MODULATION INDEX

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Press Release

Erlangen/Germany,
April 16, 2009

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Tuner2.com iPhone® Radio App uses Fraunhofer IIS HE-AACv2 Decoder to deliver Superior Sound

Modulation Index makes custom versions of iPhone radio app available to all radio networks.

Modulation Index, Inc., a leading provider of streaming and data solutions for radio stations, has licensed Fraunhofer's High Efficiency Advanced Audio Codec (HE-AACv2) decoder library for use in its custom iPhone radio apps. The first such app for Tuner2.com is now available through the Apple App Store.

Modulation Index and Tuner2 have chosen MPEG-4 HE-AACv2 (aka eAAC+) for its ability to deliver high quality stereo at only 32 kbit/s over 3G networks. Fully compatible with the 3GPP and 3GPP2 standards for audio streaming, the Modulation Index iPhone app uses RTP streaming for a more reliable mobile listening experience. The iPhone app also supports HE-AACv1 and mp3 SHOUTcast as well as Icecast2 streams, instant song purchase, song tagging, album art, shake random station selection, station search, and e-mail/ Twitter stream now playing information. Each custom iPhone app has its own dedicated directory service dynamically configurable by the radio network customer.

"We have been working to make radio stations sound great for over 25 years," said Greg Ogonowski, President of Modulation Index and co-developer of the Orban Optimod audio processor. "Many iPhone applications are satisfied to make your station sound poor. Our custom iPhone player has gone

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the extra miles to reliably supply the highest quality audio, directory services and integrated PAD to your mobile listeners. We combine the Fraunhofer HE-AACv2 decoder, Tuner2.com directory services, and standards-based RTP transport, to give your listeners the best possible experience."

"Foremost amongst the advantages of the HE-AACv2 codec is a reduction of the required bit-rate that can be as high as 50 percent for entertainment grade quality, compared to legacy codecs," says Harald Popp, head of the Fraunhofer IIS Multimedia Realtime Systems Department. "This means dropouts and extended buffering can be eliminated which results in an increased stability and quality of service. In addition, the codec clears the way for the operation of more individual streams or stations over the same bandwidth."

Available on hundreds of millions of cell phones around the world and streaming about 25 percent of all Internet radio stations, MPEG-4 HE-AACv2 is part of a large family of audio codec libraries available from Fraunhofer IIS for the iPhone Software Development Kit (SDK) and other mobile platforms. Amongst the SDK licensees are radio stations, service providers and media player manufacturers.

The MPEG-4 HE-AACv2 codec has already been deployed in embedded devices used for radio, TV and music download applications. Among other high-profile credits, the codec has been specified for 3GPP music download and streaming applications, several digital radio systems, and mobile TV standards including DVB-H, DMB Europe, ATSC-M. It is also

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well known as an Internet streaming format supported in Adobe Flash and announced for Microsoft Silverlight.

Fraunhofer's audio codec offering for the iPhone SDK also include mp3 & AAC encoders/decoders, as well as MPEG Surround binaural decoders for surround Internet radio on the move or in the rear-seat of a car.

For more information, please send an email to codecs@dmt.fraunhofer.org or call +1-408-573-9900.

For further information on Modulation Index and their custom iPhone radio app, please visit www.indexcom.com/iphone or email iphone@indexcom.com.

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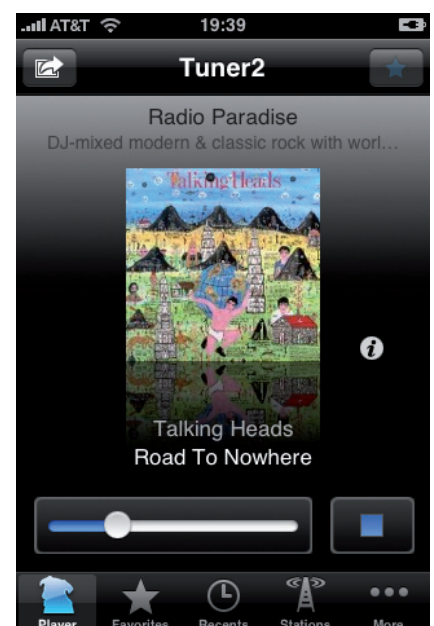matthias.rose@iis.fraunhofer.de

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Superior sound with Fraunhofer's HE-AACv2:The Tuner2.com iphone® Radio App.

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Founded in 1985 the Fraunhofer Institute for Integrated Circuits IIS in Erlangen, today with 585 staff members, ranks first among the Fraunhofer Institutes concerning headcount and revenues. As the inventor of mp3 and co-inventor of the MPEG 4 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 72 million Euro is mainly financed by projects from industry, the service sector and public authorities. Less than 25 percent of the budget is subsidized by federal and state funds.

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