

Voice Processor Based on Human Hearing System

Audience Semiconductor announced a voice processor based on the intelligence of the human hearing system and began sampling these chips to mobile handset manufacturers. By understanding the entire audio pathway - from the cochlea to the brainstem to the thalamus and cortex - the company can offer a commercial product based on the science of Auditory Scene Analysis (ASA), or the grouping and processing of complex mixtures of sound. Because this voice processor handles signals the way people actually perceive specific sounds, it is able to identify and suppress noise sources in an efficient and accurate manner. Audience's voice processor receives a complex mixture of sound at overlapping frequencies, and organizes it into individual sources, in the same way people actually hear sounds. Regardless of whether the noise is local to the caller or remote over the mobile network, the processor uses several grouping cues to group all sound sources instantaneously, suppressing the noise and delivering the voice of interest clearly. The Audience A1010 Voice Processor provides desirable noise suppression technology, whether the noise source is in the caller's environment, or coming in over the cellular networks from the other end of the call. It instantaneously reduces multiple noise sources, such as airport PA systems, restaurant noise, car noise and street noise. The result is clear voice communications over mobile networks or VoIP applications, such as PC telephony and video conferencing, in places before unimagined. This compact single chip integrates audio acceleration logic, a custom digital signal processor, audio peripherals and control interfaces. Its low power and small package design is optimized for mobile phones and portable wireless peripherals. The A1010 is packaged in a 2.7 mm x 3.5 mm WLCSP that meets RoHS requirements. Sample pricing ranges from \$5 - \$7.

Audience Semiconductor
650-254-1400, www.audience.com [1]

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