

FRAUNHOFER INSTITUTE FOR  
INTEGRATED CIRCUITS IIS

# **AUTOMOTIVE AUDIO SOLUTIONS**



For more than 10 years, automotive audio has been an important part of product development at Fraunhofer IIS. Our interdisciplinary team of researchers, engineers and Tonmeisters dedicate themselves to providing all vehicle occupants with the best sound possible. Today, in nearly every brand-new car, you can enjoy at least one of our audio technologies: mp3 and AAC decoding, DAB/DAB+ and DRM receiver solutions, as well as Symphoria and Sonamic algorithms for sound enhancement.

## **FRAUNHOFER SYMPHORIA®**

*Our long-standing signature product*

Fraunhofer Symphoria is a 3D surround sound post-processing technology for upmixing and playing back any type of audio content in premium-class vehicles. This excellent universal rendering solution significantly improves the audio quality for every seat. Front and rear passengers alike get an individual, broad and clearly defined sound stage, as well as a natural, perfectly balanced surround sound field – independent of the hardware configuration.

Sophisticated algorithms based on semantic audio analysis paired with hours of manual tuning by our Tonmeisters produce an exceptional audio experience – in quality never before heard in a car.

# **FRAUNHOFER SONAMIC®**

*Creating enhanced in-car entertainment*

Under the umbrella of Fraunhofer Sonamic, a new set of technologies is taking the customer experience of in-car entertainment systems to a whole new level. Available for all classes of vehicles, it offers solutions for audio playback and beyond.

The Sonamic product family stands not only for thrilling sound concepts or perfection in audio quality, but also for groundbreaking comfort and safety features, so that every journey is a pleasant experience.

We are convinced that high-quality audio systems will be even more important in future cars than they are today. After all, in an autonomous vehicle, you no longer have to concentrate on the road. Instead, you can make the most of your free time: listen to your favorite music, watch an exciting movie or enjoy a computer game.

**Fraunhofer Institute for  
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