AMD Details Next-Generation Platform for Notebook PCsAMD Details Next-Generation Platform for Notebook PCs

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At a press conference in Tokyo, Japan, AMD today officially disclosed more details of its next-generation open platform for notebook computing. Codenamed “Puma,” the platform is designed to deliver battery life, graphics and video processing enhancements and improved overall system performance for an enhanced visual experience.

The “Puma” platform is expected to build on the successful launches of the AMD M690 mobile chipset and 65nm process-based AMD Turion 64 X2 dual-core mobile technology in April and May 2007, respectively.

The key technologies that comprise “Puma” are AMD’s next-generation notebook processor, codenamed “Griffin”, matched with the next-generation AMD “RS780” mobile chipset. This new platform exemplifies AMD’s commitment to improve platform stability, time to market, performance/energy-efficiency and overall consumer and commercial customers’ experience via its acquisition and integration of ATI. Notebooks based on the “Puma” platform are expected to be available in the mid-2008 timeframe.

“Through the combination of our recent processor and chipset launches and the Better by Design program, AMD is constantly establishing new heights of competitiveness in serving the needs of our notebook customers,” said Chris Cloran, vice president, AMD Notebook Division. “With the unveiling of the “Puma” mobile platform we’re sending a clear

signal to the market that we intend to drive continued innovation in notebook computing in 2008 and beyond."

Next-Generation Microprocessor Architecture

Core to the "Puma" platform is the introduction of AMD's next-generation notebook "Griffin" microprocessor. With "Griffin," AMD will deliver a number of new capabilities to enhance battery life and overall mobile computing performance.

New notebook processing innovations in "Griffin" include:

-- power optimized HyperTransport and memory controllers integrated in the processor silicon that operate on a separate power plane as the processor cores, thereby enabling the cores to go into reduced power states;
-- dynamic performance scaling offers enhanced battery life with reduced power consumption through separate voltage planes enabling each core to operate at independent frequency and voltage; and
-- power-optimized HyperTransport 3.0 with a more than tripling of peak I/O bandwidth, plus new power features including dynamic scaling of link widths.

"With this introduction, AMD is stepping up its mobility story," said Roger L. Kay, president, Endpoint Technologies Associates, Inc. "With increased performance and power efficiency, Puma represents the company's first explicitly mobile platform. It's safe to assume that this offering is just the first of what will be turn out to be a stream of evolving products based on the company's new open-platform mobile technology."

"RS780" Platform Technology

“Griffin” will be complemented with the forthcoming “RS780” notebook chipset to deliver a rich visual experience and increased performance. Based on PCI Express Generation 2 and the HyperTransport 3.0 specifications,”RS780” is expected to raise the bar on the notebook computing experience by delivering significant new features such as:

-- Motherboard DirectX 10 graphics processing
-- Energy efficient high-definition multimedia support with the Unified Video Decoder
-- Integrated multi-monitor support with DVI, HDMI and DisplayPort
-- Native southbridge support for NAND flash with HyperFlash
-- PowerXpress for dynamic switching between integrated and discrete graphics to extend battery life

The “Puma” platform is based upon an open platform strategy. In addition to the “Griffin” microprocessor and “RS780” chipset, the “Puma” platform includes ATI Radeon graphics, NVIDIA chipset and graphics technologies, and industry-leading wireless technologies.

With the launch of the “Puma” platform, AMD is taking important steps in system-level optimization through adding intelligence and increased coordination between the CPU, GPU and chipset. The “Puma” platform sets the stage for the next-wave of notebook processing innovation with silicon-level CPU/GPU integration through “Fusion”.

“Puma” will be further discussed during a presentation by AMD Fellow, Maurice Steinman at the Spring Microprocessor Forum in San Jose, California on May 22nd.

Source: AMD