

## FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

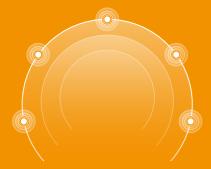
### **Working Principle**

The Sonamic Panorama algorithm separates the individual soun sources from a stereo recording, evenly distributing them in a U-shaped soundstage that surrounds the passengers. Outer sound sources in the stereo signal emerge from behind the listener, while the mid sources remain acoustically unaltered directly in front. That way, everyone can appreciate details that otherwise would be imperceptible in the pure stereo signal. The playback is kept free of artifacts and is robust to FM noise and poor digital reception.



Panorama off

Panorama on



## Fraunhofer Institute for Integrated Circuits IIS

Management of the institute lrof. Dr.-Ing. Albert Heuberger executive) Dr.-Ing. Bernhard Grill

Am Wolfsmantel 33 91058 Erlangen, Germany

Contact Sebastian Scharrer Phone +49 9131 776-6170 sebastian.scharrer@iis.fraunhofer.de

www.iis.traunhoter.de/audi

# SONAMIC PANORAMA MUSIC BROUGHT TO LIFE



# Sonamic Panorama Overview

When searching for a new car, consumers look for something special. These days, interior features are increasingly important. The vehicle's sound system becomes a real selling point with Fraunhofer's Sonamic Panorama. It transforms the sound system into an audio experience that brings to life all the richness and intensity music can offer. Passengers feel as if they are right there on stage with their favorite band.

#### Application

Fraunhofer's Sonamic Panorama was developed especially for small, medium and compact class vehicles. The algorithm does not require any additional hardware and is compatible with existing speaker configurations (minimum of four speaker positions). Installing a center speaker is recommended for the best results.

