PRESS RELEASE

mioty® technology gains importance for Low Power Wide Area Network applications

Nuremberg: At the embedded world 2020 the mioty alliance was introduced to a large audience of leading companies from research & industry, such as Texas Instruments, Fraunhofer-Institute for Integrated Circuits IIS, and Diehl Metering. Since then the alliance has registered an ever-growing number of enterprises that have decided to join. The mioty joint patent licensing program has been organized by Sisvel International S.A. to make mioty technology available for innovative LPWAN applications in various areas like Industrial IoT, Smart City or in smart buildings. The new Fraunhofer IIS features for robust, reliable and energy-efficient solutions, like Energy Harvesting, provide an attractive technology pool to boost massive IoT applications.

"Since the embedded world 2020 the number of members to join the alliance has doubled and there are more inquiries coming in every week," states Dr. Guenter Rohmer, head of the mioty alliance advisory board. Especially manufacturers and distributors of radio transmission modules and sensors applied to integrate mioty in their customized IoT solutions. The concept of ETSI-standardized robust data transmission for massive IoT, its scalability and capability to be retrofitted into existing settings as well as its hardware independence are crucial factors that convince an increasing number of companies to build or upgrade their technical solutions and develop new business models. "Within the mioty alliance customers have access to chip design providers, module production as well as sensor nodes, base stations and mioty software stack providers, and also to end users. The mioty alliance is a one-stop shop for mioty users", explains Hermann Trottler, executive director of the mioty alliance board.

Launch of mioty joint patent licensing program

In order to make the mioty technology accessible for further product integrations, like sensor nodes or mioty base stations, Sisvel International S.A. established the mioty joint patent licensing platform in midApril this year. Parties interested in creating tailored solutions have the opportunity to easily obtain a license to patents covering the mioty technology. The mioty joint patent licensing platform provides access to patents owned or controlled by the Fraunhofer IIS and Diehl Metering GmbH, and it remains open to

additional patent owners with relevant patents. Detailed information about the terms and conditions of the joint patent license is available by Sisvel.

Energy harvesting and positioning – enabler for any massive IoT solution

The Fraunhofer IIS – one of the founding members of the alliance – already develops possible next-step technologies: Especially when using a vast amount of sensors, power consumption and time- and cost-intensive maintenance are a big issue. Therefor the Fraunhofer IIS expert team for energy-efficient technologies provides energy harvesting technologies for autarkic power supply by using minimal vibration or thermal differences to power the sensors. As a result manufacturers can build and run massive long-term IoT applications at no further cost for service operation.

Precise positioning in a scalable massive IoT indoor and outdoor environment is also a crucial factor to minimize costs and to be able to identify quickly, where and which sensor is not transmitting and has to be replaced. Supported by a quick and precise overview via positioning this will optimize any maintenance process. Using the existing mioty base station and sensor nodes, such applications are cost effective and implemented quickly.

About the mioty technology:

Standardized transmission method for connecting thousands of sensors
mioty® is a technology that was incorporated into the European Telecommunications Standards Institute (ETSI) standardization for low-throughput networks protocols for radio interface A. Since 1988, ETSI has been tasked with creating standards for telecommunications and broadcasting. It has members from across the industry, as well as independent research and development bodies. The standardized method guarantees users a generally recognized basis for developing new services and solutions, ensuring that different IoT systems and solutions can interact with each other.

mioty® is a brand of Fraunhofer-Gesellschaft.

Find out more on the following websites:
www.mioty.de
www.mioty-alliance.de
www.sisvel.com/licensing-programs/wireless-communications/mioty/introduction

Sensor based on mioty transmission technology with energy autarkic power supply.
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The Fraunhofer-Gesellschaft is the leading organization for applied research in Europe. Its research activities are conducted by 74 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of 28,000, who work with an annual research budget totaling 2.8 billion euros.

The **Fraunhofer Institute for Integrated Circuits IIS** is one of the world's leading application-oriented research institutions for microelectronic and IT system solutions and services. It is the largest of all Fraunhofer Institutes. Research at Fraunhofer IIS revolves around two guiding topics:

In the area of **"Audio and Media Technologies"**, the institute has been shaping the digitalization of media for more than 30 years now. Fraunhofer IIS was instrumental in the development of mp3 and AAC and played a significant role in the digitalization of the cinema. Current developments are opening up whole new sound worlds and are being used in virtual reality, automotive sound systems, mobile telephony, streaming and broadcasting.

In the context of **"cognitive sensor technologies"**, the institute researches technologies for sensor technology, data transmission technology, data analysis methods and the exploitation of data as part of data-driven services and their accompanying business models. This adds a cognitive component to the function of the conventional "smart" sensor.

More than 1100 employees conduct contract research for industry, the service sector and public authorities. Founded in 1985 in Erlangen, Fraunhofer IIS has now 14 locations in 11 cities: Erlangen (headquarters), Nuremberg, Fürth, Dresden, further in Bamberg, Waischenfeld, Coburg, Würzburg, Ilmenau, Deggendorf and Passau. The budget of 169.9 million euros is mainly financed by projects. 26 percent of the budget is subsidized by federal and state funds.

Detailed information on: www.iis.fraunhofer.de/en