

Media FAQ

COMPANY OVERVIEW

Q: When was CPU Tech founded and why?

A: CPU Tech was founded in 1989 with a vision of making System-on-a-Chip technology economically practical for moderate and low volume applications where computing demands were outgrowing the capabilities of their microprocessor-based systems. The founder of CPU Tech believed that a focus on compatibility would allow for a cost-effective migration of the software base to the next major era of computing.

Q: Where is CPU Tech headquartered?

A: CPU Tech is headquartered in Pleasanton, California, with business development offices in Reston, Virginia.

Q: How many people does CPU Tech employ?

A: CPU Tech is categorized as a "Small Business."

Q: What are your core strengths?

A: Our steadfast commitment to continuous R&D has resulted in many patents in computer architecture, including single-chip parallel processing, that have allowed us to lead in:

- The creation of system-level design automation technology
- Real time platform level simulation
- Applying System-on-a-Chip to parallel computing
- Making System-on-a-Chip practical for low volume applications, and
- Solving complex electronics obsolescence problems.

COMPANY LEADERSHIP

Q: What can you tell us about your management?

A: The management team at CPU Tech has an average of over twenty-five years experience and its collective resume includes many of the most prestigious organizations in the high-technology and defense industries, including IBM, Intel, NCR, Cadence, and Lockheed. The Carlyle Group is an equity participant in CPU Tech.

CURRENT PRODUCTS AND SERVICES

Q: What products and services do you currently offer?

A: CPU Tech is a broad based, Compatible System-on-a-Chip (SoC) company offering the following products and services:

- Compatible System-on-a-Chip semiconductor devices, boards, kits and boxes
- New & modernized complex electronics systems using either full turn-key service from concept to warranted supply -or- development support, tools and technology
- SystemLab based design environment and platform simulator
- Intellectual property

Q: What differentiates you from other SoC providers?

A: CPU Tech focuses solely on system-level electronics. Our SoC based products and services enable efficient migration of large scale systems to today's multicore technology. These products offer dramatic performance improvements over current and expected products offered by major microprocessor and semiconductor device companies. Moreover, these performance improvements are delivered at substantially lower costs and dramatically lower power and space requirements. And the solutions developed at CPU Tech are 100% backward compatible. No software rewrite is required.

Our Test & Measurement products offer unprecedented, system-level insight and control, including the capability to simulate every electronic system on a major platform at real time speeds.

Q: What markets do you serve?

A: CPU Tech sells compatible technology solutions for large scale systems in any industry with high-performance computing requirements. Specifically, we address two major segments within the high-end market: Compatible Embedded Systems/Modernization and Compatible General Purpose Computing/Acceleration. Currently, our business focuses on the Finance, Defense and Aerospace, Entertainment and High End Computing industries.

ON THE HORIZON

Q: What Test & Measurement products are you currently developing for release?

A: CPU Tech has just begun to offer its SystemLab PS™ - the world's first real time platform simulator. The SystemLab PS is a revolutionary breakthrough in system design and integration that allows engineers and programmers to see inside the electronics of an entire platform in real time during actual software execution. Think of it as a virtual "X-ray" of real time system behavior.

This advanced modeling environment combines the power of our SuperQ X3 with our industry leading SystemLab modeling application. The SuperQ X3 super-computer accelerates the SystemLab software to real time speeds.

Q: What products for System Integration and Modernization are you currently developing for release?

A: Aside from the many SOC-based products in development, CPU Tech has created a new class of semiconductor devices called Field Programmable MultiCore chips (FPMCs). This new generation of programmable semiconductor devices combines the flexibility of FPGAs with the density, speed and low power of System-on-a-Chip. Our new Acalis™ family of FPMCs facilitates the migration of microprocessor based systems to multicore computing, while uniquely preserving the investment in existing software.

Q: Can you briefly describe how your new FPMCs compare to FPGAs and multicore processors?

A: FPGAs are a sea of gates and FPMCs are a sea of cores. The "so what" is...FPGAs are not efficient when it comes to large scale cores and, therefore, are limited in the number of cores that can be simultaneously loaded. This limits the level of integration that a system designer can achieve. FPMCs have about a 10:1 efficiency rating as compared to FPGAs. A multicore device consists of a fixed number of cores and a fixed interconnect. Within an FPMC, both the cores themselves and the way that they are connected are configurable. In short, the configuration is programmable.

Q: What kinds of software can be run on these devices?

A: From the programmer's viewpoint, an FPMC looks no different than a box full of microprocessors and controllers. The same tools that are used today for standard microprocessors can be used on an FPMC.

Q: What types of software tools are used to program them?

A: The same tools and same environments will run on FPMCs. In short, they are software compatible.

Q: What are some of the important metrics you have achieved with them?

A: We are measuring more than a 10x reduction in size, weight and power consumption over boxes designed with microprocessors and FPGAs. The more complex the system, the greater the benefit.

Q: Where are the chips being fabricated?

A: The chips will be fabricated at IBM's Trusted Foundry.

Q: Why a Trusted Foundry?

A: Use of a trusted foundry provides secure manufacturing and secure containment of anti-tamper structures, as well as a controlled, continuous supply source.

Q: When will your FPMCs be generally available?

A: The first generally releasable Acalis devices will be available in the 4th quarter of 2007.

Q: What do you see as the major markets for FPMCs? What are the HPC applications?

A: Acalis products are applicable to a broad range of general purpose and embedded computing markets. The market drivers would be size, weight, power and cost.

Q: Can you talk about any beta customer experience?

A: Products incorporating our first generation FPMC devices are currently deployed in ten programs. These high-end applications range from the Bradley Fighting Vehicle to an F-16 Fire Control Radar, as well as a new upcoming server product line.

Q: What is the roadmap for your FPMC technology?

A: We expect second generation Acalis family members to be released at the end of 2007 and third generation 65nm devices in 2008.