

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



## **AK4440 Press Release**

### **Single-supply 8-channel audio DAC features ground-referenced 2Vrms outputs**

San Jose, CA June 17, 2009 — AKM Semiconductor today launched the AK4440, a single-supply 2Vrms output 8-channel audio DAC with integrated charge pump. This device is the newest product in the AKM Audio4home™ family, and it is ideal for consumer audio applications including set-top boxes, televisions, DVD/BD players and recorders, and A/V receivers. It is an enhanced 8-channel version of the AK4420, adding a serial control interface for volume control, interface format selection, and de-emphasis control. Wide dynamic performance is achieved, at 106dB SNR and -93dB THD+N.

The AK4440 operates of a +5V nominal power supply. The device contains an integrated charge pump, which supplies the negative rail for the output buffer. Since the output buffer operates off of an internal dual-rail supply, the output signal is ground-referenced, audible pop noise is suppressed without any external mute circuit on power-up or when the clocks are stopped. The output signal is 2Vrms, centered around ground.

The audio DAC accepts 24-bit data at sampling rates up to 192kHz. A digital de-emphasis filter and soft mute circuit are integrated. An automatic power-on reset circuit eliminates the need to reset the DAC on power-up or after the clocks are stopped. The DAC includes a switched-capacitor filter (SCF), greatly improving audio performance systems with high clock jitter. The output buffer features a continuous-time filter (CTF). With these two internal filters, only a simple first-order RC external filter is recommended. The AK4440 can be controlled by registers through either a 3-wire or I2C interface. Evaluation boards and samples are available now. For more information, contact AKM Semiconductor at 888-256-7364, or visit [www.akm.com](http://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.

### **About Audio4home™**

The Audio4home™ brand identifies AKM consumer audio products designed for applications including A/V receivers, set-top boxes, speaker systems, digital video systems, digital televisions and in-vehicle entertainment. The Audio4home™ brand product range provides high performance solutions with high quality sound.