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[TI's Mobile-Phone Platform Enables 1080p Video Recording](#)

The new OMAP 4 platform is based on ARM's multi-core Cortex-A9 processor



TI unveils new OMAP 4 platform
Texas Instruments

One of the most interesting new technologies unveiled at the Mobile World Congress in Barcelona is the mobile-phone platform from Texas Instruments, capable of recording 1080p video, shooting 20-megapixel images, and playing MP3 files for as long as a week on one battery charge. The new OMAP 4 platform uses ARM's multi-core Cortex-A9 processor, which is able to deliver up to seven times the performance of today's top smartphones.

The OMAP4430 and 4440 chipsets will come with a dual-core Cortex-A9 main processor that runs at 1GHz or higher, a DSP, and a dedicated graphics chip. The new platforms will support WUXGA screens (1920 by 1200 pixel resolution), which would be ideal for watching 1080p video. The new [chipsets](#) enable up to 4 hours of video recording on a single battery charge. "This gives you a considerable amount of headroom for things yet to be imagined from a user experience perspective," TI Product Marketing Manager Robert Tolbert said.

The new OMAP 4 chipset comes with support for Windows Mobile, Symbian, and all Linux-based Oses, thus including the Android and Palm's WebOS. According to Tolbert, the OS needs to support symmetric multiprocessing to benefit entirely from the capabilities of the OMAP 4 chip, something that Linux and Symbian already do.

OMAP 4's direct competitor is [Qualcomm](#)'s dual-core Snapdragon MSM8672 chipset, running at up to 1.5 GHz, but with a lower efficiency per megahertz. TI's solution supports higher-resolution and can be programmed to support hardware decoding of future video formats. "The OMAP 4 platform lends itself well to a variety of equipment from smartphones to MID's to netbooks," stated Tolbert.

Both OMAP 4 and Snapdragon can be used in both handhelds and netbooks. The Palm Pre includes TI's older chipset, the OMAP 3. Toshiba's new TG01 handset comes with a previous version of Qualcomm's Snapdragon. Although competitors, both companies plan on going against Intel in the netbook market.

The OMAP 4 chipsets are expected to enter production in the second half of the year, while phones sporting the platform should hit the market in 2011. While announcing the OMAP 4, TI also unveiled a new version of its OMAP 3 series. The line is based on the ARM Cortex-A8 processor and is considered state of the art in smartphones. The new OMAP 36x family comes in a 45-nanometer process, allowing for the chips to be cheaper, more power efficient and able to deliver more graphics performance (up by 75 percent), although they maintain the same die size. "We want to be able to extend that platform's life and also to reduce the pricing," Tolbert noted.

The company announced four OMAP 36x chips that feature 720MHz or 1GHz frequencies, delivering up to 12-megapixel images and 720p HD video recording and playback. The new chips will become available in the third quarter of 2009, while phones based on them are expected for the next year.