



# ATS6005BC5-R SoundClear® Solution for Car Audio

## Clear Hands-Free Even In The Noisiest Environments

### General Description

Specifically targeted for the CSR BC5-MM, SoundClear® software eliminates noise and cancels echoes to achieve a high level of sound quality and enhanced full-duplex operation. With dynamic auto adjustment based on the environment and talker, the solution is ideal for the following target applications:

- Car Radio Applications
- Bluetooth GPS and Navigation Devices
- Bluetooth Hands-Free Accessories

### SoundClear Solution

SoundClear is based on patented signal processing techniques and is highly optimized on the CSR BC5MM for efficient use of MIPS and memory.

The SoundClear technology combined with Acoustic's powerful tuning tools and SoundAdvice™ audio consulting helps get customer's products to market quickly with the highest quality hands-free performance.

SoundClear technology is proven and robust. It has shipped in over 25 million products from leading consumer electronics companies around the world.



### Key Features

- Eliminates 90% of Unwanted Sounds
  - ✓ 15 dB Noise Cancellation
  - ✓ 45 dB Echo Cancellation
- Full-duplex, Echo Free Operation
- Dynamically Adjusts to Changing Backgrounds
- Fast Convergence in < 50 ms
- Smooth and Natural Conversation Transitions
- Simple Yet Sophisticated Tuning with RAPID™
- Tunable for Varying Product Configurations



**CSR Partner**

Acoustic Technologies is a member of the CSR eXtension Partner Program.



## Clear Sound Even In The Noisiest Environments

### SoundClear® Technology

The SoundClear performance advantage is achieved through a combination of several patented techniques including adaptive filtering, voice activity detection, double talk detection, sophisticated call mode processing, enhanced nonlinear processing, and spectrally matched background insertion.

Acoustic Technologies is focused on providing technical leadership targeted at solving our customer's problems. We leverage our extensive patent portfolio and 10 years of experience producing the highest voice quality solution. The ATS6005BC5-R is highly optimized for BC5-MM based designs.

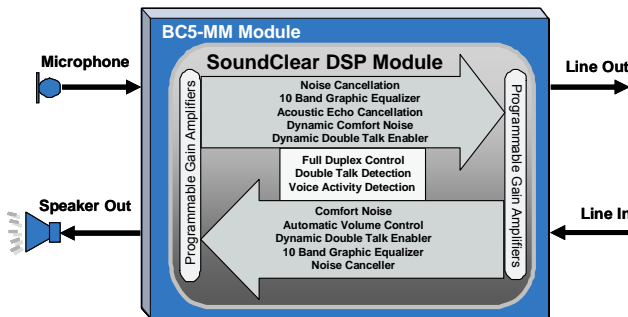
For product improvement, Acoustic prepares a comprehensive report citing the acoustic analysis results and detailed recommendations for achieving optimal sound quality of the end product. The audio consulting service helps customers get products to market quickly and with the highest quality audio performance.

### RAPID™ Tuning and Optimization

Acoustic Technologies offers RAPID (Real-time Audio Perfection and Integration Diagnostics), a PC-based tool that allows developers to easily, and in real-time, monitor and modify programmable parameters in the SoundClear software via a simple Graphical User Interface (GUI). Use the RAPID tool for:

- Fast and easy tuning with a step by step wizard
- Monitoring system behavior
- Optimizing system audio performance

RAPID helps get products to market quickly while minimizing the support effort for each design.



### SoundAdvice™ Audio Consulting Services

Acoustics' experienced software, hardware, and systems engineers utilize state-of-the-art audio equipment to assist with customer projects. Audio consulting includes test and measurement, electrical analysis, mechanical analysis and recommendations on transducers and plastics.

