

FRAUNHOFER INSTITUTE FOR
INTEGRATED CIRCUITS IIS

FRAUNHOFER UPHEAR

IMMERSIVE AUDIO VIRTUALIZER
FOR SOUNDBARS



Immersive Sound from any Content

The Fraunhofer upHear Immersive Audio Virtualizer is codec-agnostic audio post-processing technology that's bringing authentic and enveloping 3D sound to mass-market consumer devices such as soundbars and TVs.

Simplicity, Convenience & Quality

Consumer products incorporating Fraunhofer upHear create a convincing immersive 3D audio experience from any input source without the need for advanced loudspeaker setups in the living room.

Based on a sophisticated signal analysis, the synergy of hardware and software processing and individual tuning by Fraunhofer's experienced sound designers, Fraunhofer upHear enables

3D audio soundbar designs that don't require satellite surround speakers and therefore reduce hardware costs.

Features & Availability

- Immersive audio reproduction optimized for specific hardware designs
- Audio codec-agnostic, validated with MPEG-H encoded content
- Includes advanced upmix of legacy stereo and surround content
- Optimized object code library for embedded systems (e. g., ADI and TI DSPs)

www.uphear.com



**Fraunhofer Institute
for Integrated Circuits IIS**

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

Am Wolfsmantel 33
91058 Erlangen, Germany

Contact
Matthias Rose
Phone +49 9131 776-6175
matthias.rose@iis.fraunhofer.de

www.iis.fraunhofer.de