



# Press Release

Erlangen/Germany,  
February 11, 2008

## Fraunhofer audio technology for a new communication experience

Please visit us in spring 2008:  
Mobile World Congress, Barcelona,  
CeBIT, Hannover,  
VON.x Expo, San José

**Phone calls and video conferences as natural as same-room conversations: This becomes reality with the new audio technologies of Fraunhofer Institute for Integrated Circuits IIS. Visitors at the Mobile World Congress in Barcelona, booth 2F41, at the CeBIT in Hannover, booth 9B36, and at the VON.x Expo in San José, booth 1136, will experience the realistic sound quality of next generation communication systems.**

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The new technologies are integrated into the Fraunhofer Software Development Kit (SDK) for Communication Systems. Manufacturers of Internet telephony and conferencing systems can use this complete solution to distinctly improve the sound quality of their communications applications. Poor audio clarity is a thing of the past: The participants can be heard clearly and they can differentiate better who they are talking to in simultaneous conversations. Phone and conference calls become seamless and effortless; the distance between speakers is being eliminated.

The Fraunhofer SDK for Communication Systems guarantees high-quality video and audio communication even over low-bandwidth connections. A number of synchronized components guarantee undisturbed conversations and outstanding sound characteristics:

The new MPEG standard Enhanced Low Delay AAC features low bit rate and low-delay hi-fi sound quality. Harald Popp, head of the Multimedia Realtime Systems department at Fraunhofer IIS says: "Enhanced Low Delay AAC offers a much better sound quality than all comparable formats on

\* Fraunhofer USA Digital Media Technologies, a division of Fraunhofer USA, Inc., promotes and supports the products of Fraunhofer IIS in the U.S.



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the market. Finally, voices of the persons you are talking to on the phone have a natural sound and they are not disturbed by ambient noise anymore." At the same time, bit rate and delay time meet the demands of state-of-the-art communication applications like Internet telephony or mobile video conferencing. AAC-ELD is a more advanced version of MPEG AAC-LD, which is the defacto standard for high-fidelity audio compression in video conferencing systems.

Other technologies complete the Fraunhofer SDK for Communication Systems: The new echo canceller eliminates acoustical echo commonly generated in hands-free communication. Error concealment guarantees fluent conversations without interruptions even over low-bandwidth connections. Additionally, the communication chain is automatically adapted to the network transmission capacity.

The Fraunhofer SDK for Communication Systems is available as of today. For further information visit our website [www.iis.fraunhofer.de/amm](http://www.iis.fraunhofer.de/amm).

Founded in 1985 the Fraunhofer Institute for Integrated Circuits IIS in Erlangen, today with 520 staff members, ranks first among the Fraunhofer Institutes concerning headcount and revenues. As the inventor of mp3 and co-inventor of the MPEG AAC audio coding standard, Fraunhofer IIS has reached worldwide recognition. It provides research services on contract basis and technology licensing.

The research topics are: Audio and video source coding, multimedia realtime systems, digital radio broadcasting and digital cinema systems, integrated circuits and sensor systems, design automation, wireless, wired and optical networks, localization and navigation, imaging systems and nanofocus X-ray technology, high-speed cameras, medical sensor solutions and communications technology in transport and logistics.

The budget of 61 million Euro is mainly financed by projects from industry, the service sector and public authorities. Less than 20 percent of the budget is subsidized by federal and state funds.

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