

Calling all pupils! Who has the best idea for a sustainable future?

- **Invent a Chip kicks off 2021 online**
- **Calling all pupils! Who has the best idea for a sustainable future?**
- **•VDE and BMBF school competition focuses on microchip design**
- **•Quiz and challenge open to participation for grades 8 to 13**
- **•Competition to be held online with secure digital formats**
- **•Cash prizes, microcontrollers, internships and industrial contacts are up for grabs**
- **•Extra: apply with electronics projects at “Labs for Chips”**

(Frankfurt, April 26, 2021) The 20th edition of “Invent a Chip” (IAC) is kicking off, and the next generation of technology talent needs no special prior knowledge to take part. Participate, be there and make a difference in climate change, the energy transition or mobility. The technology organization VDE and the German Federal Ministry of Education and Research (BMBF) are now looking for pupils from grades 8 to 13 who are interested in designing microchips. The competition is currently exclusively online and with digital formats. “Safety is our priority due to the COVID-19 pandemic, but we hope to meet the winners in person at our awards ceremony in late fall,” says VDE CEO Ansgar Hinz. Until then, the initiative will be offering exciting expert knowledge for young people. “We want to make them fit for the challenges of the future,” Hinz explains. Following online registration, things will get rolling in the competition at the end of April with the IAC quiz. Pupils must answer twenty questions about electronics and microchips and submit their quiz by mid-September.

From quiz to challenge

The young chip designers can also get inspired by tinkering on their own for the IAC challenge. The kids start to learn step by step, wiring logic gates and learning a hardware description language. “Experts from the University of Hannover will show pupils in the IAC challenge how they can implement their projects in a microchip with freely configurable logic gates,” Hinz explains. The IAC challenge ends on August 31. The top ten competitors will then receive their

own FPGA board and an online tutorial from the experts of the Institute for Microelectronic Systems at Leibniz University Hannover. The next task will then be carrying out practical tests by working with their board to optimally control a solar tracker.

The aim of the competition is to introduce girls and boys to the diverse possibilities of microelectronics, which offer solutions for many societal challenges. They make it possible to know more and do more. "We are pleased that this practice-oriented research and promotion of young talent is being met with so much interest by the young people. It gets them interested in studying or training in this field, and the competition lets them experience how they can actively help shape the future themselves," says Hinz.

Participation

The competition is open to school pupils from grades 8 to 13 at secondary and vocational schools in Germany. The IaC quiz will be available online at www.invent-a-chip.de until September 15, 2021. Pupils can take part in the IaC Challenge up to August 31, 2021, for a chance to be among the top ten.

At the end of September, the school prizes between €500 and €1,000 will be awarded, and 50 microcontrollers will be raffled off among the best quiz participants. The winners of the IaC challenge will receive an invitation to the award ceremony, cash prizes of up to €1,500, an internship at Robert Bosch in Reutlingen in 2022, and invitations to technical events taking place in 2022.

Labs for chips – seeking good projects

Adults who inspire young people to work with electronics can also apply for an electronics prize. We are looking for electronics projects from educational institutions aiming to strengthen STEM subjects. The joint VDE and BMBF initiative awards the best ideas for electronics projects involving pupils with prize money of €500, €1,000 and €2,000. For more information (in German), visit www.labs-for-chips.de.

Numerous sponsors support "Invent a Chip": Bosch, Cologne Chip, Globalfoundries, Infineon, Siemens, DKE German Commission for Electrical, Electronic & Information Technologies of DIN and VDE.

Further information and participation documents are available (in German) at: www.invent-a-chip.de.

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.

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