

## FOR IMMEDIATE RELEASE

## Akustica's Digital Microphone Chip to Enhance Voice Communications on Fujitsu LifeBook Q2010 High-End Executive Notebook

Represents first adoption of Akustica-SigmaTel digital microphone array solution

**Pittsburgh, PA**—May 22, 2006—Akustica, Inc., a pioneer in acoustic system-on-chip solutions, today announced that its AKU2000 Microphone—the world's first Complementary Metal-Oxide Semiconductor (CMOS) MEMS microphone, which is also the only single-chip silicon microphone, has been selected by Fujitsu Computer Systems Corporation for its LifeBook® Q2010 high-end executive notebook.

The LifeBook Q2010 features two AKU2000 Microphones strategically positioned to frame the display and deliver the optimal in recording/voice quality, offering improved voice communications on the notebook platform. The AKU2000 Microphone delivers a digital microphone solution that enhances the quality of voice input in notebook PCs, essential for voice over Internet protocol (VoIP), for cellular phone calls using the 3G technologies such as Universal Mobile Telecommunications System (UMTS) and Evolution-Data Optimized (EV-DO), for speech recognition, and for other voice-enabled applications. The AKU2000—featuring digital output and single-chip construction—achieves this end by providing immunity to the numerous radio frequency (RF) sources from the internal wide-area network (WAN), personal area network (PAN), and wireless local area network (WLAN) radios.

The AKU2000 is small, thin and light, so it can be embedded directly in the bezel of a notebook. This small size is well-suited for the LifeBook Q2010 notebook, just 2.2 pounds with a 12.1-inch wide display and approximately 3/4 of an inch thick.

The LifeBook Q2010 notebook deploys the first fully integrated digital microphone array solution based on Akustica's AKU2000 and SigmaTel's STAC9228 HD audio codec. Because integration is achieved at the audio codec level, compatibility with the microphone array is assured, improving overall voice input quality.

"Communications capabilities are becoming increasingly important for notebook PC users," said Paul Moore, Sr. Director of Mobile Product Marketing, Fujitsu Computer Systems Corporation. "VoIP, dictation and other applications are placing demands on the recording and voice quality these devices

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are expected to deliver. Therefore, it's important to incorporate high-end voice-based communications capabilities in mobile devices. By deploying the Akustica AKU2000 Microphone in the LifeBook Q2010 notebook, Fujitsu is able to provide a truly superior digital microphone solution in an extremely small form factor."

As a digital microphone, the AKU2000 is less prone to RF interference and other acoustic noise, delivering significant improvements over analog designs. As a very small device, it is easily embedded alongside the LCD, which is the best position for recording sound on a notebook. In addition, because the AKU2000 is a CMOS MEMS chip, it can be manufactured in quantity with guaranteed uniformity, factors that are critically important to microphone arrays. Microphone arrays enable beam forming and noise cancellation, improving the VoIP experience for many users.

"Akustica is delighted to be working with a recognized market leader such as Fujitsu Computer Systems Corporation," said Jim Rock, CEO, Akustica, Inc. "Their selection of the AKU2000 validates our position as a provider of innovative acoustic solutions for notebook manufacturers. It also reaffirms the criticality of voice input quality for current- and future-generation voice-enabled applications on the notebook platform."

## **Availability**

The Fujitsu LifeBook Q2010 notebook will be available from Fujitsu Computer Systems Corporation summer 2006. The AKU2000 is in production now. For more information on Akustica, please visit: www.akustica.com.

## **About Akustica's AKU2000**

Akustica's AKU2000 Microphone is a small, thin, light device designed to replace the Electret Condenser Microphone (ECM), a fifty-year old technology that has been used in billions of portable electronic devices—while remaining fundamentally unchanged. The ECM, however, is limited by a number of acoustic issues. From RF noise, environmental noise, and mechanical/electromagnetic noise, the ECM cannot be used to easily eliminate all this mechanical and ambient noise—creating a number of pain points for millions of users of mobile phones, laptop computers and other digital media devices. As a silicon microphone, Akustica's

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Microphones are not prone to the same degree of noise from any of these sources—thereby

enabling superior acoustic environments. Because the AKU2000 is surface-mountable and automatic

pick and place-compatible, the AKU2000 is easy to manufacture in quantity—making it ideal for high-

volume applications such as PCs and consumer electronic devices. Leading semiconductor industry

analysts, such as Yole Développement, have forecast eight-fold growth for the silicon

microphone market by 2010.

**About Akustica** 

Founded in 2001, Akustica, Inc. is a privately held company based in Pittsburgh, PA. Through a

revolutionary technology known as Sensory Silicon<sup>TM</sup>, Akustica products enable electronic

devices to sense and respond to the world around them. By leveraging standard CMOS processes

and MEMS technology, Akustica acoustic system-on-chip solutions combine the functionality of

microphones with microelectronics and software onto a single chip. Only Akustica's CMOS

MEMS Microphone Chips—which were pioneered by Akustica co-founder and CTO Dr. Ken

Gabriel during his tenure at Carnegie Mellon University—enable single-chip solutions with

arrays of transducers and integrated signal processing that disrupt both conventional microphone

and speaker technologies. Smaller and more reliable than the current crop of ECMs, silicon

microphones can be customized with advanced sound capture features and noise reduction

capabilities. For more information on Akustica, please contact us via phone: (412) 390-1730, Fax

(412) 390-1737, email: contact@akustica.com or web: www.akustica.com.

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