

30/2021

16.11.2021

Last call: VDE promotes microelectronics master plan at MST Congress 2021 with new position paper

- **Microelectronics is the basis for the technological sovereignty of the future**
- **VDE stresses the need for action with its Hidden Electronics III position paper – a European master plan is one of the core topics at the 9th MST Congress**
- **Essential goals: Removing investment hurdles and making funding internationally benchmarkable**

(Place, date) “An event such as the **MST Congress**, where **experts from the fields of business, research and politics share their ideas**, has never been as important as this year,” says Professor Christoph Kutter, the Fraunhofer Society’s deputy spokesperson for microelectronics and co-author of the VDE Hidden Electronics III position paper. “It’s time for a **new IPCEI** for microelectronics; companies such as Intel and TSCM want to **invest in Europe** – the **EU must act now** to safeguard innovation and social prosperity in Germany and Europe in the future.” **Hidden Electronics III, which was presented to the public for the first time at the MST Congress 2021** in Ludwigsburg near Stuttgart, outlines the essential points of a European master plan for microelectronics.

Understanding microelectronics as the basis for technological sovereignty

While tens of billions are being invested in the US and Asia to further strengthen their leading role in the field of microelectronics, the **market share in Europe** is currently stagnating at **just seven percent** instead of the goal of 20 percent. If the EU wants to maintain its **technological sovereignty, safeguarding microelectronics expertise** is of primary importance, as it impacts all sectors from climate protection and mobility to a sustainable energy supply.

“We aim to ensure that this fact is **communicated to** and understood by **the general public – microelectronics is virtually invisible but keeps things running in many areas**,” explains Professor Robert Weigel, professor of technical electronics at the Friedrich-Alexander University of Erlangen-Nuremberg (FAU) and also co-author of the Hidden Electronics III position paper at the MST Congress.

Removing investment hurdles and making funding internationally benchmarkable

The situation varies between the different technological fields. Demand in the area of **advanced CMOS logic** is still at a low level in Europe, but edge computing and automotive applications will change this. The production sites that are currently being planned in Europe by Intel and TSMC are taking this demand into account. In the context of the **more-than-Moore technologies** (e.g. sensors, power semiconductors, opto-electronics), Germany and Europe are currently in a strong position – there is high demand in the automotive sector and in industry in particular. But other countries are investing huge amounts in this area too and are therefore **catching up**.

“To **turn the situation around in general and to gain competitive advantages**, we need to remove any hurdles to investment – **from excessive bureaucracy through restrictive antitrust policies to a lack of clarity in the tax system**,” says Professor Weigel. It is also still important to establish an internationally benchmarkable funding system that can quickly make and implement decisions regionally, nationally and throughout Europe.

Modernizing the qualification system and promoting startups

In addition to the lack of availability of components and raw materials, the increasing shortage of qualified technical staff poses major challenges for industry and society as a whole. “We must improve the quality of STEM education, modernize qualification options and make them more needs-oriented – as we **need the cleverest minds if we are to succeed on the global market**,” explains Dr. Udo-Martin Gómez, Senior Vice President Engineering Sensors & Business Line Sensors at Robert Bosch GmbH, who is another of the authors of the Hidden Electronics III position paper, at the MST Congress in Ludwigsburg. Another focus of a **dynamic ecosystem consisting of research and development at universities and SMEs is active support for young companies and startups** in order to set up expertise clusters in sectors such as consumer electronics, ICT, IoT and Big Data.

About the Microsystems Technology Congress 2021:

The MST Congress 2021 is the ninth staging of this event, which is held every two years. It is organized jointly by VDE and the Federal Ministry of Education and Research and is located in Ludwigsburg near Stuttgart this year. The focus is once again on intensive dialog between scientists and engineers from companies and research institutes in the microelectronics/microsystems technology sectors in Germany, as well as representatives of the federal and state ministries involved. In 2019, the MST Congress was held in Berlin, where more than 1,000 experts from Germany and Europe shared their ideas – the congress is therefore one of the largest events of its kind in Germany.

About VDE:

VDE, one of the largest technology organizations in Europe, has been regarded as a synonym for innovation and technological progress for more than 125 years. VDE is the only organization in the world that combines science, standardization, testing, certification and application consulting under one umbrella. The VDE mark has been synonymous with the highest safety standards and consumer protection for 100 years. Our passion is the advancement of technology, the next generation of engineers and technologists, and lifelong learning and career development “on the job”. Within the VDE network, 2,000 employees at over 60 locations worldwide, more than 100,000 honorary experts and 1,500 companies are dedicated to ensuring a future worth living: networked, digital, electrical. We shape the e-dialistic future.

The headquarters of the VDE (Association for Electrical, Electronic & Information Technologies) is in Frankfurt am Main. For more information, visit www.vde.com.

Press contact: Melanie Unseld, Tel. +49 69 6308-461, melanie.unseld@vde.com