



# DSP SpeakerPhone™ Solution

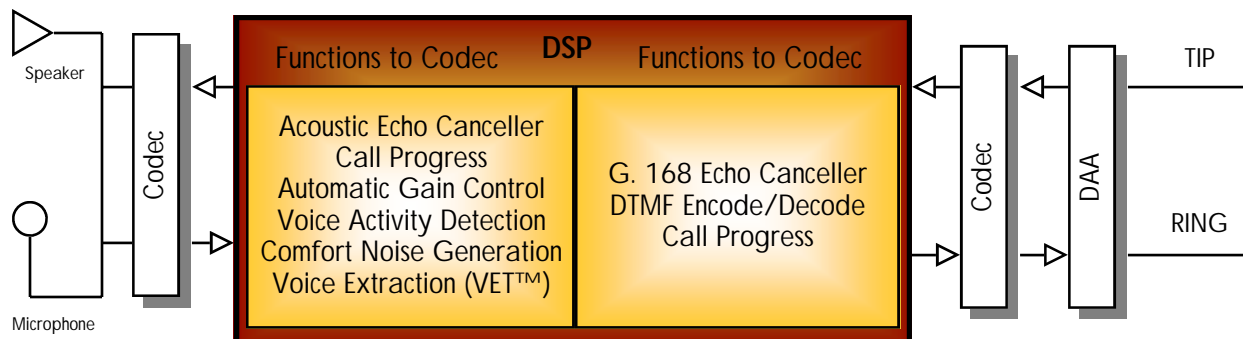
Product Part Number 2-0001-01

**imagine**  
TECHNOLOGY, LLC™

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## Features and Benefits

- Supports Full Duplex operation: single or 3-microphone solutions available.
- Suppresses acoustical echo in excess of 45 dB using Imagine's Echo Suppression Technology™ (EST™).
- Supports customized tail lengths up to 384 ms.
- Fast convergence time of 50 ms on average.
- Proprietary 2nd order adaptive double-talk detector provides customizable settings to obtain optimal performance for individual system designs.
- Proprietary echo path estimation which eliminates echo caused by false state transitions.
- Adjustable Non-Linear Processing.
- Includes G.168 line echo cancellation.
- Optional CNG, Noise Cancellation with VET™, Call Progress, DTMF, VAD, AGC and Caller ID.
- CNG is a programmable order mathematical model to estimate real colored noise environments.
- Provides optimal balancing of AEC with Noise Cancellation using Voice Extraction Technology™ (VET).
- Multi-Tier solutions based upon feature requirements and budget, available for all TI TMS320C5000 and C6000 DSP™ platforms, including generations from the C5402 to the C6211 DSP.
- All algorithms are eXpressDSP™ compliant.
- Framework is based upon Texas Instruments RF3 design.
- Solution contains User's Guide, Application Notes, and Reference Software to enable users to get to market quicker than previous design methods.
- Imagine provides a comprehensive support model from software documentation to full integration.
- Solution is industry tested and has been adopted by several leading manufacturers.



Contact Imagine Technology for other integrated DSP solutions, framework, hardware design options and embedded demos for all available TI DSP algorithms.

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