

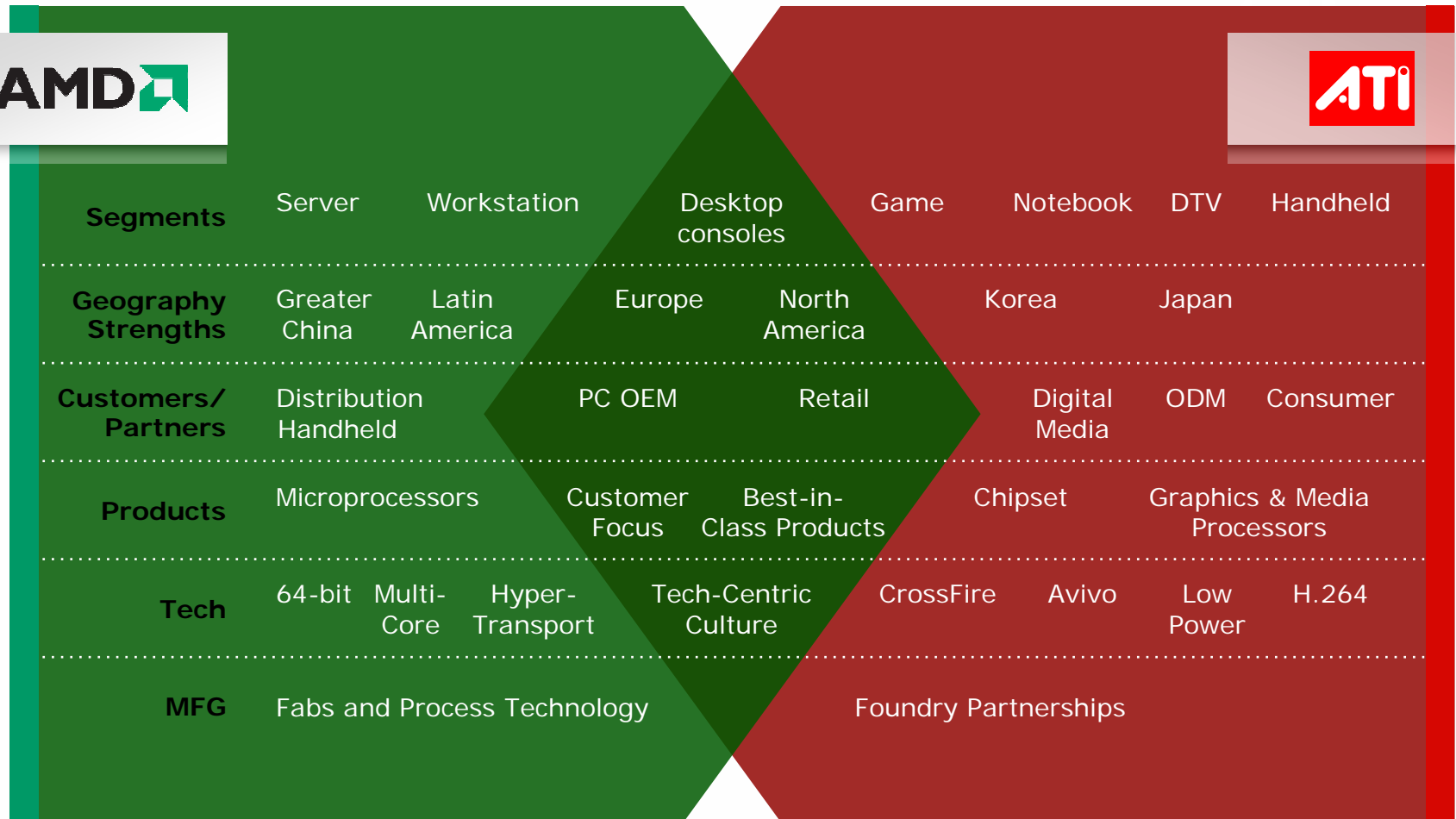


# AMD CPU Roadmap

Justin Boggs  
Sr. Developer Relations Engineer  
Sunnyvale, CA, USA

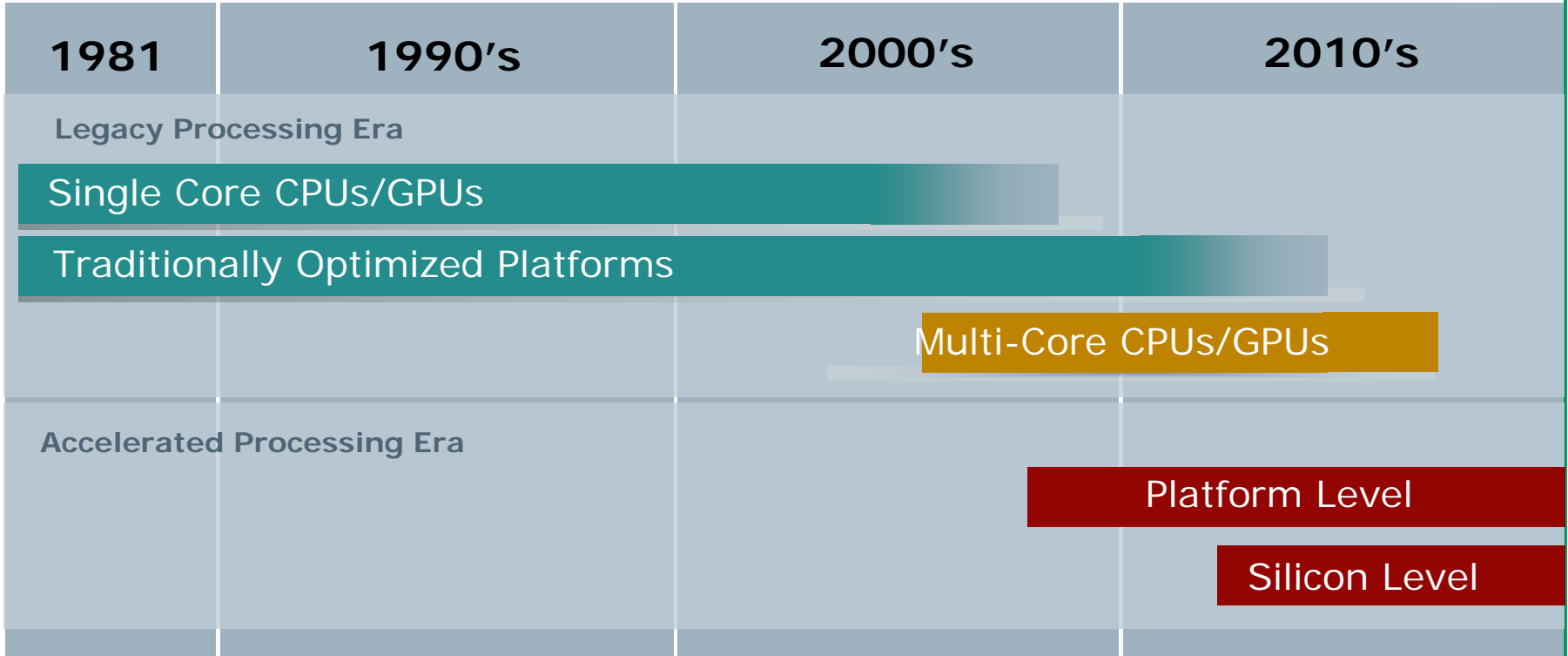
July 2007

# The New AMD: Capabilities



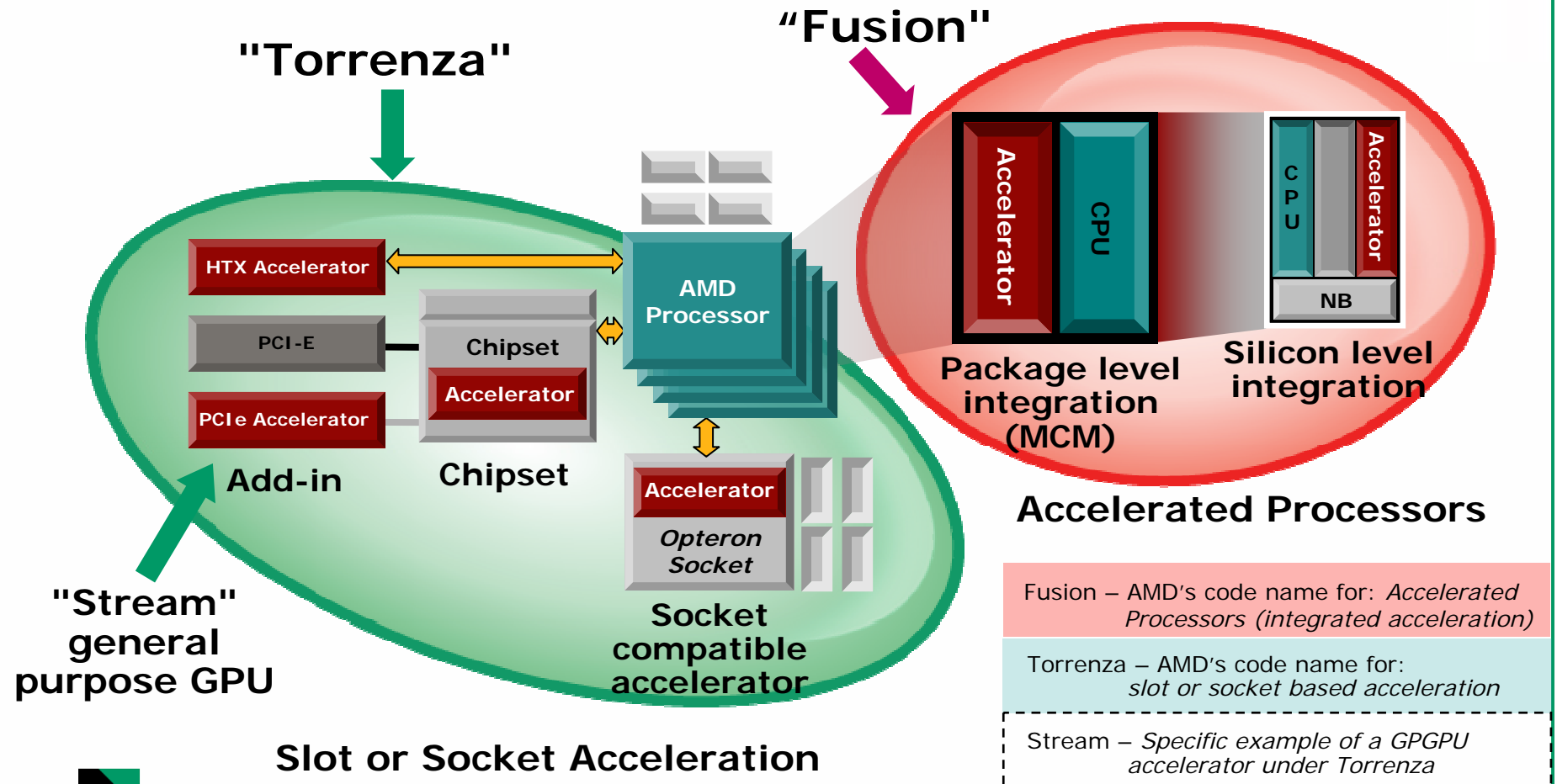
**Blending world-class knowledge, cultures and people**

# The Next Major x86 Inflection Point



**The Era of Accelerated Computing is coming,  
and AMD is again leading the way**

## Accelerated Computing



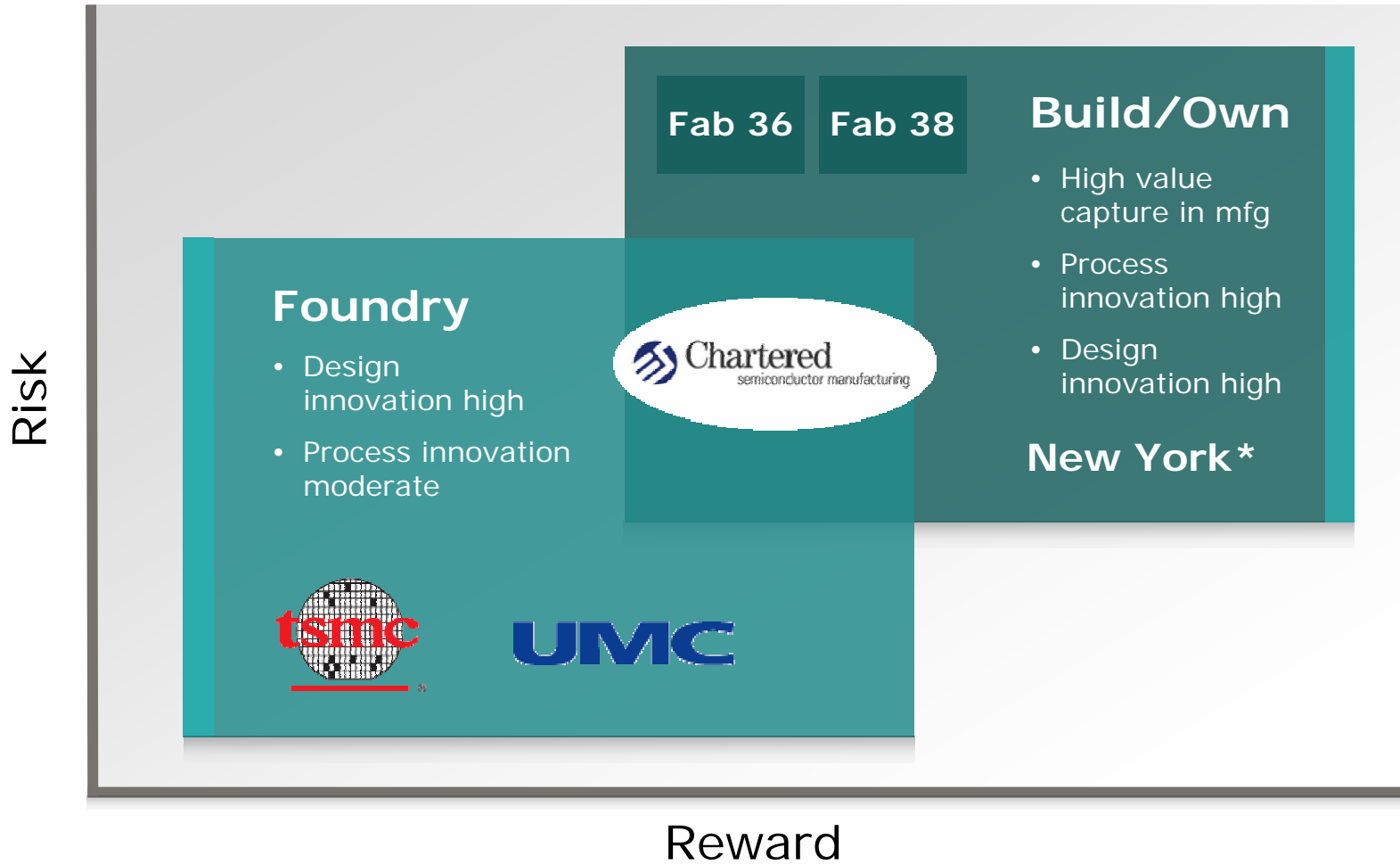
# First AMD Accelerated Processor Combining CPU and GPU

## Fusion Vision

Create the optimal computing experience for an increasingly mobile, graphics- and media-centric world

Deliver step-function improvements in microprocessor performance-per-watt-per-dollar over today's CPU-only architectures

# A New Level of Innovation



\* Potential AMD Fab facility

# Manufacturing: Continuing to Set the Standard - AMD Dresden

## Fab 36

- 300mm microprocessor Fab
- Output continues to increase
- 65nm volume production underway
- Reached full 65nm conversion in mid-2007
- Ramped 65nm at mature yields with extremely low defect densities
- First 65nm production wafers left Fab36 in October 2006

## Fab 30 / Fab 38

- 200mm microprocessor Fab with 300mm transition to Fab38 started in 1H07
- New "Bump and Test" facility completed Q107



# Quad-Core AMD Opteron™ Advantage

## More than just four cores

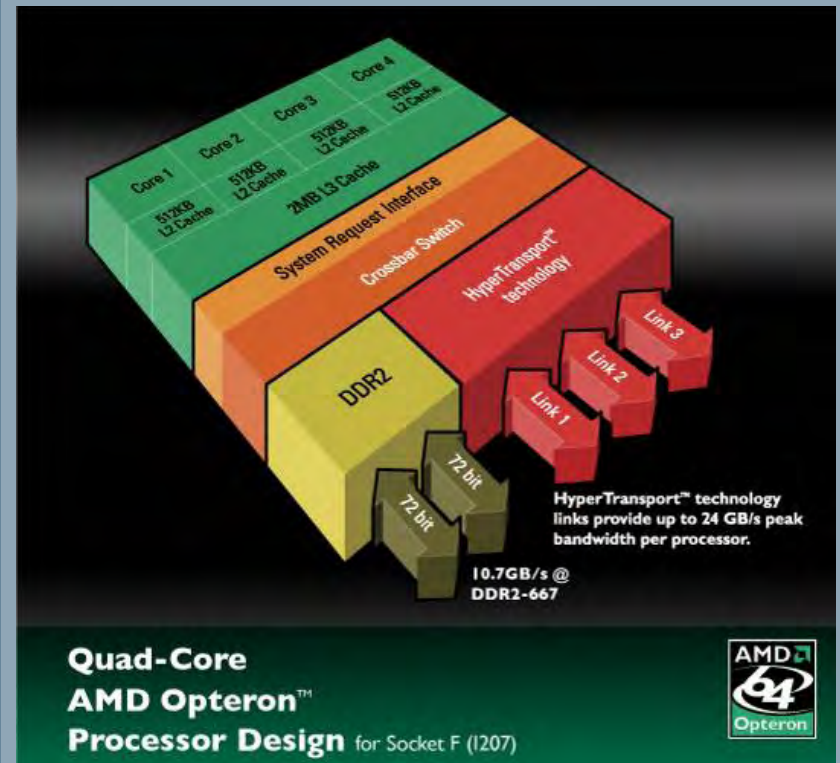
- Significant CPU Core Enhancements
- Significant Cache Enhancements

## World-class performance

- Native Quad-Core
  - Faster data sharing between cores
- Enhanced AMD-V™
  - Nested paging acceleration for virtual environments

## Reducing total cost of ownership

- Performance/Watt leadership
  - Consistent 95W thermal design point
  - Low power 68W solutions
- Drop-in upgrade
  - Socket F compatibility – BIOS upgrade
  - Leverage existing platform infrastructure
- Common Core Architecture
  - One core technology top-to-bottom
  - Top-to-bottom platform feature consistency





# AMD Desktop Platform Roadmap

2006	2007	2008
<b>Processor</b>		
Dual Core HT 1.0/2.0		Dual Core, Quad Core Shared L3 Cache HT 3.0
Single Core HT 1.0/2.0	Dual Core, Single Core L2 Cache, HT 3.0	
<b>Platform</b>		
125W/89W/76W/65W/62W/45W		
DDR2 Memory Technology		DDR2/DDR3
HyperTransport™ Technology (HT) 1.0/2.0		HT 3.0
<b>Chipsets</b>		
CrossFire™ dual-graphics, HD audio		CrossFire dual-graphics, HT 3.0 PCIe Gen 2
DirectX9 integrated graphics, HD audio		DirectX10 integrated graphics PCIe Gen 2, HT 3.0

# Introducing AMD Phenom™ Processors

*May 14, 2007, we announced our vision and strategy for true quad-core client technology with the unveiling of the AMD Phenom™ processor family*

Next-generation AMD Phenom processors allow users to...  
experience the Phenomenal

**Native, true multi-core capability for an experience that is**

Exquisitely powerful

True dual to quad-core architecture in an elegant design for ultimate performance with extreme bandwidth and a hair-trigger response

Intensely visual

Immersive and media-rich compute experiences to help users realize new possibilities and find new inspiration

Strikingly Efficient

Intelligent use of energy and system resources – stable, reliable, virtualization-ready and energy astute



# AMD Desktop Products 2H'07



**AMD Phenom™ FX processors**  
*Ultimate Performance*  
True Quad-core



**AMD Phenom™ X4 and X2 processors**  
*Phenomenal Experience*  
True Quad- and Dual-core

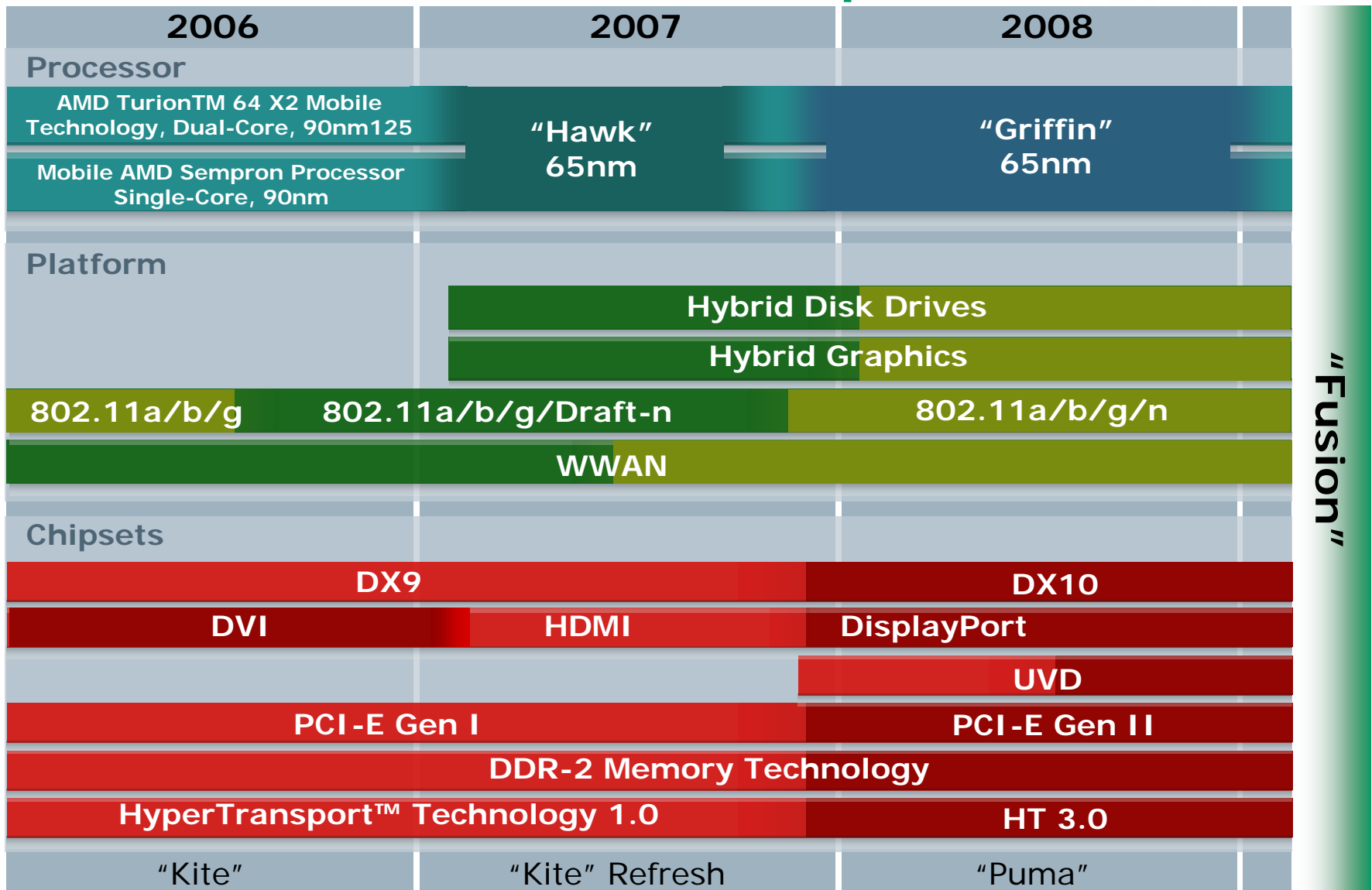


**AMD Athlon™ X2 processors**  
*Do More In Less Time*  
Dual-core



**AMD Sempron™ processors**  
*Everyday Computing*  
Single-core

# AMD Mobile Platform Roadmap



"Fusion"