

# **TI Sampling First OMAP-Vox™ Device Delivering Advanced Multimedia Applications on Mainstream Mobile Phones**

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Continuing to broaden availability of advanced capabilities to mobile phones, Texas Instruments Incorporated (TI) announced today an enhanced, cost-efficient GSM/GPRS/EDGE solution for handset manufacturers to bring advanced multimedia features to mainstream mobile phones. Built on TI's leading OMAPT™ processor architecture, the OMAPV1030 solution leverages TI's success in applications processing to address the demand for multimedia applications in the growing mid-range wireless market. One of the industry's most integrated and optimized EDGE solutions, the OMAPV1030 baseband processor design expands on TI's proven GSM/GPRS technology and leverages TI's advanced high-volume 90nm digital process technology.

The OMAPV1030 solution is sampling today and is the first product in TI's new OMAP-Vox™ wireless platform, also announced today, which will offer handset manufacturers a natural and affordable roadmap from GSM/GPRS/EDGE to UMTS.

Specifically designed to bring multimedia functionality to mass market mobile phones, the OMAPV1030 solution delivers advanced capabilities to mid-range wireless handsets, such as QCIF 30 frames per second video capture, playback and streaming; megapixel digital still camera; color LCD; and interactive 2D/3D gaming. Based on the OMAP architecture and prior generations of proven GSM/GPRS technology, the OMAPV1030 solution adds inherent EDGE support and serves as the

foundation for UMTS OMAP-Vox processors, enabling seamless software migration from EDGE to UMTS to save manufacturers time and money.

"TI's OMAPV1030 solution gives customers an ideal migration path for delivering advanced multimedia to a broader user base and expands their personal entertainment and communication options," said Alain Mutricy, vice president, cellular systems for Texas Instruments. "Based on the success of TI's OMAP processors in high-end market segments, TI is uniquely positioned to take its applications and modem expertise to support the increasingly feature-rich mid-range wireless market."

### **SoC Integration Enhances Applications, Lowers Cost**

TI's system level integration expertise brings improved functionality to the OMAPV1030 and optimizes it for a lower cost. The OMAPV1030 provides enough performance to run modem and applications on the same processing core sharing hardware resources. The OMAPV1030 processor is based on the OMAP1710 architecture and runs both GSM/GPRS/EDGE modem and applications processing on a single OMAP core, leveraging ARM926TEJ and TI DSP capabilities. This architecture serves as the foundation for the scalable OMAP-Vox hardware architecture and is designed to easily extend from 2.5G to 3G and beyond. While improving performance, use of a proven OMAP core also reduces costs and power consumption of mid-range devices resulting in longer battery life and usage times for consumers.

OMAPV1030-based devices will provide manufacturers, operators, and content providers with new multimedia features to create rich services for mobile phone subscribers that drive higher revenue. Capabilities enabled by the OMAPV1030 include digital camera with 2-megapixel still images; video record and playback and streaming media downloads in QCIF format at 30 frames per second and CIF format at 15 frames per second. Other capabilities include digital audio such as MP3 and

other audio formats; 64 polyphonic MIDI ringtones; 2D and 3D gaming; two color LCD screens up to QVGA in size; and hardware-based security.

The OMAPV1030 chipset includes an integrated analog device to further reduce overall bill of materials by combining power management, audio codecs, and drivers onto one chip. The OMAPV1030 certified reference design provides a full bill of materials, including the RF and power amplifier, on a form factor board that enables manufacturers to develop their complete solutions in record time. To further reduce development resources, the OMAPV1030 also includes complete field-tested GSM/GPRS/EDGE protocol stack software, as well as integrated multimedia codecs and functions, and range of development tools. Access to TI's worldwide support from design start through full-scale production further improves time to market for wireless manufacturers.

### **Expanded OS Support Broadens Development Options**

TI provides software scalability and a range of differentiation and development options for its customers. The OMAPV1030 solution includes support for Nucleus™ and embedded Linux®-based applications suites, as well as Java acceleration support. This new solution is also capable of supporting high-level operating systems such as Windows Mobile™ software and Symbian OS™ software. Like all TI OMAP processors, this new technology platform provides access to the OMAP Platform Ecosystem, a worldwide network of application software developers, system integrators and development tools providers. These options allow TI customers to benefit from re-use of existing applications and standard APIs.

The OMAPV1030 includes a full range of connectivity options and supporting interfaces for the latest technologies including Bluetooth, Wireless LAN and assisted GPS (A-GPS). In addition, TI's OMAP-Vox

solutions include embedded security technology, a set of hardware accelerators supporting terminal security, transactions security and content security, without the latencies and risks associated with software-only solutions.

TI's system-level expertise and experience developing digital RF integration provides TI with a natural path toward a single-chip cell phone solution for GSM/GPRS/EDGE in the future.

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