PureAudio™ is a digital noise canceling algorithm designed to sample an ambient noise environment and attenuate the noise sources around the desired speech signals, delivering a **pure** audio signal. As a result, continuous and repetitive noise is removed from the audio input and latency in the recognition system shows marked improvement with significantly less digital residual distortion when used with any speech-enabled application. Designed specifically to improve signal-to-noise ratio, PureAudio works best in canceling stationary noises such as computer fans, engines, tire noise, etc.

**Market Applications**

PureAudio enhances a wide variety of speech-enabled applications including desktop speech recognition, cellular, Internet telephony, videoconferencing, voice verification, voice chat, surveillance, automotive telematics systems, wearable computers, military and embedded devices. In essence, PureAudio can be applied to any audio-input.

**Integration and System Requirements**

PureAudio can be embedded directly into an application or device, but more importantly, the algorithm is scalable to the user environment. For example, the software can be customized to cancel 10 dB of noise or 20 dB of noise.

PureAudio can run on a Digital Signal Processor (DSP), Pentium® or any other PC processor. In addition, the software can be utilized as an independent noise canceling algorithm for single-element micro-phone solutions or enhance a host of Andrea Electronics’ digital solutions including DSDA® multi-mic beam-forming.