

INFORMATION:
AKM Semiconductor
(888) 256-7364
e-mail: icinfo@akm.com



AK7734 Press Release

Audio DSP with Integrated ADC & SRC Ideal for Echo and Noise Canceling Audio Processing for Hands-Free Applications

San Jose, CA June 17, 2009 — AKM Semiconductor today launched the AK7734, an audio digital signal processor (DSP) with a stereo 24-bit ADC and a 24-bit sample rate converter (SRC), providing high quality sound for audio and hands-free voice applications. AKM's royalty-free high performance noise and echo cancellation algorithms are available for porting to the AK7734. The hands-free voice algorithm enables full-duplex telephone calls in high noise environments, such as an automobile. Both echo and noise cancellation algorithms are included in the hands-free program. Parameters are fully tunable for a variety of operating conditions.

The audio DSP features 24-bit floating point arithmetic, and it has a parallel operation capability of 1536 steps/fs (at 48kHz sampling). In addition, the RAM program area is freely programmable for user applications. For SRS or Dolby licensed users, programs such as ProLogic II and CS Auto can be ported. Users can create their own applications by combining standard programs with their original algorithms. An integrated large memory eliminates the need for external program memory. Programs are loaded into internal RAM via a serial interface from a microcontroller, allowing for seamless updates.

For connections to other audio devices, a flexible serial interface is available with eight input and eight output channels. The AK7734 operates with MSB-first, LSB-first and I²S audio data formats. It is capable of providing signals to a class-D amplifier and receiving input data from external digital sources. Asynchronous signals are supported with two SRC channels. Additionally, the AK7734 includes a mode that generates the master clock from a bit clock stream, enabling easy connection to a Bluetooth module.

The AK7734 operates off of a single +3.3V supply. The DSP core's 1.8V supply is generated by an internal regulator, simplifying system design. Evaluation boards and samples are available now. For more information, contact AKM Semiconductor at 888-256-7364, or visit www.akm.com.

About AKM Semiconductor

AKM Semiconductor (AKMS) is a wholly owned subsidiary of Asahi Kasei EMD Corporation, Tokyo, Japan. AKMS, located in San Jose, California, offers sales, marketing and design support for North and South American customers. AKM designs and manufactures CMOS mixed signal integrated circuits for applications including audio, multimedia, data storage, and telecommunications. North American headquarters are located at 1731 Technology Drive, Suite 500, San Jose, CA 95110.