

News Release

Infineon Villach begins mass production of a new energy-saving chip generation for automotive applications

Infineon revolutionized the world market for power semiconductors with its 300 millimeter thin wafer technology, developed in Villach. Now the company is the first in the world to begin high-volume production with this technology. The new chips make an essential contribution to reducing motor vehicle CO² emissions.

VILLACH, July 14, 2015 – Infineon Technologies in Villach is the first manufacturer worldwide to begin high-volume production of power semiconductors for automobile applications with 300 millimeter thin wafer technology. "By initiating mass production for the world automotive market Infineon Austria is setting yet another internationally visible example for optimum interaction of innovation and high-quality production at the Villach site," stated Dr. Sabine Herlitschka, CEO of Infineon Technologies Austria AG. In 2013 the "Power300" project earned Infineon Austria the Austrian State Prize for Innovation. The same year also saw complete qualification and customer approval for the new generation of power semiconductors.

The manufacturing technology developed in Villach for especially thin energy-saving chips strengthens Infineon's leading position in worldwide power electronics. The semiconductors enable even more efficient power conversion in electronic systems. At the same time mass manufacturing is made significantly more productive. A 300 millimeter wafer has a diameter 50 percent larger than that of a 200 millimeter wafer, making it possible to produce approximately two and a half times as many chips in a single production run.

Higher performance, more environmentally friendly

The first product family is OptiMOS™ 5 with 40 volt variants. The chips of the newest generation provide for more efficient energy consumption in motor vehicles and thus reduce CO₂ emissions. "Infineon will supply large quantities of high-performance MOSFETs for automotive applications at competitive prices. Our customers in the automotive sector will profit from supply reliability and our long-term productivity roadmap for the 300 millimeter production line," says Jochen Hanebeck, President of the Infineon Technologies AG Automotive Division.

Infineon's 300 millimeter thin wafer technology is the basis for continuous improvement in the performance capabilities of future MOSFET generations for automotive applications: The technology reduces power losses and makes compact MOSFET designs possible that increase system efficiency and power density. The 300 millimeter wafers will be thinned out to 60 μm (0.06 mm), making the OptiMOS 5 power semiconductors among the thinnest of their type in the world. By way of comparison, a sheet of standard typing paper is about 110 μm (0.11 mm) thick.

Additional Information

Technical details on OptiMOS™ 5 40V are available at www.infineon.com/automotivemosfet

About Infineon Austria

Headquartered in Villach, Infineon Technologies Austria AG is a Group subsidiary of Infineon Technologies AG. Infineon Technologies Austria operates research and development centers in Villach, Graz and Linz, the IT-Services GmbH in Klagenfurt and a sales and distribution management office in Vienna. With over 3,300 employees throughout Austria, of which approximately 1,200 work in research and development, the company achieved sales in fiscal year 2014 (as of the end of September) of € 1.3 billion.

More information is available at www.infineon.com/austria.