Fraunhofer-Institute for Integrated Circuits, Fraunhofer IIS (Erlangen)

🗾 Fraunhofer

Förderung der angewandten Forschung e.V. (FhG) is Germany's leading non-profit organisation for applied research. Currently it consists of 58 independent institutes that form a legal and financial entity. FhG links science with industry by applying results of scientific research to industrial projects. In total it has approximately 13,000 employees and an annual research budget of about one billion Euro.

Fraunhofer-Institut für Integrierte Schaltungen (IIS) conducts contract research for national as well as international industry and public authorities. Headed by Prof. Heinz Gerhäuser, Fraunhofer IIS engineers and scientists develop microelectronic systems and equipment along with the required integrated circuits and software. Founded in 1985 in Erlangen, Fraunhofer Institute for Integrated Circuits IIS with its locations in Nürnberg, Fürth and Dresden ranks first among the Fraunhofer Institutes concerning headcount and revenues. The range of applications encompasses microelectronics, information technology, telecommunications, audio and multimedia, digital cinema, camera technology, logistics as well as industrial and machinery automation. Audio and video coding techniques developed at the Institute have reached international recognition due to adoption as international standards. MP3, developed by Fraunhofer IIS, is the best-known and a widely applied audio coding technique.

Fraunhofer IIS is also the leader of the Network Digital Cinema within the Fraunhofer-Gesellschaft, which is a consortium of four institutes developing key technologies for the whole chain of digital cinema. Fraunhofer IIS develops key technologies for the digital cinema industries. Fraunhofer IIS was the consortium leader of the project WorldScreen, which influences significantly the Dcinema market, and of the key partner in the field of digital film archiving in the EDCINE project. IIS is partner of the DCI and developed the DCI Compliance Testplan and validated the DCI Reference DCPs. It led the interoperability test group in JPEG 2000 and developed the specifications for digital cinema in Germany by order of the German Federal Film Board. Fraunhofer IIS developed the electronics for the ARRI D20, the fieldrecorder Megacine and many software tools for Digital Cinema.

Role in EFG1914 porject: Co-lead of WPs 2, 3 and 4. Consultancy and support for digitization workflow and transcoding issues. Link to international Digital Cinema standardization activities.