

AMD Announces Broad Software Ecosystem Support for Industry's First x86 Native Quad-Core Solution

-- Windows, Linux, Solaris and VMware Environments Are Optimizing to Take Advantage of AMD's Native Quad-Core "Barcelona" Processors --

SUNNYVALE, Calif .-- (BUSINESS WIRE) --

AMD (NYSE:AMD) today announced that leading x86 operating system (OS) and virtual infrastructure (VI) vendors are embracing support for AMD's native Quad-Core AMD Opteron(TM) processor, code-named "Barcelona." Microsoft, Novell, Red Hat, Sun Microsystems and VMware are optimizing their operating systems, virtual infrastructures and supporting tools and middleware to take full advantage of the increased efficiencies, performance and decreased power consumption enabled by AMD quad-core technology.

By working closely with leading operating system and virtual infrastructure vendors, AMD is providing customers with the ability to choose the environment that is best suited to their applications demands. Development efforts by operating system and virtual infrastructure vendors are primarily focused on leveraging enhanced power management, virtualization and multi-core features of the upcoming Quad-Core AMD Opteron processor. Since its introduction, the AMD Opteron processor has become a platform of choice on the road maps of operating systems from Windows(R), Linux(R) and Solaris(TM) as well as that of VMware Infrastructure.

"AMD and leading operating system and virtual infrastructure vendors are working together to provide a non-disruptive upgrade path to help enable the mainstream adoption of quadcore technology," said Terri Hall, vice president, Commercial Systems Marketing, AMD. "Operating system and virtual infrastructure support is the cornerstone for ensuring a robust software ecosystem. Our goal is to deliver a computing platform that offers our customers choice, increased application performance and performance-per-watt, and improved operational efficiency."

Microsoft Windows Server, SUSE Linux Enterprise Server from Novell, Red Hat Enterprise Linux, Sun Microsystems' Solaris Operating System and VMware Infrastructure are expected to offer versions of their industry-leading operating systems and virtual infrastructures that work out-of-the-box with "Barcelona," the industry's first native x86 quadcore processors, providing improved performance across a range of applications. "Barcelona's" enhancements, which will offer increased application performance within the same platform and power envelope as existing dual-core processors, include native quadcore capabilities, Enhanced AMD PowerNow!(TM) technology and Rapid Virtualization Indexing (formally "Nested Paging"), which is a new feature of AMD Virtualization(TM) technology.

"Microsoft has worked closely with AMD to ensure that Windows Server is optimized to take full advantage of the new processor features offered by Barcelona," said Bill Laing, general manager of Microsoft's Windows Server division. "Windows Server 2003 R2 provides full support for the enhanced power management capabilities of Quad-Core AMD Opteron processors today, and the upcoming release of Windows Server 2008 will offer additional power savings and increased performance when it is available."

"SUSE Linux Enterprise Server 10 SP1 is the first production-level operating system to support Barcelona's enhanced virtualization feature, Rapid Virtualization Indexing," said Roger Levy, senior vice president and general manager of Open Platform Solutions for Novell. "Novell continues to work hard to provide customers with innovative solutions at the front of the market, as we are again one of the first Linux vendors to embrace new technology offered by AMD. We look forward to leveraging future AMD innovations to benefit customers."

"Sun has a long history of providing solutions that define innovation," said Marc Hamilton, vice president of Solaris Marketing, Sun Microsystems. "The free and open Solaris 10 Operating System is leveraging more than 20 years of SMP expertise - with 64-bit computing since 1998 - and will offer exceptional computing performance, security and virtualization capabilities on AMD Opteron processor-based systems ranging from single cores to 32-cores and beyond."

In addition to the out-of-the-box compatibility with "Barcelona," versions of vendor operating systems and virtual infrastructures currently under development are expected to include additional optimizations that specifically enable applications to exploit AMD64 quad-core capabilities.

"Red Hat, AMD and the Open Source Software community have worked together to ensure that Linux will fully leverage the multi-core, virtualization and power management capabilities of the Quad-Core AMD Opteron processor," said Paul Cormier, executive vice president of Engineering, Red Hat. "This technology partnership allows Red Hat to ensure Red Hat Enterprise Linux meets the critical business needs of our customers."

"VMware has worked closely with AMD to optimize the Quad-Core AMD Opteron processor for VMware virtualization products. Features such as Rapid Virtualization Indexing are designed to enable customers using the industry-leading VMware platform to further increase CPU utilization and provide more efficient memory access," said Brian Byun, vice president of global partners and solutions at VMware. "We are excited about the enhanced virtualization capabilities of AMD's upcoming processors, including AMD Virtualization, and their ability to improve performance on a broader set of workloads."

AMD has an established history of working closely with major ISVs and the Open Source Software community to ensure that software applications can easily leverage the innovative features provided by the AMD Opteron processor with Direct Connect Architecture. For the Quad-Core AMD Opteron processor, AMD is working closely with OS, VI, tools and infrastructure ISVs to ensure the best possible operating environment for the thousands of x86 software applications.

OS and VI AMD Native Quad-Core Support

OS or VI Version Planned availability

Novell SUSE Linux Enterprise Server 9 (SP4)	40 2007
Novell SUSE Linux Enterprise Server 10 (SP1)	
Red Hat Enterprise Linux 4.5	Released
Red Hat Enterprise Linux 5.0	Released
Solaris 10	Released
Windows Server 2003 SP2, R2	Released
Windows XP SP2, x64	Released
Windows Vista	Released
Windows Server 2008	10 2008
VMware Infrastructure	Planned

About AMD

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Source: Advanced Micro Devices, Inc.