AMD fait un point complet sur sa feuille de route 2012 – 2013

Au fil des articles composant notre dossier sur l'AMD 2012 Financial Analyst Day, nous avons pu découvrir certains des plans de la firme. **Rory Read**, CEO d'AMD, annonce ainsi l'arrivée de SoC. **Mark Papermaster**, CTO d'AMD, promet la fusion complète des GPU et CPU au sein des APU pour 2014. Enfin, **Lisa Su** a levé le voile sur les futurs APU mobiles, dont un modèle dédié aux tablettes, et sur les futures évolutions des Opteron.

En pages suivantes, vous trouverez une présentation reprenant l'ensemble de la *roadmap* produits de la firme pour les deux années à venir. Nous notons tout d'abord que certaines puces équipées de cœurs Piledriver seront bien accessibles en *socket* AM3+ (ce qui permet ainsi de répondre en partie à l'une des questions de nos lecteurs).

Généralisation du 28 nm en 2013

En 2012, la plupart des composants seront toujours gravés en 40 nm (entrée de gamme) et 32 nm (familles de produits plus classiques). Seules les cartes graphiques bénéficieront du 28 nm. Tout ceci devrait changer en 2013, année à partir de laquelle les composants mobiles seront gravés en 28 nm, y compris les remplaçants des Brazos 2.0 et Hondo.

Même constat dans le monde *desktop*, où seul le haut de gamme sera encore gravé en 32 nm. Sur le marché des serveurs, peu d'évolutions sont à attendre. Les cœurs Piledriver succéderont aux Bulldozer en 2012-2013, mais ils resteront gravés en 32 nm.

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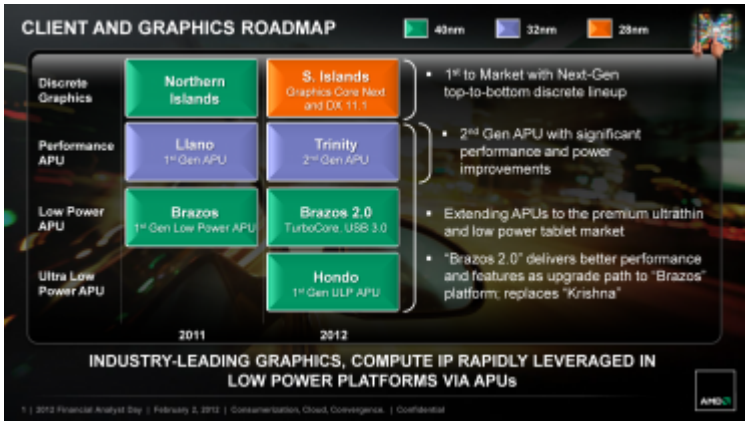
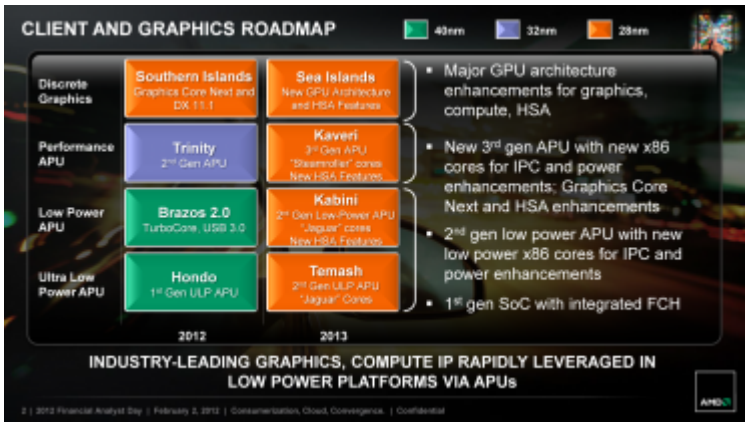
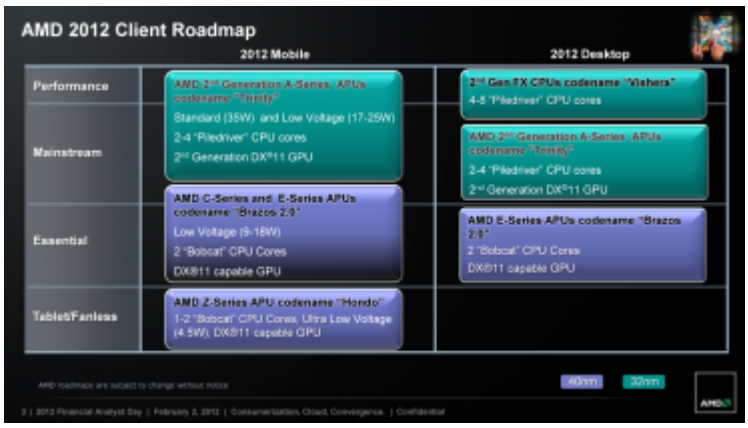
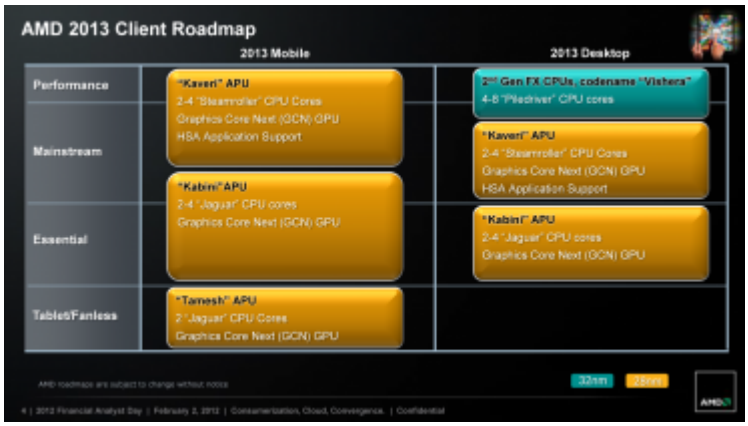
En pages suivantes : la roadmap produits d'AMD, puis, à partir de la page 7, les dates de sorties prévues pour ces différents produits.




CLIENT AND GRAPHICS ROADMAP
40nm
32nm
28nm
Discrete Graphics
Southern Islands
Graphics Core Next and DX 11.1
Sea Islands
New GPU Architecture and HSA Features
Performance APU
Trinity
2nd Gen APU
Kaveri
3rd Gen APU
"Steamroller" cores
New HSA Features
Low Power APU
Brazos 2.0
TurboCore, USB 3.0
Kabini
2nd Gen Low-Power APU
"Jaguar" cores
New HSA Features
Ultra Low Power APU
Hondo
1st Gen ULP APU
Temash
2nd Gen ULP APU
"Jaguar" Cores
2012
2013
Major GPU architecture enhancements for graphics, compute, HSA
New 3rd gen APU with new x86 cores for IPC and power enhancements; Graphics Core Next and HSA enhancements
2nd gen low power APU with new low power x86 cores for IPC and power enhancements
1st gen SoC with integrated FCH
INDUSTRY-LEADING GRAPHICS, COMPUTE IP RAPIDLY LEVERAGED IN LOW POWER PLATFORMS VIA APUs


AMD 2012 Client Roadmap
2012 Mobile
2012 Desktop
Performance
Mainstream
Essential
Tablet/Fanless
AMD 2nd Generation A-Series APUs codename "Trinity"
Standard (35W) and Low Voltage (17-25W)
2-4 "Piledriver" CPU cores
2nd Generation DX*11 GPU
2nd Gen FX CPUs codename "Vishera"
4-8 "Piledriver" CPU cores
AMD 2nd Generation A-Series APUs codename "Trinity"
2-4 "Piledriver" CPU cores
2nd Generation DX*11 GPU
AMD C-Series and E-Series APUs codename "Brazos 2.0"
Low Voltage (9-18W)
2 "Bobcat" CPU Cores
DX*11 capable GPU
AMD E-Series APUs codename "Brazos 2.0"
2 "Bobcat" CPU Cores
DX*11 capable GPU
AMD Z-Series APU codename "Hondo"
1-2 "Bobcat" CPU Cores, Ultra Low Voltage (4.5W), DX*11 capable GPU
AMD roadmaps are subject to change without notice
40nm
32nm


AMD 2013 Client Roadmap
2013 Mobile
2013 Desktop
Performance
Mainstream
Essential
Tablet/Fanless
"Kaveri" APU
2-4 "Steamroller" CPU Cores
Graphics Core Next (GCN) GPU
HSA Application Support
2nd Gen FX CPUs, codename "Vishera"
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2-4 "Steamroller" CPU Cores
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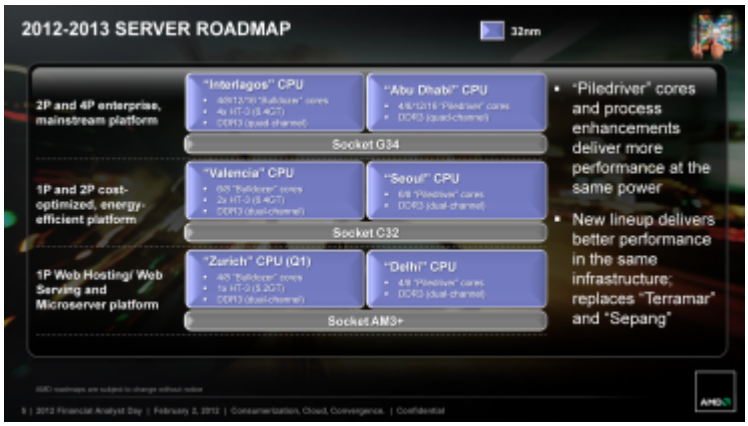
"Kabini" APU
2-4 "Jaguar" CPU cores
Graphics Core Next (GCN) GPU
"Kabini" APU
2-4 "Jaguar" CPU cores
Graphics Core Next (GCN) GPU
"Tanesh" APU
2 "Jaguar" CPU Cores
Graphics Core Next (GCN) GPU
AMD roadmaps are subject to change without notice
32nm
28nm


2012-2013 SERVER ROADMAP
32nm
2P and 4P enterprise, mainstream platform
"Interlagos" CPU
"Abu Dhabi" CPU
Socket G34
1P and 2P cost-optimized, energy-efficient platform
"Valencia" CPU
"Seoul" CPU
Socket C32
1P Web Hosting/ Web Serving and Microserver platform
"Zurich" CPU (Q1)
"Delhi" CPU
Socket AM3+
"Piledriver" cores and process enhancements deliver more performance at the same power
New lineup delivers better performance in the same infrastructure; replaces "Terramar" and "Sepang"

AMD

At-a-Glance Codename Decoder

This document is designed to help decipher publicly referenced, forward-looking product and micro architecture codenames discussed in presentations at the AMD Financial Analyst Day on February 2, 2012. Codenames are alphabetically listed and/or indicated in "". See Product Roadmaps for visual representation of these details.

"Abu Dhabi" CPU (Server)
- "Abu Dhabi" is designed for 2P and 4P enterprise/mainstream server markets.
- This CPU retains the existing G34 socket infrastructure, while utilizing up to 16 next-generation "Piledriver" based cores.
- Planned for introduction: H2 2012

"Brazos 2.0" APU (Essential Desktop and Notebook, Netbook, All-in-One and Small Desktop)
- The "Brazos 2.0" family of APUs will follow "Brazos", AMD's fastest ramping platform ever.
- In addition to increased CPU and GPU frequencies, "Brazos 2.0" will offer additional features and functionality as compared to "Brazos".
- Planned for introduction: H1 2012

"Cape Verde" Graphics
- Cape Verde" is an upcoming discrete graphics product based on the new Graphics Core Next architecture, utilizing the cutting-edge 28nm process node.
- Planned for introduction: Q1 2012

"Delhi" CPU (Server)
- "Delhi" follows "Zurich" for the 1P Web Hosting/Web Serving and Microserver markets.
- This CPU adds the "Piledriver" core enhancements, while maintaining a consistent platform with "Zurich."
- Expected to be available with four or eight cores.
- Planned for introduction: H2 2012

"Excavator" Core Micro Architecture
- "Excavator" is the evolution of AMD's "Steamroller" core architecture.

"Hondo" APU (Tablet)
- "Hondo" is AMD's sub-5W APU designed for tablets. "Hondo" will feature low-power "Bobcat" CPU cores and support DirectX® 11 technology in a BGA or pin-less format.
- Planned for introduction: H2 2012

"Jaguar" Core Micro Architecture
- "Jaguar" is the evolution of AMD's "Bobcat" core architecture for low-power APUs.

"Kabini" APU (Essential Desktop and Notebook, Netbook, All-in-One and Small Desktop)
- The "Kabini" APU is AMD's second generation low-power APU and follow-on to "Brazos 2.0."
- In addition to new "Jaguar" cores, these APUs will be enhanced with new Heterogeneous Systems Architecture (HSA), enabling features for easier programming of accelerated processing capabilities.
- Planned for introduction: 2013

"Kaveri" APU (Notebooks and Desktops)
- "Kaveri" is AMD's third generation APU for mainstream desktop and notebooks.
- These APUs will include "Steamroller" cores, and new HSA-enabling features for easier programming of accelerated processing capabilities.
- Planned for introduction: 2013

AMD

"London" Graphics
- "London" is the internal codename for the AMD Radeon™ HD 7000M series of notebook graphics products.
- AMD Radeon HD 7000M products based on the TeraScale 2 architecture first introduced in December 2011.
- Planned for introduction: Q2 2012

"New Zealand" Graphics
- "New Zealand" is the internal codename for the ultra-enthusiast dual GPU graphics card that will be added to the "Southern Islands" family later this year.
- Based on the new Graphics Core Next architecture, utilizing the 28nm process technology.

"Piledriver" Core Micro Architecture
- "Piledriver" is the next evolution of AMD's revolutionary "Bulldozer" core architecture.
- The "Trinity" line-up of APUs will be the first introduction of "Piledriver."

"Pitcairn" Graphics
- "Pitcairn" is the internal codename for an upcoming discrete graphics product based on Graphics Core Next architecture, utilizing the cutting-edge 28 nm process node.
- Planned for introduction: Q1 2012

"Sea Islands" Graphics Architecture
- New GPU Architecture and HSA Features
- Planned for introduction: 2013

"Seoul" CPU (Server)
- The "Seoul" CPU, which is expected to offer up to eight "Piledriver" cores, is created for the 1P and 2P market focused on cost-optimized, energy-efficient platforms.
- This CPU maintains the existing C32 infrastructure.
- Planned for introduction: H2 2012

"Southern Islands" Discrete Graphics
- Internal codename for the entire family of desktop graphics ASICs based on Graphics Core Next architecture and utilizing 28nm process technology.
- "Southern Islands" products include "Tahiti" (AMD Radeon™ HD 7900 series), "Pitcairn," "Cape Verde" and "New Zealand."

"Steamroller" Core Micro Architecture
- "Steamroller" is the evolution of AMD's "Piledriver" core architecture.

"Tahiti" Graphics
- "Tahiti" is the internal codename for the AMD Radeon™ HD 7900 desktop graphics series, which is based on the new Graphics Core Next architecture and utilizes the cutting-edge 28nm process node.
- The AMD Radeon™ HD 7970 graphics card was unveiled on December 22, 2011 and available for purchase on January 9, 2012.
- The AMD Radeon™ HD 7950 launched on January 31, with immediate worldwide availability.

"Temash" APU (Tablet and Fanless Client)
- The "Temash" APU is AMD's second generation tablet APU and follow-on to "Hondo."
- In addition to new "Jaguar" cores, these APUs will be enhanced with new Heterogeneous Systems Architecture-enabling features for easier programming of accelerated processing capabilities.
- Planned for introduction: 2013

"Trinity" APU (Traditional Notebooks, Ultrathin Notebooks and Desktops)
- "Trinity" is AMD's second generation APU and improves the power and performance of AMD's A-Series APU lineup for mainstream and high-performance notebooks and desktops. "Trinity" will feature next-generation "Piledriver" CPU cores and new, DirectX® 11-capable, second generation AMD Radeon™ HD 7000 series graphics.
- New for 2012, AMD will offer a BGA or pin-less format, low power "Trinity" APU specifically designed for ultrathin notebooks.
- Planned for introduction: Mid-2012

"Vishera" CPU (Desktop)
- The "Vishera" desktop CPU incorporates up to eight "Piledriver" cores, advanced instruction sets and other performance enhancing additions.
- This next-generation CPU will maintain the AM3+ infrastructure.
- Planned for introduction: H2 2012

"Zurich" CPU (Server)
- "Zurich" focuses on 1P Web Hosting/Web Serving and Microserver platforms and leverages the economic efficiencies associated with a volume infrastructure.
- Includes "Bulldozer" core design.
- Planned for introduction: H1 2012

CODENAMES NO LONGER IN USE

"Deccan" (Client Platform)
- Platform codename for essential desktop and notebook, netbook, all-in-one and small desktop systems featuring the "Krishna" or "Wichita" APUs.

"Komodo" CPU (Desktop)
- Six to ten "Piledriver" core desktop CPU. Replaced by "Vishera" (see above) for accelerated time to market, delivers improved performance and next-generation features with existing AM3+ boards.

"Krishna" APU (Essential Desktop and Notebook, Netbook, All-In-One and Small Desktop)
- This APU had two to four "Bobcat" cores for essential notebook, netbook, tablet, all-in-one and small desktop form factors. Planned for 28nm process manufacturing.
- Replaced with "Brazos 2.0" (see above).

"Sepang" CPU (Server)
- Up to 10 next-generation "Bulldozer" cores designed for 1P and 2P market focused on cost-optimized, energy-efficient platforms.
- Replaced by "Seoul" (see above).

"Terramar" CPU (Server)
- Up to 20 next-generation "Bulldozer" cores designed for 2P and 4P enterprise/mainstream server markets.
- Replaced by "Abu Dhabi" (see above).

"Wichita" APU (Essential Desktop and Notebook, Netbook, All-In-One and Small Desktop)
- "Bobcat" dual-core APU for essential notebook, netbook, tablet, all-in-one and small desktop form factors. Planned for 28nm process manufacturing.
- Replaced with "Brazos 2.0" (see above).