

PRESS RELEASE

PRESS RELEASEJan. 18, 2023 || Page 1 | 3

Bavarian Chip Design Center: Bavaria on course to become a center of innovation and excellence in chip design

Nuremberg, Germany: On January 18, 2024, the Bavarian Chip Design Center (BCDC) reached an important milestone on its path toward making Bavaria a leading location for innovation and excellence in chip design. As part of the Symposium on Chip Development – Greater Innovation through Chip Design, held at Fraunhofer IIS, Bavaria’s Minister of Economic Affairs Hubert Aiwanger presented the Center with a grant of 50 million euros.

The BCDC has set itself the ambitious goal of further expanding chip design expertise in Bavaria and providing companies, especially start-ups and small and medium-sized enterprises (SMEs), with easier access to chip design and suitable supply chains. The recent challenges in German industry have once again highlighted the sector’s dependence on international semiconductor companies and underscore the importance of having a strong chip design center.

“Chip design holds strategic significance: those who help develop the semiconductors of tomorrow secure their own influence on the global market. That is precisely our goal for Bavaria. In addition, there is considerably more added value in designing the chips than in actually manufacturing them. Our semiconductor policy is therefore putting the focus on the right areas. With its three participating institutes, the Fraunhofer-Gesellschaft is the right partner for this project. We in the state government already paved the way for the Bavarian Chip Design Center in previous years with our own semiconductor initiatives. With this additional 50 million, we’re making a clear commitment to the semiconductor industry in Bavaria,” says Hubert Aiwanger, State Minister of Economic Affairs, Regional Development and Energy

The funding approval marks a milestone in the development of the BCDC, which was launched in 2022 with an initial grant of one million euros. Since 2022, the Fraunhofer Institutes for Applied and Integrated Security AISEC, for Electronic Microsystems and Solid State Technologies EMFT, and for Integrated Circuits IIS have been driving research, identifying key topics, and developing concepts to qualify more specialists for integrated circuit (IC) design and provide access to IC production and supply chains. They also seek to establish access to an IC design ecosystem that makes it easier for SMEs and start-ups to break into IC development.

BCDC: A competence center for chip design

PRESS RELEASEJan. 18, 2023 || Page 2 | 3

With the second grant from the Bavarian Ministry of Economic Affairs, Regional Development and Energy, the BCDC can further expand its research expertise and, together with five Bavarian colleges and universities as partners, develop into a leading competence center for chip design in the state.

The Bavarian Chip Design Center is organized into three pillars, each focused on a core topic:

- The IC – Design Ecosystem pillar features platforms that support the development of specific solutions in the areas of sensor/actuator systems and AI, digital signal processing, secure systems-on-chip, and chiplets. This pillar also develops IP portfolios for innovative and novel technologies and explores solutions to minimize the risk of obsolescence and chip shortages.
- The IC – Design Talents pillar addresses the shortage of skilled workers in chip design through on-the-job training for suitable talent.
- The IC – Supply Chain pillar helps companies in the production of their own integrated circuits as prototypes and small batches.

In addition to expanding research capacity, efforts are underway to establish a network with industry and promote strategic initiatives at both the national and EU levels. The Bavarian Ministry of Economic Affairs, Regional Development and Energy is supporting the co-financing of a planned German pilot line submitted by the Research Fab Microelectronics Germany (FMD) as part of the European Chips Act through a dedicated part of the project.

As part of the five-year funded project, the partners have been entrusted with meeting the challenges of chip development and production through expertise, innovative strength, and networking. This is how the BCDC will play a key role in advancing the technological sovereignty and competitiveness of the Bavarian economy.

PRESS RELEASEJan. 18, 2023 || Page 3 | 3

The Fraunhofer-Gesellschaft, headquartered in Germany, is the world's leading applied research organization. Its research activities are conducted by 76 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of around 38,000, who work with an annual research budget of roughly €3.0 billion.

The **Fraunhofer Institute for Integrated Circuits IIS**, headquartered in Erlangen, Germany, conducts world-class research on microelectronic and IT system solutions and services. Today, it is the largest institute of the Fraunhofer-Gesellschaft. 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 1170 employees conduct contract research for industry, the service sector and public authorities. Founded in 1985 in Erlangen, Fraunhofer IIS now has locations in 11 cities: Erlangen (headquarters), Nuremberg, Fürth and Dresden, as well as Bamberg, Deggendorf, Ilmenau, Munich, Passau, Weisenfeld and Würzburg. 72 percent of the budget of 189.7 million euros a year is financed by contract research projects. Institutional funding from the Fraunhofer-Gesellschaft covers 28 percent of the budget.

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