

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

PRESS RELEASE

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Fraunhofer IIS to introduce RFID, telemetry and antenna systems for Industry 4.0 at CeBIT

Erlangen/Hannover, March 18, 2015, CeBIT, hall 9, booth E40: At this year's CeBIT, the Fraunhofer Institute for Integrated Circuits IIS will be presenting solutions that rely on the use of radio frequency identification (RFID), telemetry and intelligent antenna systems for Industry 4.0 applications and the Internet of Things (IoT).

While Industry 4.0 is on everyone's lips these days, the question is what significance does it have for practical application in production environments and industrial processes? To illustrate the potential, at CeBIT Fraunhofer IIS will be demonstrating a technology platform and state-of-the-art RFID technology combined with intelligent antenna systems that can already be used to implement automated, connected production and logistic chains. This technology platform is especially suitable for the energy-efficient and secure transmission of sensor information and small data packets. It thus offers robust, narrowband wireless communication and long range for a variety of applications in digital production environments. Together with various RFID applications, the platform makes a valuable contribution to the realization of IoT in digital production.

With an ever increasing flow of goods, companies are relying more and more on automated identification systems to manage their production and logistics processes. These days, reading stations can simultaneously detect several hundred RFID transponders. With its expanded field of view, the multibeam antenna technology developed by Fraunhofer IIS can precisely and securely detect shipments. This unique RFID technology significantly improves and speeds-up logistics and retail processes many times over.

At CeBIT, the Fraunhofer experts will be demonstrating the capability of the communication between the RFID reader, communication platform and state-of-the-art antenna technology by means of a so-called bulk reading scenario, in which a pallet with several hundred transponders can be read in less than five seconds.

On March 18, from 11:00 to 12:00, the Fraunhofer IIS experts will be giving presentations in the Fraunhofer Technology Briefing together with industry representatives to provide specific insights into the technologies and business applications along the digital production value chain. The presentation and follow-up discussion will focus on

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Editorial notes



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which opportunities wireless communication provides and how companies can prepare for the future challenges of Industry 4.0.

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Telemetry systems and RFID technology connect and optimize digital production processes. © Fraunhofer IIS/Kurt Fuchs | Bild in Farbe und Druckqualität: www.iis.fraunhofer.de/pr.

The **Fraunhofer-Gesellschaft** is the leading organization for applied research in Europe. Its research activities are conducted by 66 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of nearly 24,000, who work with an annual research budget totaling more than 2 billion euros.

Founded in 1985, **Fraunhofer Institute for Integrated Circuits IIS** in Erlangen, Germany, ranks first among the Fraunhofer Institutes concerning headcount and revenues. As the main inventor of mp3 and universally credited with the co-development of AAC audio coding standard, Fraunhofer IIS has reached worldwide recognition. In close cooperation with partners and clients the Institute provides research and development services in the following areas: Audio & Multimedia, Communications Systems, Energy Management, IC Design and Design Automation, Imaging System, Medical Technology, Non-destructive Testing, Positioning, Safety and Security Technology, Sensor Systems plus Supply Chain Management.

More than 830 employees conduct contract research for industry, the service sector and public authorities. Fraunhofer IIS with its headquarters in Erlangen, Germany, has further branches in Dresden, Fuerth, Nuremberg, Coburg, Deggendorf, Ilmenau, Wuerzburg, Bamberg and Waischenfeld. The budget of 108 million euros is mainly financed by projects. Less than 25 percent of the budget is subsidized by federal and state funds.

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