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ESC: Plurality launches scalable 256 multicore processor
Plurality has created a new category of acceleration co-processors, dubbed HyperCore, that simplifies code compilation, delivers performance that scales linearly with the number of cores, and offers power consumption that rivals hard-wired ASICs

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(04/28/2010 1:06 PM EDT)

San Jose, Calif. and Netanya, Israel - Plurality Ltd. has launched what they claim is the world's first scalable 256 multicore processor for wireless infrastructure, the HyperCore family of low power, small footprint, ManyCore processor IP for wireless markets. HyperCore represents a new category of acceleration co-processors based on an innovative architecture that simplifies code compilation and a unique hardware-based synchronizer-scheduler, and which delivers performance that scales linearly with the number of cores. In addition, its efficiency offers power consumption that rivals hard-wired ASICs.

Plurality offers its HyperCore acceleration processor IP to system-on-chip (SoC) developers and original equipment manufacturers (OEMs) as a general purposes accelerator for wireless, networking and high-performance (Cloud) computing applications. The HyperCore processor IP acts as a performance extension to the industry's most popular processor architectures (x86, PowerPC, MIPS and ARM), enabling improved SoC performance without greater power consumption or die area.

The combination of optimized high-performance multicores provides designers with the ability to make the best possible tradeoffs between size, power, and programmability to meet the challenging needs of next generation multiband, multimode radios. The solution is reconfigurable and provides a platform for applications ranging from 4G macro base-stations to cost-optimized femtocells, thus offering the benefits of single scalable hardware platform design and extensive software code reuse.

With a HyperCore-based design, a base-station OEM can achieve a unified platform strategy both vertically across wireless standards such as LTE, HSPA, or 3G, as well as horizontally across wireless devices ranging from macro base-stations to femtocells. In addition, Plurality's development environment and task-oriented programming model, together with a growing ecosystem of system and software partners, enables rapid product development.

"The wireless world is transitioning toward fourth-generation systems such as LTE, which requires high processing requirements as well as flexibility and upgradeability due to rapidly changing standards and evolving consumer needs," stated Igor Pe'er, CEO of Plurality. "Our fully programmable HyperCore processor technology speeds time-to-market and enables our customers to build high quality solutions for the LTE release 8 standard with a clear, low-cost, upgrade path for releases 9 and 10."

Plurality will be exhibiting at the Embedded Systems Conference / Multicore Expo at the San Jose McEnery Convention Center April 26 " 29, booth #2413, as well as at ChipEx Israel 2010 in Airport City on May 4th. Attendees will be able to view the HyperCore demonstration.

For further information, please email info@plurality.com or visit www.plurality.com.