

Synopsys Announces Virtual Platform for Marvell's PXA3xx Application Processors

Development Environment Boosts Design Quality and Shortens Time-to-Market by Up to Nine Months

MOUNTAIN VIEW, Calif., June 19 [PRNewswire-FirstCall](#)/ -- Synopsys, Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, today announced the availability of the DesignWare® VPXA3 Virtual Platform for development of smartphones, hand-held and consumer electronics devices that use Marvell PXA3xx XScale technology next-generation application processor. The DesignWare VPXA3 Virtual Platform is now available to engineers who want to evaluate and use the Marvell PXA3xx in their portable and handheld devices. Synopsys' Virtual Platforms improve design quality and shorten time-to-market by allowing the software team to start software development up to nine months before the silicon prototype is available. By continuously integrating the software and hardware before hardware is available, developers are able to find and fix significant software and hardware integration issues before tape-out.

The DesignWare VPXA3 Virtual Platform provides software engineers with a high-speed, pre-silicon software execution environment that allows the development of system-on-chip- (SoC) related software before hardware is available. The Virtual Platform technology enables the creation of a software model of a complete system that fully mirrors the functionality of a complex, multicore hardware platform. The DesignWare Virtual Platforms combine high-speed processor instruction-set simulators and high-level, fully functional transaction-level models (TLMs) of the hardware building blocks to provide a high-level model of the hardware to the software developer.

Synopsys also provides the complete hardware/software development and validation environment for designers using the Marvell PXA application processors. Engineers at Marvell Technology, a leader in storage, communications and consumer silicon solutions, used the DesignWare VPXA3 Virtual Platform for pre- and post-silicon software development, hardware/software integration, and system validation. The DesignWare VPXA3 Virtual Platform helped Marvell engineers shorten time-to-market and improve design quality, and also allowed them to execute their software -- including the post-silicon software tests -- before the hardware was available.

"We turned to Synopsys to help us improve our system integration and validation. Synopsys Virtual Platform methodologies allowed our software engineers to begin development using functional hardware models," said Sam Ardit, senior vice president, Marvell Cellular and Handheld Group. "This helped us shorten time-to-volume. Synopsys' fast delivery and high quality Virtual Platform also saved us development costs and reduced the integration risk as we introduced our PXA3xx application processor to the highly competitive handheld and consumer markets.

The Marvell PXA3xx family of application processors was designed for feature-rich handsets, smartphones, GPS navigation systems, wireless handhelds and other consumer electronics devices. Marvell application processors deliver high-resolution VGA multimedia performance with the extended battery life required for today's advanced 3G video and audio applications.

"Synopsys' Virtual Platforms are enabling software teams to develop, validate, and integrate their software months before a silicon prototype is available," said Joachim Kunkel, vice president and general manager, Synopsys Solutions Group. "A great example of this is how Marvell was able to introduce the device software, consisting of boot code, device drivers and operating systems, along with their PXA3xx next-generation application processor by using the DesignWare VPXA3 Virtual Platform."

Availability

Synopsys' DesignWare VPXA3 Virtual Platform software development environment systems are available now. For more information on Synopsys DesignWare Virtual Platforms, go to <https://www.synopsys.com/virtualplatform>.

About Synopsys

Synopsys, Inc. (NASDAQ: SNPS) is a world leader in electronic design automation (EDA) software for semiconductor design. The company delivers technology-leading system and semiconductor design and verification platforms, IC manufacturing and yield optimization solutions, semiconductor intellectual property and design services to the global electronics market. These solutions enable the development and production of complex integrated circuits and electronic systems. Through its comprehensive solutions, Synopsys addresses the key challenges designers and manufacturers face today, including power management, accelerated time to yield and system-to-silicon verification. Synopsys is headquartered in Mountain View, California, and has more than 60 offices located throughout North America, Europe, Japan and Asia. Visit Synopsys online at <https://www.synopsys.com/>.

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