

# VoIP Engine™

## Voice over IP Engine Suite

### RELATED PRODUCTS:

VoIP Eng/SIP Reference Kits

» AnVoice SDK

» iVoIPEngine SDK

» LnxVoice SDK

VoIP Engine

AnVoice

LnXVoice

iVoIPEngine

LnXVoice demo - Sitara 335x

*Distinguish your product!*  
VoIP Engine SW: Sound depth and clarity unprecedented in the mobile voice app market.

*Give us a listen!*

» [Contact us for more information](#)

## VoIP Engine™: Crystal clear voice and audio for mobile apps.

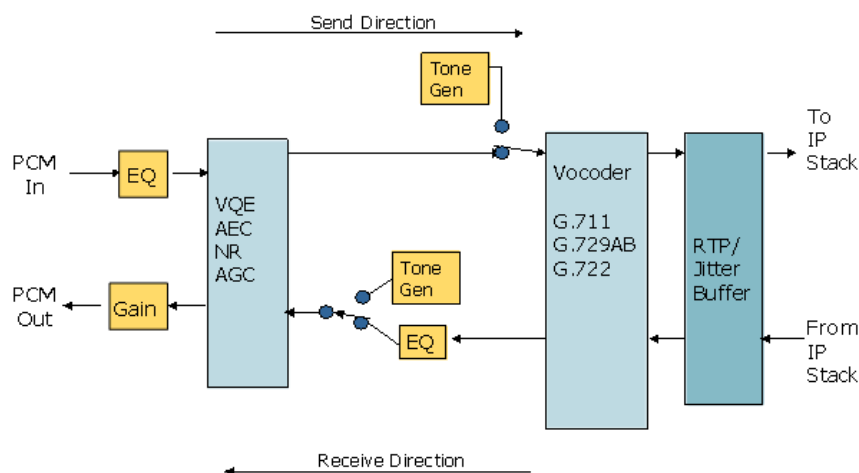
BY LEVERAGING VOIP ENGINE, DEVELOPERS CAN FOCUS ON THE FUNCTIONALITY OF THE END APPLICATION WITHOUT DEALING WITH THE COMPLEXITIES OF VOICE PROCESSING AT THE NATIVE LAYER.

VoIP Engine portable for use in conjunction with any application or operating system.

VoIP Engine (VE) is at the core of our ARM-based VoIP applications, it provides complete PCM to packet processing. The VoIP Engine software is a software engine package that handles all the voice processing from PCM to Packet and back. Its intended use is in VoIP enabled handsets or desktop phones.



### VoIP ENGINE DATA FLOW



### VoIP ENGINE IS PORTABLE FOR USE ON MULTIPLE H/W AND OPERATING SYSTEMS

- » AnVoice™
- » iPVoice™
- » LnxVoice™

### AVAILABLE AT VARIOUS LEVELS OF INTEGRATION

- VE source Code
- VE object Code
- VE Class Library
- VE SDK includes VE Class library and SIP Class Library
- VE Reference Kit includes Class Libraries and Sample Application code

Customizable to include multiple algorithms

[Specifications](#)
[Description](#)
[Availability](#)

ANDROID PERFORMANCE SPECS

In order to provide the best software possible, Adaptive Digital Technologies measures the performance of the VoIP Engine software package. These measurements are published in the number (in millions) of instructions needed per second for real-time, full-duplex operation. To get this data, the execution time of specific functions are measured, and averaged, over a large sample size. In order to keep this document brief, performance statistics for other platforms are not shown but are generally similar.

MIPS UTILIZATION UNDER TYPICAL USE-CASES:

For reference, a 1 Gigahertz processor equals 1000 Million Instructions per Second (MIPS).

Codecs	Millions of Instructions Per Second (MIPS)	Noise Reduction - ON	Noise Reduction - ON
G.711	MIPS	141	91
G.729 AB	MIPS	170	115
G.722	MIPS	302	217

Cortex-A8/A9/A15

Codec / AEC	AEC Disabled	Without SRTP		
AEC Tail Length	--	64 msec	128 msec	256 msec
G.711a1a2/AEC	9	100	118	154
G729*AB/AEC	48	144	165	198
G.711/AEC	40	266	338	403

CPU UTILIZATION - LnxVoice: Linux/Cortex-a8 VoIP Engine Mips, running at 720MHz on Sitara/Beaglebone AM335x

AEC Fast Update Forced On

\*Note: G.729 library does not include most recent NEON optimization.

Adaptive Digital (**easy integration + field proven algorithms**) = **quick-to-market applications**