



Press Release

Erlangen, April 12, 2007

Visit us at NAB 2007 in Las Vegas: Fraunhofer booth (#SU6830) and Harmonic booth (#SU9620)

Harmonic Licenses Fraunhofer IIS Audio Codecs for Professional Broadcast Encoders

Fraunhofer Institute for Integrated Circuits IIS announced that Harmonic Inc. (NASDAQ: HLIT) is using Fraunhofer's floating-point MPEG-4 High Efficiency Advanced Audio Coding (HE-AAC) and MPEG-1 Layer-2 audio coding software for the DiviCom® Electra™ family of broadcast encoders. The high performance Electra 7000 HD and Electra 5400 SD H.264 encoders will be shown at the Harmonic booth (#SU9620) and the Electra 7000 will also be featured at the Fraunhofer booth (#SU6830) during the upcoming NAB2007 exhibition in Las Vegas on April 16-19.

As an option to its Electra multi-channel compression platform, Harmonic has integrated the efficient and speed optimized Fraunhofer DSP audio software in a multi-channel audio card.

The Harmonic Electra encoders are used in broadcast, satellite, cable and telco IPTV headends or studios for real-time encoding of HDTV and SDTV content. In addition to systems supporting H.264 compression, the Electra product line also includes multi-channel MPEG-2 SD encoders. Fraunhofer's HE-AAC and Layer-2 software delivers discrete multi-channel audio quality at bitrates as low as 128 kbps.

"Our customers increasingly roll out HD and SD channels with multiple 5.1 or 7.1 audio services, and need a cost-effective, integrated solution to reduce audio bandwidth," said Arnaud Perrier, Senior Product Marketing Manager at

Fraunhofer Institute for Integrated Circuits IIS

Am Wolfsmantel 33 91058 Erlangen, Germany

Executive Director

Prof. Dr.-Ing. Heinz Gerhäuser **Director** Prof. Dr.-Ing. Günter Elst

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Harmonic Inc. "The HE AAC codec from Fraunhofer IIS offers best-in-class quality and allowed us to rapidly incorporate this function into our market-leading line of Electra encoders."

Harald Popp, head of the Multimedia-Realtime Systems department of Fraunhofer IIS, says: "Harmonic is the industry leader for digital TV broadcast encoders, offering its customers ultra-high compression efficiency, and we are happy to see our high quality MPEG audio codecs used in their outstanding Electra family of products."

MPEG-4 HE-AAC is the most efficient audio codec widely adopted in mobile multimedia, digital radio and TV broadcasting and is the de-facto standard for music download services on mobile phones. MPEG-1 Layer-2 is the proven audio compression scheme used on DVD and digital TV transmissions for years.

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Fraunhofer IIS

Founded in 1985, the Fraunhofer Institute for Integrated Circuits IIS in Erlangen, with its 480 staff members, ranks first in employees and revenues among the Fraunhofer Institutes. Fraunhofer IIS has achieved worldwide recognition for the development of the audio coding method mp3.

Fraunhofer IIS provides research services on a contract basis and licenses technology in the areas of 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.

Its budget of 58 million Euro is financed primarily by projects from industry and public institutions, with less than 20 percent subsidized by state and federal funds. For more information visit www.iis.fraunhofer.de/amm.

Harmonic Inc.

Harmonic Inc. is a leading provider of versatile and high performance video solutions that enable service providers to efficiently deliver the next generation of broadcast and on-demand services including high definition, video-on-demand, network per-





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sonal video recording and time-shifted TV. Cable, satellite, broadcast and telecom service providers can increase revenues and lower operational expenditures by using Harmonic's digital video, broadband optical access and software solutions to offer consumers the compelling and personalized viewing experience that is driving the business models of the future.

Harmonic (NASDAQ: HLIT) is headquartered in Sunnyvale, California with R&D, sales and system integration centers worldwide. The Company's customers, including many of the world's largest communications providers, deliver services in virtually every country. Visit www.harmonicinc.com for more information.



Harmonic's DiviCom® Electra™ family of broadcast encoders is using Fraunhofer's MPEG-4 High Efficiency Advanced Audio Coding (HE-AAC) and MPEG-1 Layer-2 audio coding.

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