What Intel Plans to Bring to Magdeburg and Europe

With the planned multi-billion dollar investment, Intel will continue to bring its most advanced technology to the continent, helping the EU create a next-generation European chip ecosystem and addressing the need for a more balanced and resilient supply chain. In the initial phase, Intel plans to develop two first-of-their-kind semiconductor fabs in Magdeburg, Germany, the capital of Saxony-Anhalt. By significantly increasing manufacturing capacity across Europe, Intel is laying the groundwork to support the EU’s envisaged “2030 Digital Compass” strategy. One fifth of the world’s semiconductors are to be produced in Europe. Along with the site in Leixlip, Ireland and the recently announced assembly and test facility in Poland, the new planned wafer fabrication site in Magdeburg will create a first-of-a-kind, leading-edge end-to-end semiconductor manufacturing value chain in Europe. The following results are included in Intel’s plans:
Technological progress:
The two new fabs in the German state of Saxony-Anhalt are expected to deliver chips using Intel’s most advanced transistor technologies, serving the needs of both foundry customers (contract manufacturing) and the goals set by Intel in Europe and globally as part of the company’s IDM (integrated device manufacturer) 2.0 strategy. Intel plans to enter the Angstrom era in 2024 with its two breakthrough technologies, RibbonFET and PowerVia.

The Intel processors will then include the unit of measurement for wavelengths “Å” (Ångström), named after the Swedish physicist Anders Jonas Ångström, in their name, whereby 2 nanometers correspond to 20 angstroms.

Since 1989, Intel has invested a total of €30 billion in Ireland to advance technology. The most recent expansion has doubled manufacturing space and created the conditions for the first use of high-volume EUV technology as well as the first use of an EUV scanner in manufacturing within Europe.

Creation of jobs:
In the first phase of construction, 3,000 new jobs are to be created as a result of Intel’s decision to locate its new facility in Magdeburg. Around 1,500 employees are expected to work in each factory module. Since the final phase of construction in Magdeburg may include eight fab buildings, the total number of jobs created could thus even exceed 10,000. The specialists could be recruited, for example, from Otto-von-Guericke-University and Magdeburg-Stendal University of Applied Sciences, but also from vocational training schools and other universities such as Leipzig and Hanover. In addition, Intel is already working with universities and colleges at other locations in the EU, for example in Ireland. At the same time, opportunities also exist on continents outside of Europe for the training of specialist personnel.

Economic effects:
The investments to support the EU Chips Act aim to ensure that Europe will account for around one-fifth of the world market share in the chip industry by 2030. The investments are predicted to boost Europe’s GDP by up to €85 billion over the next decade. Looking at other countries shows the impact the chip industry can have on the economic budget. Since Intel began operations in Leixlip in Ireland in 1989, the gross domestic product there has increased more than tenfold. Intel now has 4,900 employees in Ireland and supports around 17,000 additional full-time jobs. Intel contributes just over €2.75 billion per year to the Irish economy. Since locating there, a total of 283.4 million working hours have been recorded. Since 2007, Intel has supported 771 domestic suppliers in Ireland, spending €284 million per year on them. €8.3 billion has been spent on Irish labour since 1989. €1.75 million is donated to educational programs each year, and €5 million has been donated to communities across Ireland over the past three years.