RT-RK's MPEG-H Decoder Implementation for Cirrus Logic DSPs on Display at CES 2023

January 4, 2023

RT-RK, a leading embedded software development house, alongside Fraunhofer IIS, primary developer of the MPEG-H Audio standard, today announced the immediate availability of RT-RK's MPEG-H 3D Audio decoder implementation for Cirrus Logic DSPs commonly used in home theater products such as AV Receivers and Soundbars.

MPEG-H Audio is an open ISO standard and the industry's most advanced audio system for UHD-TV and streaming. It supports both immersive sound and the ability for users to adjust elements in the audio to their preferences. MPEG-H has been on the air since 2017 on all TV networks in South Korea under the ATSC 3.0 standard. Recently the Brazilian SBTVD Forum selected the MPEG-H Audio system as the sole mandatory audio codec for their next-generation broadcast system. Grupo Rede Amazônica is the first broadcaster in Latin America to provide a 24/7 MPEG-H Audio service on one of their terrestrial broadcast channels using ISDB-Tb TV 2.5. MPEG-H is also a candidate for the upcoming Japanese TV Audio standard.

"RT-RK Home Audio team is extremely proud of yet another great achievement of our DSP team. Working alongside our colleagues at Fraunhofer IIS, our DSP Audio team successfully ported the sophisticated audio object technology known as MPEG-H," says Miroslav Dokic, VP, Business Development for Home Audio at RT-RK. *"Furthermore, this implementation was completely accomplished in-house on a very low-cost embedded Cirrus Logic quad core DSP CS49844, which should further accelerate the wordwide adoption of MPEG-H Audio in newly designed soundbars and Audio/Video Receiver (AVR) systems, as well as other audio/video products."*

With support for MPEG-H decoding in RT-RK's Cirrus Logic DSP implementations, AV receiver and soundbar manufactures have convenient access to a high-quality, ultra-efficient MPEG-H decoder implementation that can provide immersive and interactive personalized audio experiences. Its more accessible format and price point open the door to the enjoyment of Next Generation Audio to an even wider audience. This includes the play back of 360 Reality Audio immersive music, which is based on the MPEG-H Audio system and available globally on many streaming services including Amazon Music Unlimited, nugs.net, Peertracks, Sony Select, and TIDAL.

"RT-RK has been a long-term partner of Fraunhofer IIS and their embedded software implementations are highly regarded in the consumer electronics industry," says Harald Fuchs, Head of Media Systems and Applications at Fraunhofer IIS. *"Having MPEG-H*

decoding available commercially for the Cirrus Logic DSP from RT-RK will enable many greatly immersive and interactive consumer audio products."

Demonstrations of MPEG-H running on Cirrus Logic DSPs will be available at the Venetian Hotel. Please contact Miroslav Dokic (Miroslav.Dokic@rt-rk.com) for details and to book appointments.

Fraunhofer's MPEG-H CES demonstrations will be on display at the Las Vegas Convention Center, Central Hall, booth #15915.

About RT-RK

RT-RK is a premium embedded software development house in the Southeast Europe, with a focus on consumer electronics and infotainment systems. The company was founded in 1991, and currently employs 500+ engineers. RT-RK has a background in being a near shore development center of silicon vendor, networking, automotive, and consumer electronics companies. RT-RK operates under the umbrella of TTTech Group.