

## Overview

**IntegrIT CrystalSpeech** – latest technology CrystalSpeech from IntegrIT company — new step in the real-time speech processing software enabling hands-free full-duplex communications. Technology is ideally suited for conferencing terminals, smartphones, communicators, videophones, dispatcher boards, speech synthesis and recognition systems, VoIP solutions, etc. Speech enhancement technology includes intellectual echo and noise suppressors providing natural speech quality that selectively recognizes active speaker even in noisy places. This allows conversations in a wide range of conditions with extremely high echo level and environmental noise. Echo cancellation technology adapted for use in mobile devices such as notebooks, communicators and gadgets where audio quality is limited due to the mechanical resonances, small speakers and high level of microphone-speaker acoustic feedback.

## Features

- adaptive echo cancellation providing comfort conversations even in presence of high acoustic echo (up to 500 msec)
- nonlinearity compensator suppressing remaining echo caused by nonlinear distortions in acoustic path or mechanical resonances
- smart noise suppression system reducing the level of electrical and environmental noise with minimum speech distortions
- voice-activated automatic gain control system balancing speech level without noise increase in the pauses
- antihowling filters preventing distortions due to the high level of acoustic coupling
- the set of user profiles for easy parameter selection (car, street, office, etc.)
- multiplatform implementation for compatibility with multiple operation systems from WindowsCE to Linux and different processors

## Applications

- conferencing terminals
- smartphones, communicators, gadgets
- hands-free car kits
- videophones
- dispatcher boards
- speech synthesis and recognition systems (ARS)
- VoIP equipment
- web VoIP terminals
- hands-free sets

## Availability

This software package is available in binary/source code written on fully portable C-language for:

- Texas Instruments TMS320C64xx, DaVinci, OMAPs
- Marvell KirKwood/ARMADA
- ARM9E, ARM11, Cortex A8
- x86
- Windows, Linux, DSP/BIOS
- Other platforms and OS are under request

IntegrIT Design House offers engineering services for software adaptation, customization and drivers development under Customer's software and hardware and platforms.

---

## Contacts

[support@integrit.com](mailto:support@integrit.com)  
Tel: +7 495 545 46 42

[www.integrit.com](http://www.integrit.com)