



C O N E X A N T™

Editorial Contact:

Christine Cabori
Lages & Associates
(949) 453-8080
Christine@lages.com

Conexant Launches Audio Playback IC Product Line

New KX1400 Ideally Suited to Applications Requiring Audio Playback of Pre-recorded Data

NEWPORT BEACH, Calif., September 27, 2011 – [Conexant Systems, Inc.](#), a leading supplier of innovative semiconductor solutions for imaging, audio, embedded modem, and video surveillance applications, today announced the addition of the KX1400, an audio playback chip designed to play 8KHz audio data directly to an external speaker via an on-chip digital audio processor and class-D driver. The first in a line of audio playback products, Conexant's KX1400 was acquired by the company from Keterex, a developer of mixed-signal integrated circuits and systems.

Conexant's audio playback product line is ideally suited to most applications that require the audio playback of pre-recorded data. From vending machines and toys to pedestrian crossing signage and interactive kiosks, Conexant's simple-to-use audio playback device is a great way to integrate audio capabilities into a wide variety of devices and appliances and greatly enhances the overall user experience.

Functionally, the KX1400 takes audio data streamed from an external microcontroller (MCU), or external non-volatile random-access memory (NVRAM). The on-chip audio processor and integrated Class D amplifier provide high quality audio without the cost of additional components. Low-power CMOS technology and a stand-by power-savings state make Conexant audio playback ICs well-suited for battery powered applications.

“Conexant has a long history of innovation in audio technology and proven expertise in creating solutions tailored to the needs of our customers,” noted Sailesh Chittipeddi, Ph.D., Conexant’s president and chief executive officer. “We have found that, in many cases, our customers are working on applications that require a simple audio playback function to a small MCU. The KX1400 was designed with this in mind – it does not require the custom driver and firmware support associated with a highly integrated audio subsystem chip – and thus does not carry a high overhead cost, making it ideal for these applications.”

The KX1400 supports both 12-bit PCM and 4-bit IMA ADPCM data formats, and has a built-in tone generator capable of generating tones at 4,096 different frequencies. The on-chip audio processor alleviates the need for an external low-pass filter in most cases. The KX1400 operates in either a stand-alone mode or interfaced to an MCU host. Audio data is provided to the KX1400 from either user-programmed external serial memory or from the host MCU. Under MCU control, the user can select phrases or tone sequences to play from the external memory, play tone sequences via commands or stream audio data directly to the on-chip audio processor. In stand-alone mode no MCU is required; on reset, the KX1400 plays a single phrase from external memory and then returns to a stand-by power-saving state.

Additional features include:

- On-chip tone generator
- Operates stand-alone or as MCU Peripheral
- Integrated Class-D Speaker Driver
- No External Low-pass Filter Required
- On-chip Oscillator - No XTAL Required
- Configurable General-purpose Clock Output
- Two General-purpose Digital Outputs
- Low-power Standby State (1 μ A Typ.)
- Operating Voltage: 2.7V - 5.5V
- Operating Temperature: -40°C to 85°C
- 24-pin 4X4mm QFN (KX1400EG) package

According to Jim Divine, president for Keterex, “Conexant has a clear focus on audio technology with a comprehensive and growing portfolio of products and is an ideal partner for our existing KX1400 customers.”

Availability and Pricing

A complete, self-contained evaluation kit with reference board and all the necessary technical documents and software is available now. Pricing for the KX1400 starts at \$1.56 in 100 quantities.

About Conexant

Conexant’s comprehensive portfolio of innovative semiconductor solutions includes products for imaging, audio, embedded modem, and video surveillance applications. Conexant is a fabless semiconductor company headquartered in Newport Beach, Calif. To learn more, please visit www.conexant.com.

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