

Pressemitteilung

Fraunhofer-Institut für Photonische Mikrosysteme (IPMS)

Julia Schulze

09.08.2024

<http://idw-online.de/de/news838027>

Forschungsprojekte, Kooperationen
Elektrotechnik, Physik / Astronomie, Werkstoffwissenschaften, Wirtschaft
überregional



Fraunhofer IPMS remains important research partner for GlobalFoundries Dresden

The Fraunhofer Institute for Photonic Microsystems IPMS is expanding its long-standing collaboration with the leading international semiconductor manufacturer GlobalFoundries and launches several research projects on innovative integrated memory concepts.

The Center Nanoelectronic Technologies (CNT) at Fraunhofer IPMS is researching new processes and concepts for memory modules in GlobalFoundries chip technologies within several research projects on behalf of GlobalFoundries. In addition to the development of processes for the 22nm FDX[®] technology, the focus of the development projects that have now been launched lies on the optimization of magnetic, ferroelectric and resistive embedded data storage. An important goal is to develop scalable and energy-efficient memory solutions. This is particularly advantageous for the Internet of Things and automotive sectors.

The research projects are being implemented on behalf of GlobalFoundries as part of the "Important Project of Common European Interest" (IPCEI), which is funded proportionately by Saxony and the federal government and was launched in 2023.

Reasons for GlobalFoundries' cooperation with the CNT at Fraunhofer IPMS are the excellent technical expertise of its more than 100 employees, the immediate vicinity in the north of Dresden and the research clean room with standard industrial equipment on 300mm wafer size, which is unique in Germany. Only this unique selling point makes a fast and efficient exchange of wafers and research results with fabs such as GlobalFoundries possible.

Wenke Weinreich, Head of CNT and Deputy Director of Fraunhofer IPMS, is pleased with the continuation of the cooperation with GlobalFoundries Dresden alongside the new projects and proudly emphasizes: "It is an honor to continue to be an important research partner of GlobalFoundries Dresden. With these projects that have now been launched, we are working together to ensure that Dresden continues to occupy a leading position in global microelectronics."

Dr. Manfred Horstmann, General Manager of GlobalFoundries Dresden, adds: "The teams at the Center Nanoelectronic Technologies at Fraunhofer IPMS and GlobalFoundries are perfectly attuned to each other. We are therefore delighted to be continuing our proven collaboration in the field of research under the umbrella of IPCEI. The results will make a significant contribution to the further strengthening of the Central German semiconductor cluster."

About Fraunhofer IPMS

The Fraunhofer Institute for Photonic Microsystems IPMS is a leader in applied research and development in the fields of intelligent industrial solutions, medical technology and mobility. Fraunhofer IPMS works on electronic, mechanical and optical components and their integration into miniaturized devices and systems. Its services range from design and

product development to pilot production in its own laboratories and clean rooms. With the Center Nanoelectronic Technologies (CNT), Fraunhofer IPMS offers applied research on 300 mm wafers for microchip producers, suppliers, device manufacturers and R&D; partners.

About GlobalFoundries

GlobalFoundries is one of the world's leading semiconductor manufacturers. The company offers a unique mix of design, development and manufacturing services. With a talented and diverse team and manufacturing facilities in the US, Europe and Asia, GlobalFoundries is a trusted technology provider for its worldwide customers. The company employs around 3,000 people from 50 countries in Dresden, Germany.

wissenschaftliche Ansprechpartner:

Dr. Wenke Weinreich - wenke.weinreich@ipms.fraunhofer.de