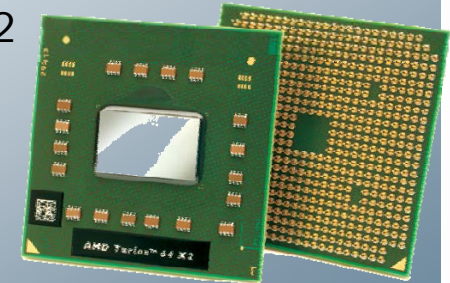
65nm Mobile Processors Introduction

AMD is now shipping its first mobile processors manufactured with its award-winning 65nm process*

Features high-performance SOI transistor technology with next-generation strain engineering

Announcing a new, higher performance 65nm mobile processor: AMD Turion 64 X2 Dual-Core Mobile Technology, TL-66

- New TL-66: 2.3 GHz, 35W TDP, 1MB total dedicated L2
- TL-64: 2.2 GHz, 35W TDP, 1MB total dedicated L2
- TL-62: 2.1 GHz, 35W TDP, 1MB total dedicated L2
- TL-60: 2.0 GHz, 31W TDP, 1MB total dedicated L2
- New TL-58: 1.9 GHz, 31W TDP, 1MB total dedicated L2
- TL-56: 1.8 GHz, 31W TDP, 1MB total dedicated L2





AMD Better By Design Mobile Platforms: Enabling the Ultimate Visual Experience

Patrick Moorhead
Vice President, Advanced Marketing, AMD

May 2, 2007

The Era of Ubiquitous 3D Graphics

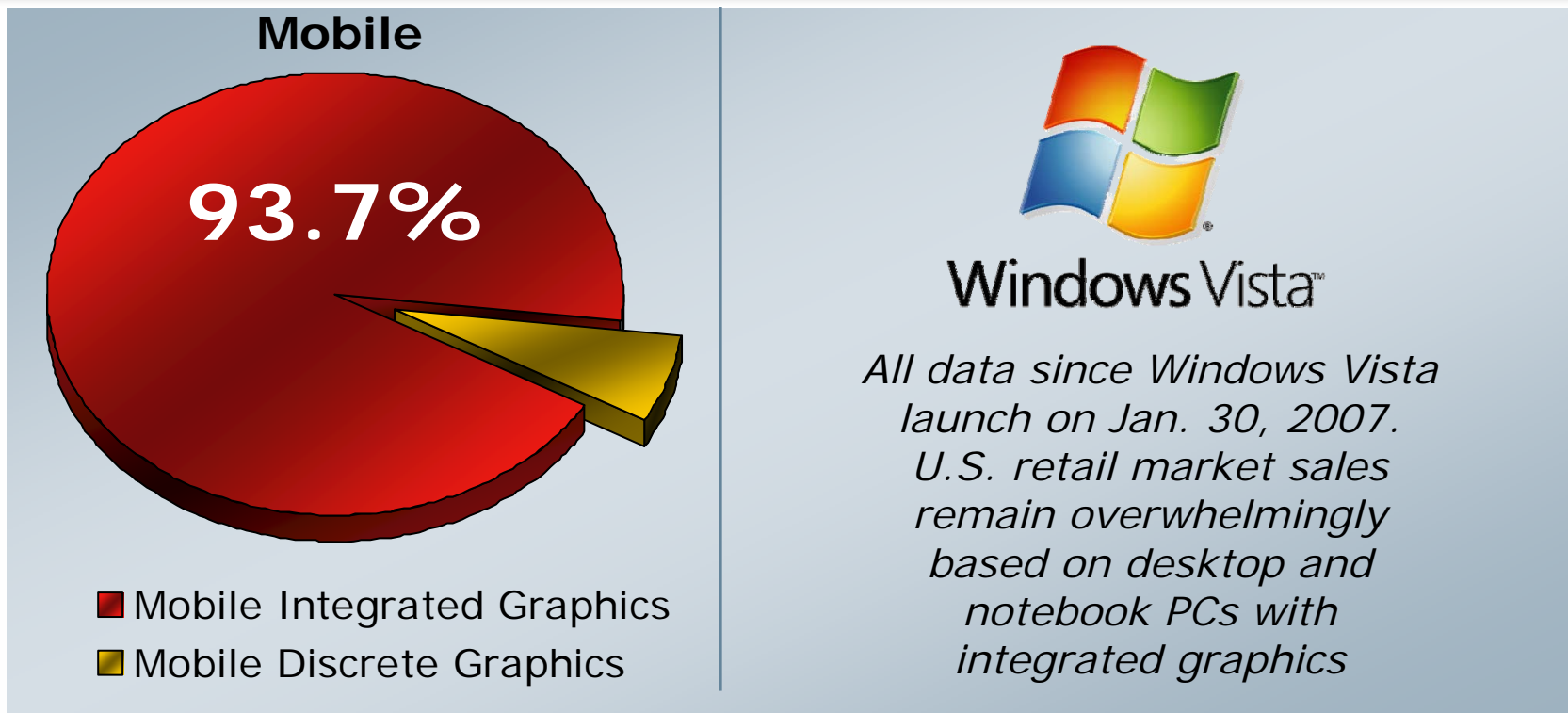
The launch of Windows Vista™ is increasing the role of 3D graphics and digital video entertainment for consumers



AMD recommends a robust level of 3D graphics to achieve the ultimate Windows Vista experience

It's a 3D World, But Do U.S. PC Sales Reflect it?

U.S. Mobile PC Sales by Graphics Type Jan. 30 – April 30, 2007



Source: Current Analysis

AMD Offers the Ultimate Vista Experience for Mainstream Computing



Outstanding **compute** performance coupled with:

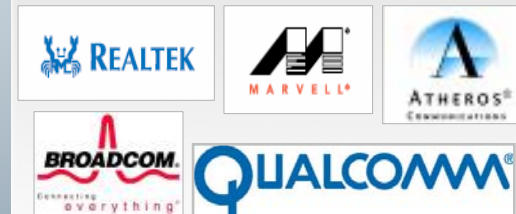
- 1 Superior **gaming** and **3D** graphics performance
- 2 High display resolution and **video** quality
- 3 Fast **wireless** LAN solutions offering greater throughput and increased range



Processor



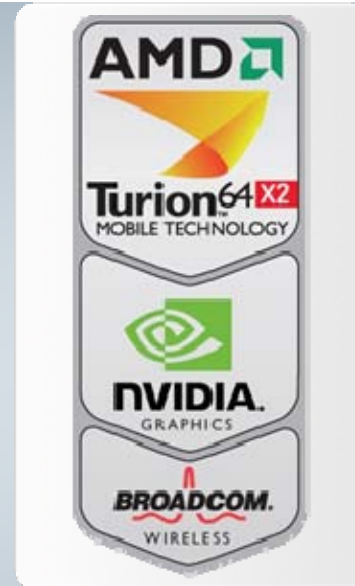
Graphics and Video



Wireless

The Better by Design Program

A program driven by AMD and leading technology partners like NVIDIA and Broadcom, enabling OEMs to design PCs that *deliver the ultimate Windows Vista™ experience.*

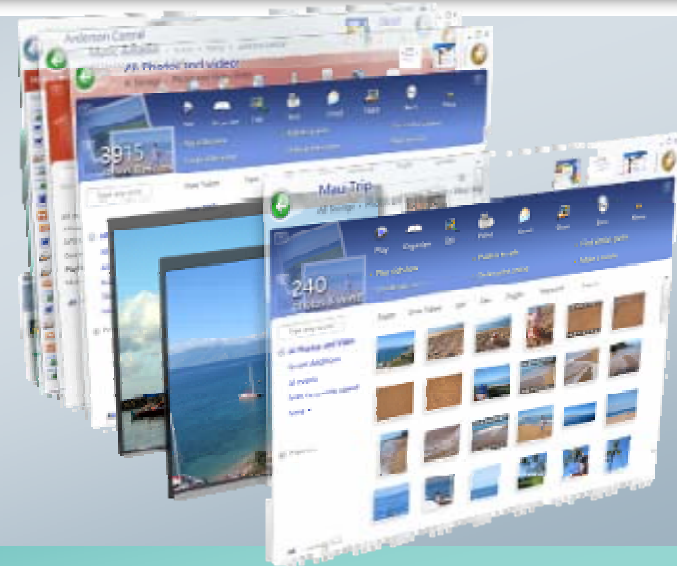
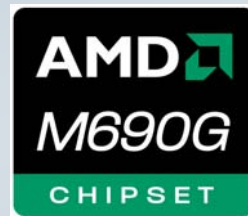


Better by Design helps buyers more easily identify PCs that deliver a better experience

AMD M690 Mobile Chipset: Built for Windows Vista™



AMD: Microsoft's Leading Windows Vista Partner



“ From day one, AMD has played a key role in helping us design and validate the new driver model at the heart of Windows Vista. That knowledge has led to the development of extremely stable, feature-rich, high-performance software drivers and hardware that really showcase the full power of the new Windows operating system.”

– Steve Ballmer, CEO, Microsoft Corporation



Excellent Power Management for 5+ Hours Battery Life AMD M690



Feature	Function	Benefit
AMD64 Technology	Full support of Turion 64 X2's Multi-Core Power State Modes	Maximize performance with 64-bit technology
Frame Buffer Compression	Data Traffic Optimization	Increase productivity for users on-the-go
PowerShift	Advanced Frequency and Voltage Scaling	Operate at low voltage for thin and light computing
Display Cache*	Keeps CPU in Lower Power States Mode	Longer battery life for extended mobility

"The RS690 chipset reintroduces the world to chipsets by AMD — and for its intended audience it is a complete success."



"AMD has put together a very competent integrated graphics chipset in the 690G — one that will no doubt help the company push a holistic platform that consolidates processing, core logic, and graphics."



* Applicable only to AMD M690 with ATI Radeon™ X1270

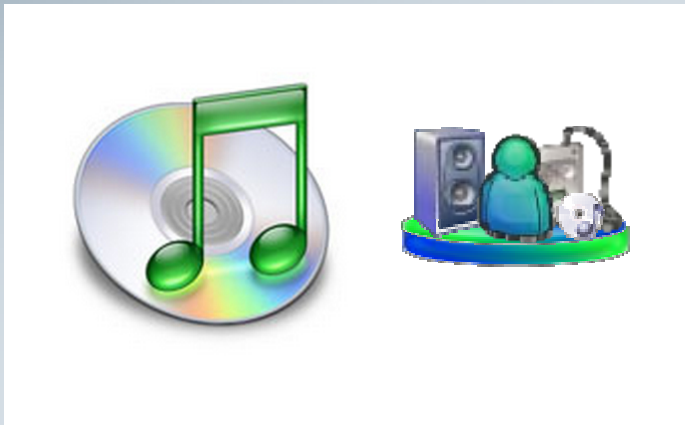
AMD Platforms Excel in Digital Media

Clearly Superior Digital Media Performance



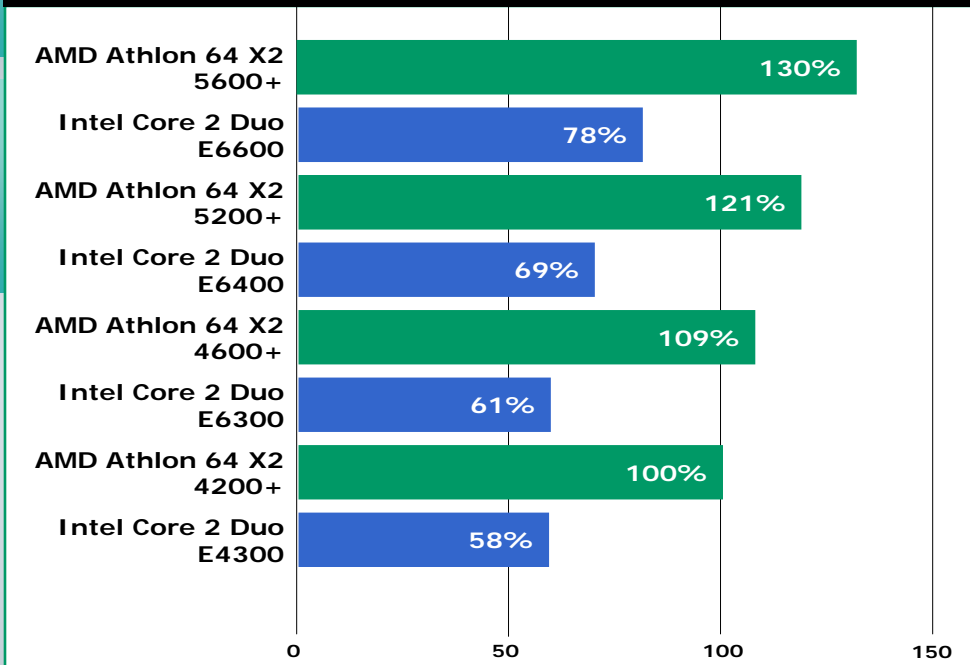
Clearly superior performance on Apple iTunes

Faster performance on CD Ripping to Apple iTunes digital format



AMD CPU+Chipset vs. Intel CPU + Chipset on Microsoft Vista

iTunes, Version 7.0.2.16



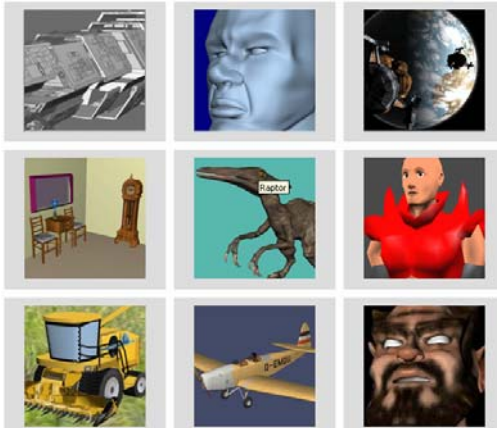
AMD 690 vs. Intel G965 benchmarking data as of 5/2/07

AMD Platforms Excel in 3D Productivity

Excellent 3D Content Creation Performance



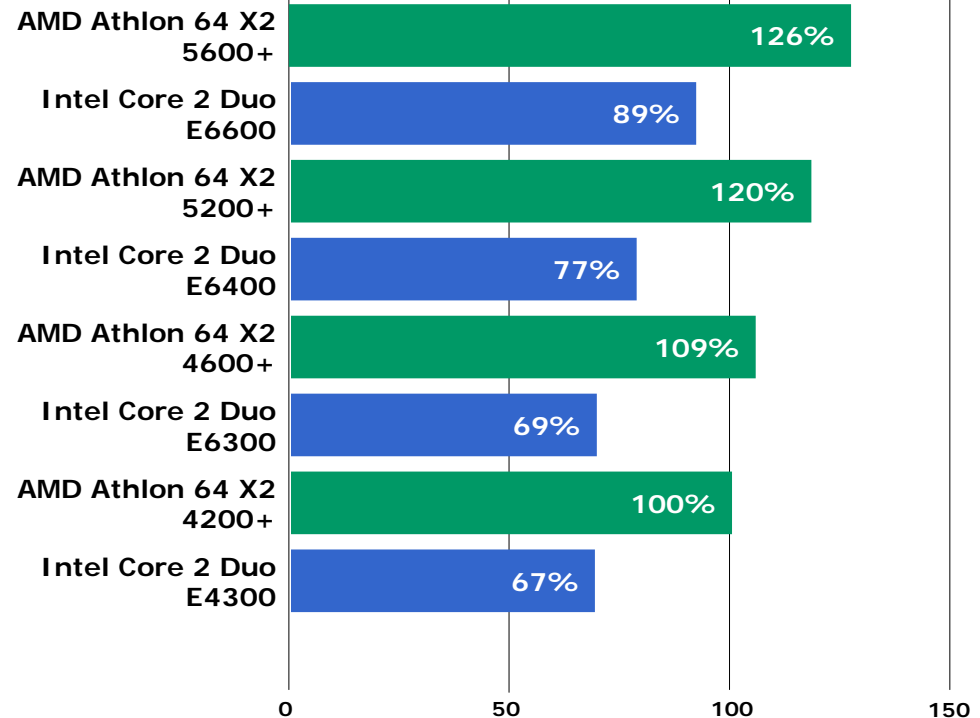
Superb graphic performance for 3D productivity and digital productivity applications including AC3D



AMD 690 vs. Intel 965G

AMD CPU + Chipset vs. Intel CPU + Chipset on Microsoft Vista

AC3D™



AMD 690 vs. Intel G965 benchmarking data as of 5/2/07

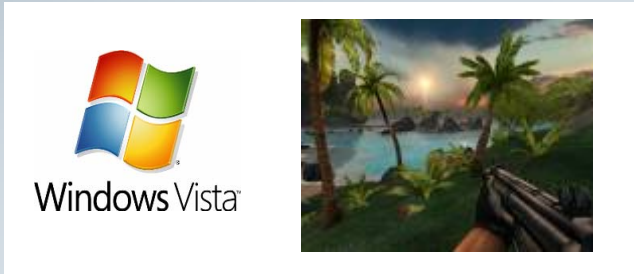
AMD Platforms Excel in Gaming

Clearly Superior Gaming Performance



Clearly superior 3D graphics performance for games including Far Cry on integrated graphics platforms

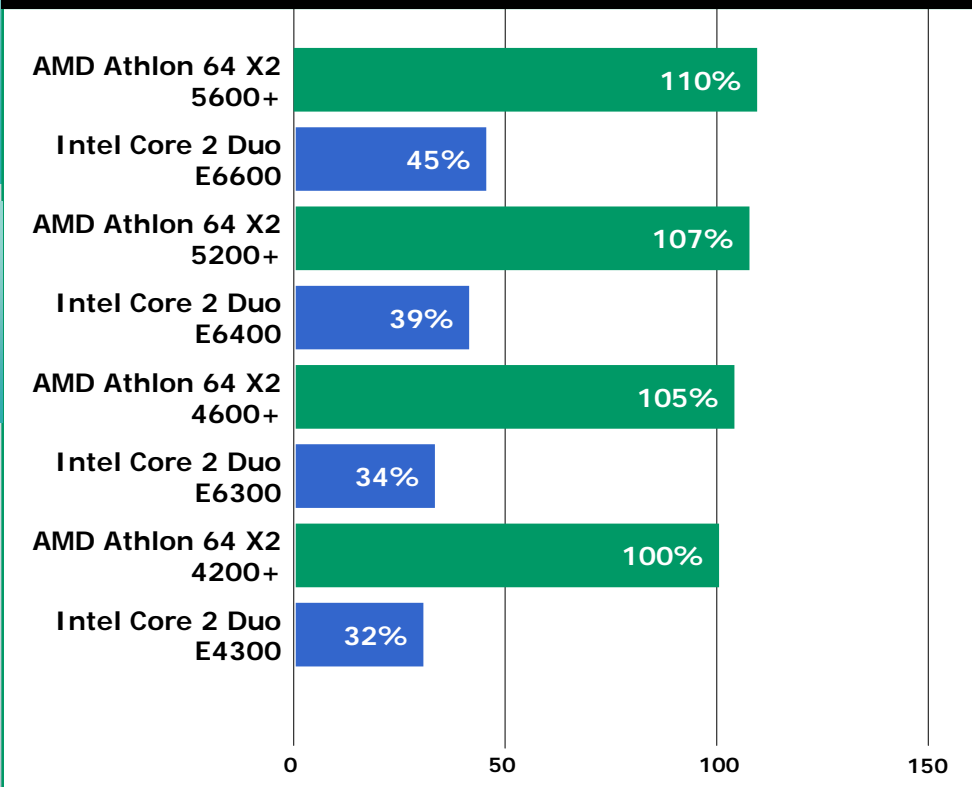
Delivering a compelling gaming experience to mainstream consumers



AMD 690 vs. Intel 965G

Latest AMD CPU+Chipset vs. Latest Intel CPU + Chipset on Microsoft Vista

Ubisoft™ Far Cry®



AMD 690 vs. Intel G965 benchmarking data as of 5/2/07

AMD Delivers Superior Compatibility

With Leading Gaming Titles on Windows Vista



Intel had **46** self-proclaimed game title issues between the 945G and G965

Intel recently altered the way this information was posted on intel.com

Intel's G965 Platform has run into so many issues Intel has provided a webpage outlining which games don't work with G965. In comparison, With AMD's 690 chipset it's simple – everything just works."



-FiringSquad

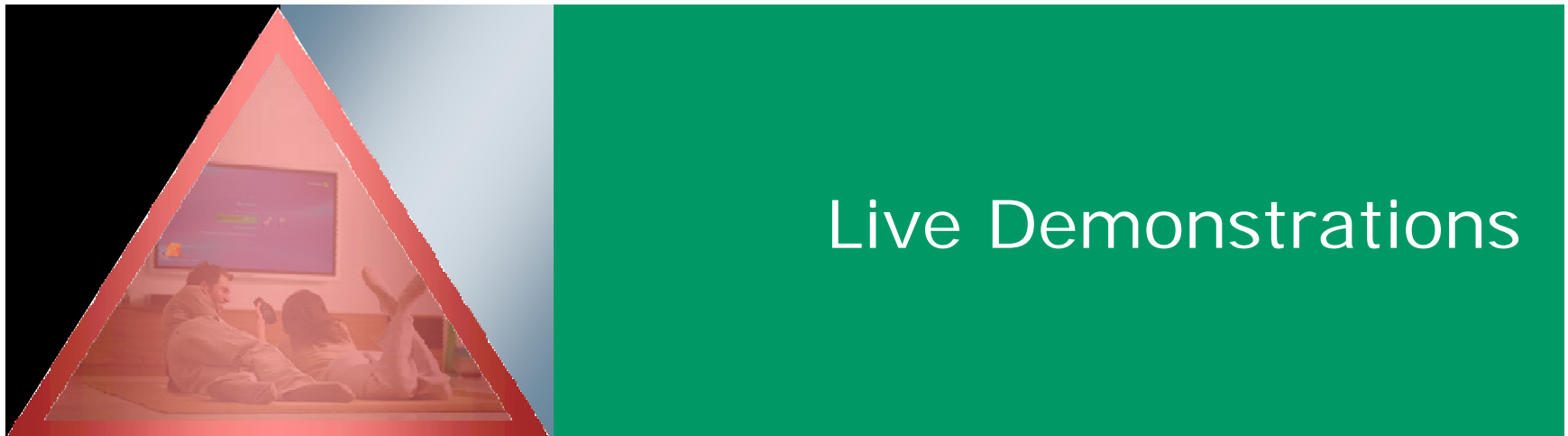
"Game does not operate or issues make game play difficult" on Intel platform

- Armed and Dangerous
- Dragonshard
- Elder Scrolls IV: Oblivion
- Full Spectrum Warrior
- Ghost Recon Advanced Warfighter
- Half-Life 2
- Half-Life 2: Episode One
- Half-Life 2: Lost Coast
- Just Cause
- Lego Star Wars
- Shattered Union
- Splinter Cell Chaos Theory
- Titan Quest

Source: <http://support.intel.com/support/graphics/intel945g/sb/CS-020666.htm>

Source: <http://www.intel.com/support/graphics/intelg965/sb/cs-023018.htm>

As of May 2, 2007



AMD 690 success



"Complete Success!"

"The RS690 chipset reintroduces the world to chipsets by AMD – and for its intended audience it is a complete success. Users looking for a budget computer for an HTPC or businesses looking for an alternative to current offerings, the AMD690 fits the bill."



"Top Performer"

"As promised, AMD delivered on their claims of a better gaming experience with the integrated X1250, with both gaming tests showing the Radeon X1250 as the top performer..."



Best Product Award



"First Try of the New AMD Turned Out a Success"

"However, one of the most convincing arguments in favor of AMD 690G is the DVI connector that will ensure high-quality image on your LCD monitor, which you can't get from the majority of solutions with integrated graphics at this time. So, the first try of the new AMD division turned out a success."



"Best Chipset in the Market"

"From a gamers point of view the AMD RADEON 1250 is the best available integrated graphics chipset on the market bar none"



Ned Finkle
Vice President, Strategic Marketing
NVIDIA

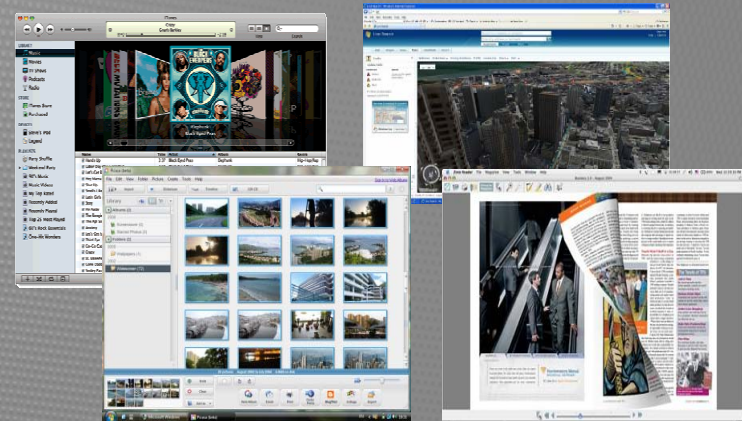


NVIDIA – Redefining Graphics

Windows Vista



New Mainstream 3D applications



Blu-ray & HD DVD Movies



Hyper-realistic Games



What's Important to You

Why do you need a graphics processor?



Why NVIDIA?



Better by Design + NVIDIA

- **Better graphics**

- *Every day tasks have become more graphically intensive*

- **Better performance**

- *Offloading work from the CPU is good for your PC!*

- **Look for a branded graphics solution**

- *NVIDIA GPUs provide an unparalleled visual experience*

- **NVIDIA has a solution for everyone**

- *For home or work, at every budget*



Clint Brown
Director of Business Development,
WLAN Business Unit
Broadcom

About Broadcom

- Largest volume fabless semiconductor supplier
- Founded in 1991
- 2006 revenue of \$3.67 billion
- Broadest communications product and IP portfolios
- Over 5,000 employees with 40 offices in 15 countries

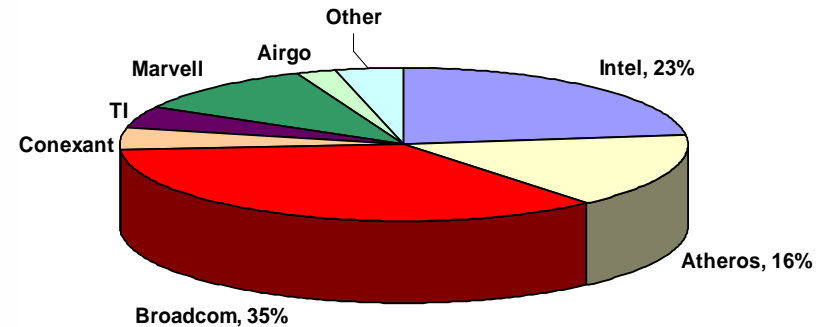


Broadcom technology powers many of the hottest consumer products available today

Wi-Fi Market Leadership

- **Broadcom is the Wi-Fi Market Leader**

- First-to-market with 802.11g
- Shipped over 150 million 54g™ chipsets
- Segment leadership: networking equipment, PCs, consumer electronics, embedded devices



Worldwide Wi-Fi Chip Market Share
Source: IDC, Broadcom data

- **54g leadership Extending to 802.11n Market**

- First 802.11n draft-compliant chipset
- Shipped over 3 million Intensi-fi™ chipsets
- Complete end-to-end 802.11n solution; more design wins than any other chipmaker (AppleTV, Netgear, Linksys, Buffalo, Asus)
- Most traction in PC OEM space (HP, Dell, Lenovo, Acer, Apple)



Broadcom is Driving the Wi-Fi Ecosystem



Laptops



Desktops



NICs



Routers

Beyond traditional network gear into...



DSL Gateways



Cable Modem Gateways



Printers



AC Powered Gaming

DSL/Cable modems, printers and game consoles and...



Cellular & VoIP Phones



Media Players



Handheld Games



Digital Still Cameras



Set-Top Boxes



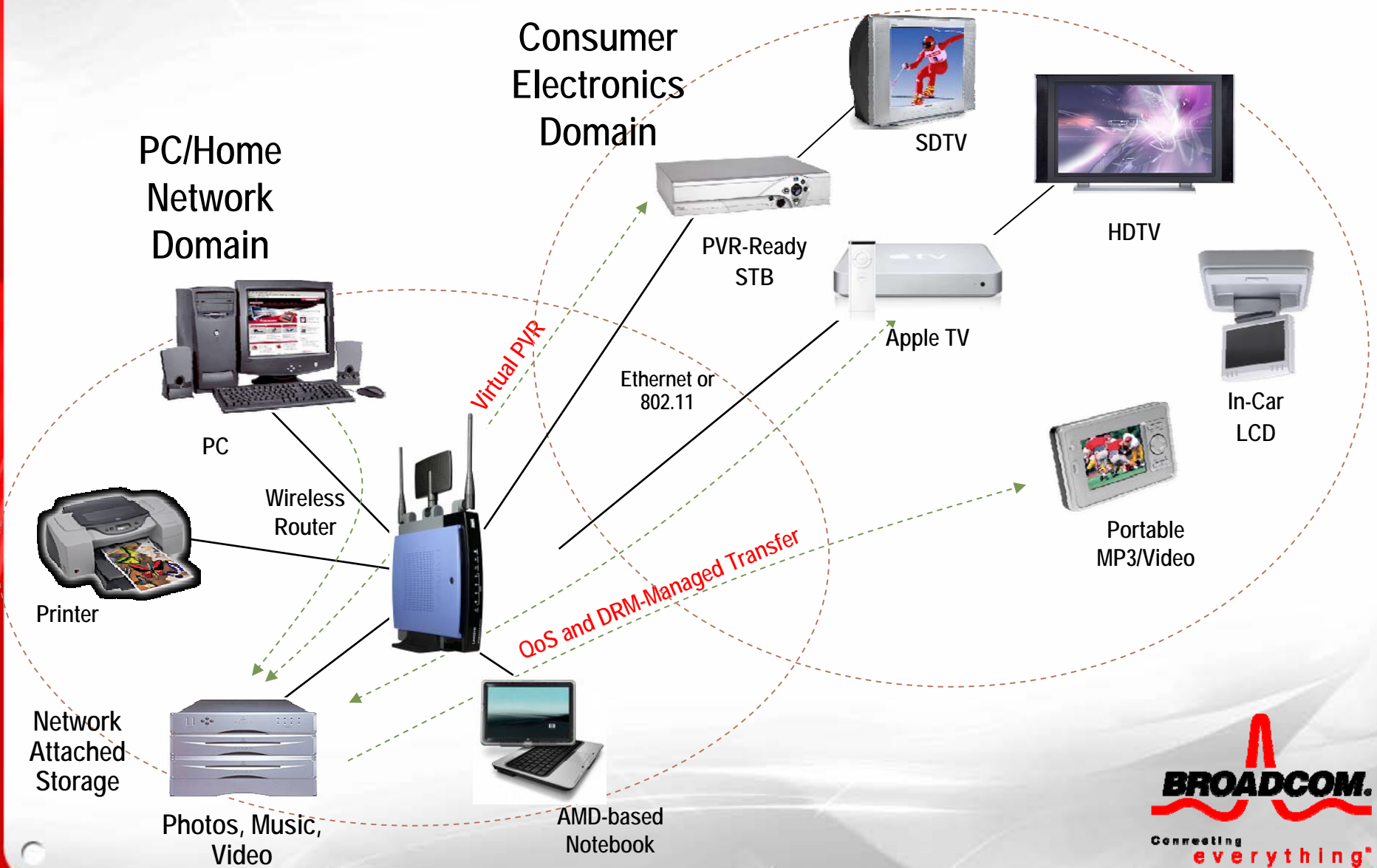
PVR Adapters



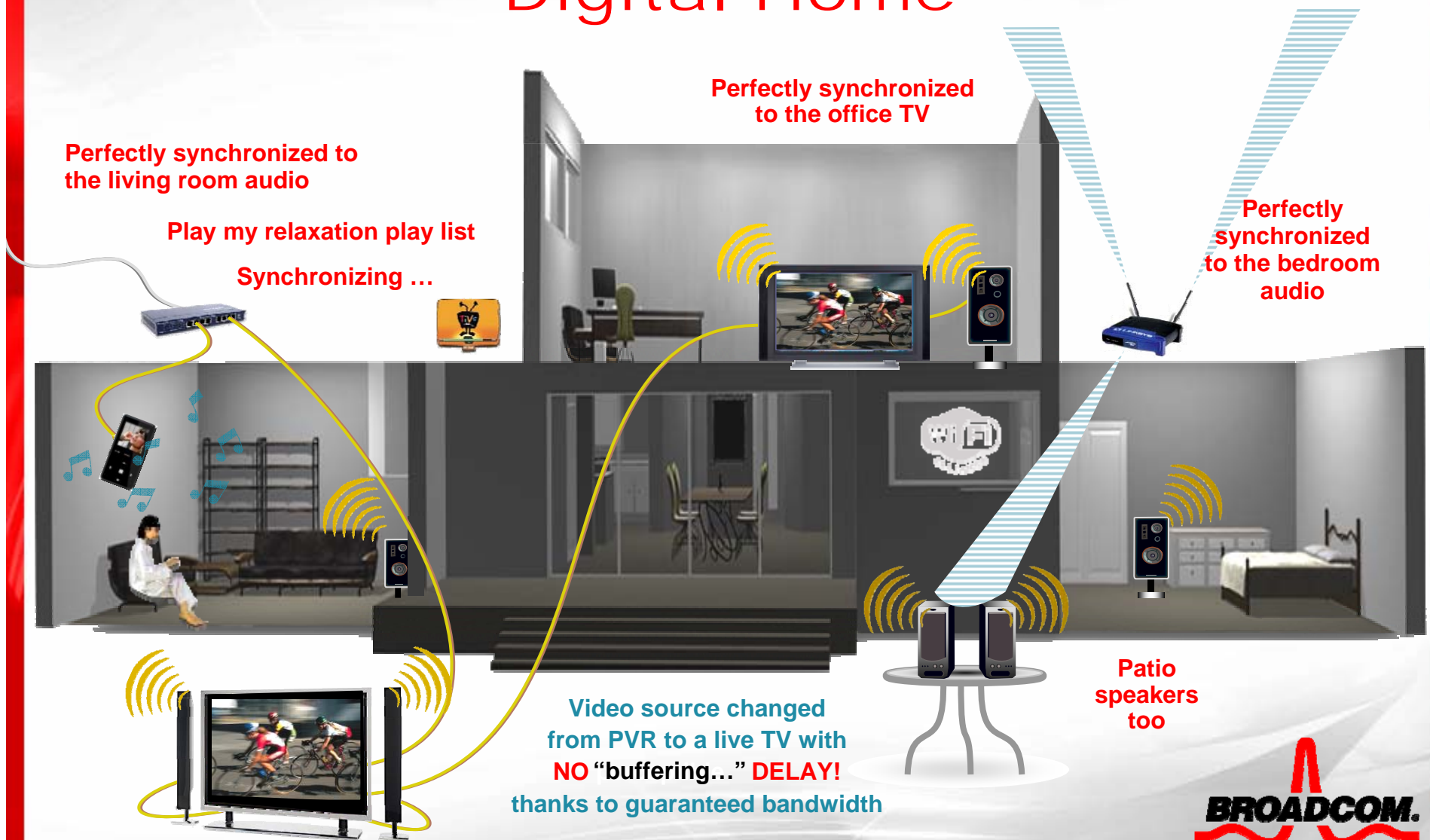
Network Storage

New consumer electronics platforms

Trends in the Connected Digital Home



Multimedia Distribution in the Digital Home



BROADCOM.
Connecting everything®

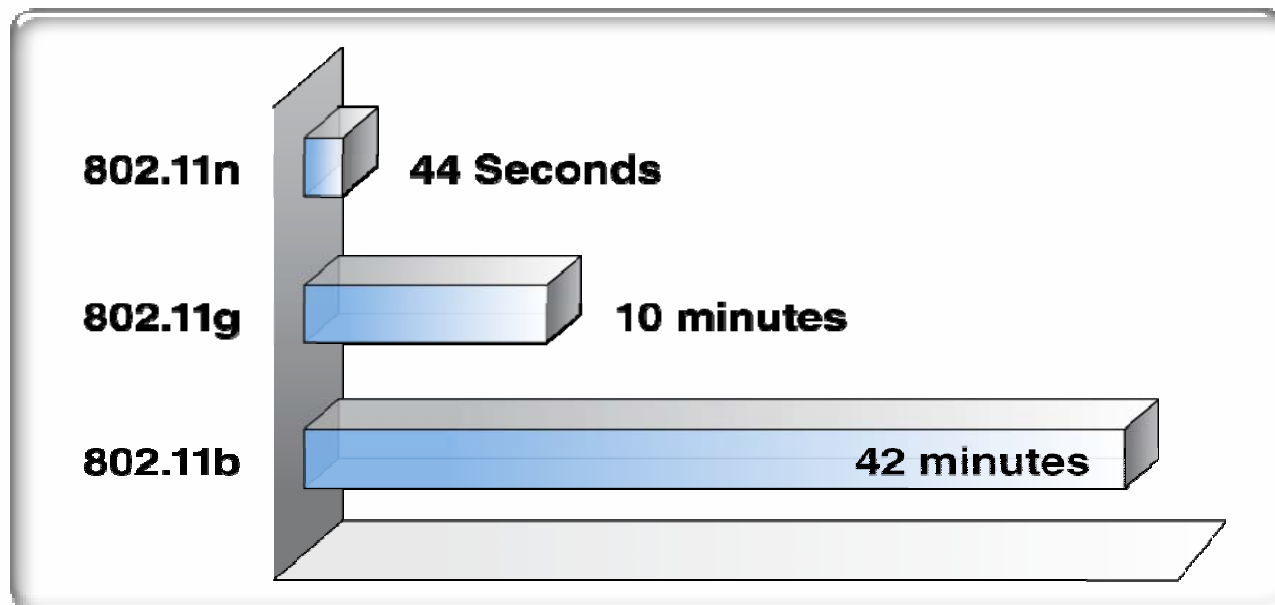
802.11n in the Connected Home

- Proliferation of CE devices designed for new types of applications and content requires a strong Wi-Fi backbone.
- 802.11n provides the backbone for the digital home
 - VoIP over Wi-Fi
 - In-home video & music distribution, including HDTV programming
 - Telcos pushing video services



Broadcom 802.11n Performance

- Compare the time (versus 802.11g) it takes to transfer multimedia using 802.11n technology
 - 500 MP3 Songs (5 Mb Files)
 - 1250 Digital Photos (2 Mb Files)
 - 125 Music Videos (20 Mb Files)
 - 30 Minutes of HD Video (2.5 Gig File)



802.11n = 44 Seconds

Broadcom 802.11n – Best Wireless Choice for Microsoft Windows Vista™

- Users wanting to take advantage of Vista's new features and benefits need to make sure the system they choose will support the features they find most valuable
- 802.11n is the first Wi-Fi technology that truly allows users to move photos, music, and multiple streams of HD video content quickly throughout the home
- With 7x the speed and 3x the range of 802.11g, 802.11n can handle seamless distribution of HD content, support online gaming, and enable file sharing all simultaneously and on one wireless network



AMD Better By Design Program



- Equips PCs with better multi-tasking and digital media enjoyment, superior Wi-Fi and graphics.
- Broadcom provides robust wireless connectivity for seamless distribution of enhanced 3D graphics and HD video. Users can download content 7x faster with 3x the range.
- Enables PC buyers to take full advantage of the rich visual experience of Microsoft Windows Vista™
- Simply put, Better By Design allows users to do more wirelessly at speeds faster than previously possible





802.11n – The Backbone of the Digital Home

Product Demonstration

Rich Ybarra
Technical Marketing Engineer

AMD Better by Design



Q & A



Thank You!

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System Configurations

April 2007

Benchmark System Configurations

Configurations for: Integrated Chipset on Windows Vista

- iTunes 7.0.2.16
- AC3D
- FarCry

AMD UMA Graphics Platform

Name:	Vista32 Ultimate		
Version:	RTM		
Build #:	6000		
DirectX Version:	DirectX 9.0C Jan07 Update		
Processor	AMD X2 4200,4600,5200,5600		
Hardware			
Motherboard:	MSI 7327 K9AGM2		
BIOS Info:	A7327.101		
Chipset:	RS690		
Memory			
Manufacturer & Type:	Corsair CM2X1024-6400		
Quantity & Size: (each)/(MB)	Qty (2) 1GIG MB DIMM Module		
Total Memory Size: (MB)	2 GIG total		
Hard Drive			
Model Name:	Seagate Barracuda 7200.10		
Model Number:	ST3250620AS		
Hard Drive Size:	250 GB		
Transfer Mode:	SATA 7200 RPM		
Other Info:	NTFS was used to format the hard disk		
Network Card	Included with Operating System: Yes x No (if No, provide info)		
Name:	Realtek RTL8168/8111 Family PCI-E Gigabit Ethernet NIC		
Model Number:	Onboard		
Sound Card			
Manufacturer's Name:	High Definition Audio Device		
Model Number:	Onboard		
Video Card			
Graphics Adapter:	ATI Radeon X1200 Series		
Memory Size (MB) and Type:	Auto UMA		
Drivers			
Network Card	Publisher Name: Microsoft	Date if applicable:	
	Version: 6.1837.926.2006		
SATA Drivers	Publisher Name: Microsoft	Name: Standard Dual Channel PCI IDE	
Sound Card	Publisher Name: Microsoft	Date if applicable: 11/2/2006	
	Version: 6.0.5840.16387		
Video Card	Publisher Name: ATI	Date if applicable: 2/2/2007	
	Version: 7.1.1.598		
	Graphics Resolution: 1280 x 1024		
	Color Depth: 32 bit	Refresh Rate: 60Hz	Texture

Intel UMA Graphics Platform

Name:	Vista32 Ultimate		
Version:	RTM		
Build #:	6000		
DirectX Version:	DirectX 9.0C Jan07 Update		
Processor	INTEL Core2 DUO E4300,E6300,E6400,E6600		
Hardware			
Motherboard:	Intel 965RY		
BIOS Info:	MQ96510J.86A.1577.2006.1115.2351		
Is BIOS publicly available?	Yes	X	No
Chipset:	Intel 965		
Memory			
Manufacturer & Type:	Corsair CM2X1024-6400		
Quantity & Size: (each)/(MB)	Qty (2) 1GIG MB DIMM Module		
Total Memory Size: (MB)	2 GIG total		
Hard Drive			
Model Name:	Seagate Barracuda 7200.10		
Model Number:	ST3250620AS		
Hard Drive Size:	250 GB		
Transfer Mode:	SATA 7200 RPM		
Other Info:	NTFS was used to format the hard disk		
Network Card	Included with Operating System: Yes x No (if No, provide info)		
Name:	Intel(R) 82566DC Gigabit Platform LAN Connect		
Model Number:	Onboard		
Sound Card			
Manufacturer's Name:	SigmaTel High Definition Audio CODEC		
Model Number:	Onboard		
Version Number:			
Video Card			
Graphics Adapter:	Intel(R) GMA 3000		
Memory Size (MB) and Type:	Dynamic UMA		
Drivers			
Network Card	Publisher Name: Microsoft	Date if applicable:	
	Version: 6.1837.926.2006		
SATA Drivers	Publisher Name: Microsoft	Name: Standard Dual Channel PCI IDE	
	Version: 5.10.2600.691	Date if applicable:	
Sound Card	Publisher Name: SigmaTel	Date if applicable: 2/26/2007	
	Version: 6.10.5274.0		
Video Card	Publisher Name: Intel Corporation	Date if applicable: 1/31/2007	
	Version: 7.14.10.1187		
	Graphics Resolution: 1600x1200		
	Color Depth: 32 bit	Refresh Rate: 60Hz	Texture

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