Where Expanding Markets and Next Generation Technologies Meet

The Market

Germany’s Semiconductor Industry

Germany is the beating heart of the European semiconductor industry, ranking among the top five locations worldwide. Microelectronics is one of Germany’s fastest-growing industry sectors. The country hosts an unparalleled density of world-leading device manufacturers and suppliers for materials, components, and equipment across the value chain. Investment opportunities are numerous, both in design and manufacturing as well as applications.

Investment Areas

Automotive Industry

Germany dominates the market for automotive semiconductors with more than a third of global
Strong application markets push industry growth and initiate new trends

market share. In 2011, the auto industry accounted for 39.6 per cent of all semiconductor revenue in Germany. Between 2000 and 2011 the German semiconductor automotive segment grew by 163 per cent, and is forecast to keep growing by 43 per cent between 2011 and 2016. Highly qualified engineering personnel and close proximity to customers are the keys to this success.

Germany is a highly attractive location for automotive electronics research and investment thanks to constant growth in the global automotive market allied to increasing demand for German-made high-quality vehicles, particularly from emerging countries. German car manufacturer outputs are expected to increase continuously over the next years, reaching an annual output level of 6.7 million until 2016. Germany is Europe’s largest automotive market, both in terms of production and sales, accounting for 37 per cent of all passenger cars produced in Europe. Since 2006 the automotive industry is the largest purchaser of semiconductor devices in the country. Leading the segment, electronic components assembly accounts for 42 per cent of the total German automotive electronics market.

Industry and Power Semiconductors
The second largest microelectronics segment in Germany is industrial electronics, with an over 25 per cent share of the domestic semiconductor industry. Strong growth rates originating from a diversified industrial base consolidate Germany’s leading technological development position. The German microelectronics market for industrial applications will grow by more than ten per cent annually through 2015. Historically, the largest segments are building technology, automation and electronic payment systems with a combined share of nearly 50 per cent, followed by smaller but promising application areas including power semiconductors.

The German power semiconductor market provides a number of different market opportunities in the coming years. Abandoning nuclear energy in 2022 and switching to renewable energy sources will require enormous research efforts and investment in high-performance power semiconductors, especially metal oxide semiconductor field effect transistors (MOSFET) and insulated gate bipolar transistors (IGBT). Because they are applied in the high-voltage segment IGBTs are encroaching into MOSFET territory and gradually increasing their market share. As to mobility, the current power semiconductors share (25 per cent) of the total automobile cost is likely to increase to approximately 30 per cent by 2015. While the North American market is in the mature stage, Europe and Germany are likely to drive market demand for power semiconductors.

Advantages
The advantages of establishing your business in Germany:

- Dedicated materials development
- Pioneering microtechnologies
- World-leading machinery and equipment suppliers
- First-class electronic device manufacturers
- Rapidly expanding application markets
- Governmental investment and R&D support

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