



## **Feedback Eliminator (FbE1301)**

Technical Info for Software Package **FbE1301**

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**The Feedback Eliminator FbE1301** is an advanced algorithm for the prevention of feedback howling in audio systems where microphone and loudspeaker are located in the same room. The algorithm rapidly adapts to changes in the room characteristics and keeps the communication system always stable. For optimal performance an initialisation procedure is recommended before first time use, which automatically generates calibration signals. If the acoustic properties of the room are known (e.g. automobile mass production), pre-configuration is possible replacing such an initialisation procedure.

A ready-to-use evaluation setup of Feedback-Elimination is available as In-Car communication device "ICC460". Usage of such a communication device in the car is not only a convenience issue, it also has a safety aspect: When talking to rear passengers the driver always tends to turn his head back, as otherwise he talks in direction of the windscreen resulting in poor understanding. By means of an in-car-communication device utilizing Feedback Elimination the driver can keep his eyes on the road while talking to the rear passengers, as his amplified voice is output by rear loudspeakers.

### **Technical Data (Software):**

Max. loop attenuation of critical freq: 20 db  
Sampling rate: 8 kHz ...11 kHz  
Internal signal delay: 19 ms @ 11 kHz  
Req. Calculation Power: 30MIPS @ 11 kHz  
Req. Working Memory: 50 kByte