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AK4201 Press Release

High Performance Cap-Less Stereo Headphone Amplifier and 2Vrms Line Driver

San Jose, CA May 14, 2009 — AKM Semiconductor has introduced the AK4201, a cap-less stereo headphone amplifier and 2Vrms line driver. The AK4201 has an integrated charge pump that generates an internal negative rail, enabling ground-referenced outputs for the amplifier. This architecture eliminates large AC-coupling capacitors, achieving high quality sound and significantly reduces board space required for portable devices. The AK4201 achieves a PSRR (Power Supply Rejection Ratio) of 100dB using an integrated regulator, making it an ideal choice for systems high supply ripple and noise, such as USB bus power.

The AK4201 also functions as a 2Vrms output lineout amplifier with high linearity and low noise output signals. An innovative offset cancellation circuit reduces pop noise, eliminating the need for an external mute circuit. This feature allows for muting of clicks and pops from the analog sources. Ground loop noise can be eliminated by connecting the ground from external devices back in to the AK4201's V_{SS2} pin, which is tied to the non-inverting inputs of the amplifier.

The supply voltage range is selected automatically from between 2.6V to 3.6V and from 4.5V to 5.5V, improving operating efficiency based on the external power supply. The headphone amplifier output power ranges up to 65mW into 16 Ω , achieving -60dB THD+N at 50mW. The line driver achieves -90dB THD+N at 2Vrms into 5k Ω . The AK4201 is housed in an ultra-small space-saving 12-pin USON package (2.2mm X 2.9mm). Ideally suited for portable multimedia players and personal computer applications, it is a flexible high performance flexible product. Evaluation boards, samples, and production units 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.