



GLOBAL IP SOLUTIONS

GIPS AEC - IP Phone

Maintain high quality by eliminating acoustic echo

Global IP Solutions' unique software acoustic echo cancellation solution for hardware IP phones is optimized to eliminate echo caused by acoustic feedback in real-time communications. This highly efficient, full duplex speech processing software cancels the acoustic feedback without audible echo or clipping.

The G.167 compliant solution includes an adaptive filter, non-linear processor (NLP), double talk detector, comfort noise generator and a control system which all are crucial in a high performance AEC. GIPS AEC IP Phone is also flexible in its interoperability with different speech coders by being able to handle both 8 kHz and 16 kHz sampled signals. This enables the usage of high quality audio coders, such as GIPS iPCM™-wb.

The software is easily implemented at end point devices, such as hardware IP phones and conferencing systems.

Key benefits

- High quality AEC for hardware IP phones
- Optimized for IP networks
- Software solution portable to hardware IP Phone platform of choice

Features

- Available in fixed point ANSI C and DSP (TIC54x, TIC62x, TIC64x and Starcore 810x). Other DSP implementation on request
- Full convergence up to 64 ms echo tail length (can be extended to 128 ms)
- Additional (up to) 32 ms cancellation provided by an adaptive window
- Fully configurable echo tail length to optimize complexity
- Adaptive echo cancellation with no extra delay inserted
- Handles multiple reflections
- Handles both 8 kHz and 16 kHz sampled signals
- Full duplex solution, very robust against double talk

Platform	Tail Length	Complexity	Program Memory	Data Memory	
				Static	Dynamic
TIC54x	32 ms	12 MIPS	16	2.3 + 3.9/ch.	0.5

GIPS AEC-IP Phone in narrowband mode

Memory in kWord16