

Automotive, Industrial and Multimarket Electronics provide more security, efficiency, and convenience

Our semiconductors for automotive electronics meet highest quality standards in the industry. Energy consumption can be reduced through intelligent use of motors and lamps. We deliver highest security for identity cards, passports, and networks.

Automotive electronics: driven by fuel saving and passenger safety

In the automotive industry, manufacturers and electronics suppliers depend upon strong planning and long-term customer relations because of long product life cycles. Infineon, number one in European automotive and number two worldwide, also maintains stable business relations with over 200 customers directly, and with several thousand indirectly through distribution partners. Many Infineon customers are based in Europe where most automotive innovations are still conceived.

Increased driver concern about safety and convenience has steadily raised the proportion of electronics and thus the number of semiconductors in each car. Quality is of the greatest importance for all automotive products, including the semiconductors used in vehicle applications. Infineon has therefore introduced its Automotive Excellence Program to meet these superlative standards. The program's goal is to ensure that absolutely no component defects arise. In July 2005, Continental Automotive Systems presented its "Supplier of the Year 2004" award to Infineon, the first semiconductor company to receive the honor. This clearly demonstrates the success of this program.

Technical developments that save fuel and reduce emissions are also becoming increasingly important. The 32-bit microcontrollers of our TriCore family of products, which are used for engine and transmission control, and in particular the --> **TriCore TC1796**, make use of their immense computing power to achieve greater engine efficiency and to fulfill the highest requirements in efficiency, and fuel and emissions optimization.

A further automotive trend is the replacement of mechanical and hydraulic components by electrical systems. This requires high voltages to be regulated with the minimum possible heat. Infineon has developed its --> **OptiMOS-T** product range specifically for automotive applications.

Demands for increased car safety and new traffic safety regulations have driven the development of pressure, rotation speed, magnetic field, shock, and roll-over sensors. This segment of automotive semiconductors further promises high growth rates.

Industrial electronics: demand higher efficiency and smaller components

In the past financial year, Infineon has newly organized its industrial business, expanding its microcontroller range and its power product portfolio, which includes products for electric motor drive control. We place particular emphasis on the development of highly efficient power transistors, and the reduction in size of components and modules used in power supply units. Switching power supplies used in PCs, notebooks, and consumer electronics are our main focus. They can also be found in electrical drives for air conditioners, washing machines, industrial automation, trains and wind turbines.

Industrial control can be extended to energy conversion and load-control applications. A great deal of power can be saved if engines and pumps are flexibly controlled according to need, rather than with a basic on-off switch. These devices are known as variable-speed drives. Digital power management in power semiconductors is increasingly used in industrial and automotive applications.

Chip card: the highest of security requirements

Personal identification (passports, identity cards, and health insurance cards) and forms of payment (credit and debit cards) are the primary driving forces behind security chip growth. Both contact and contactless chip cards need to meet the highest security and performance requirements.

SIM cards have also gained in importance, particularly through the immense growth of the mobile phone market in emerging countries. Low security standards for cards in those countries have, however, led to low barriers to

market entry, and thus high competitive pressure on chip manufacturers. Cards with memory configurations from 8 to 64 kilobytes have finally become a commodity business with the usual low profit margins. In order to increase the profitability of this business, we have introduced low-cost versions and expanded our contactless security applications portfolio. Over the past financial year, for instance, we have brought a new production technology to market, as well as the --> **MicroSlim** memory technology, and the module-mounting technology, Flip Chip On Substrate (--> **FCOS**).

... Letter to the shareholders, p. 4

The Company's early entry into the PC and network security market with Trusted Platform Modules (TPM) has paid off. PC manufacturers will begin to install the latest version of these chips (--> **TPM 1.2**) in their products over the coming months. Infineon is the only company that supplies both chips and the associated software.

ASIC & Design Solutions: customized chips include great system expertise

In our ASIC & Design Solutions business, we translate our wealth of know-how, patents, and system expertise into new products that we develop in close cooperation with our customers. With this approach, we can shorten the development phase and enable our customers to introduce new products with fast time to market. The most recent example is our cooperation with Microsoft, whose Xbox 360 game console includes three of our components (--> **plug-in memory module, security chip, gamepad controller**).

Sites expanded in Asia and Europe

The construction of our new factory for the production of power semiconductors used in the automotive and industrial sectors in Kulim High-Tech Park, Malaysia, is proceeding according to plan. The first clean-room equipment is expected to be installed there in March 2006, with production planned to begin in the last quarter of the 2006 calendar year. With this investment, we are securing the expansion of our production capacity to support our growth, while cutting our manufacturing costs considerably, thanks to the factory's lower level of labor costs.

We have also expanded our development activities in the past financial year. We opened, for instance, a new development center in Bucharest, Romania, in April 2005, and expanded our research centers in Villach, Austria, and Padova, Italy.

... Infineon's sites worldwide, p. 28

Infineon innovations

TriCore TC1796

Engine control is one of the most computationally intensive and time-sensitive tasks in an automobile. We have designed the TriCore 32-bit microcontroller range for these complicated real-time calculations. The TC1796, with 40 million transistors, is, to date, the most complex of our automotive components.

OptiMOS-T

Direct current converters such as those found in notebooks, network servers, and even in cars, are typical of applications supported by our OptiMOS product range. We have developed our new Trench 55V technology (OptiMOS-T) specifically for automotive use.

MicroSlim

The memories based on the MicroSlim technology can in the future be built with only one transistor per bit cell instead of the current two. This reduces chip size and production cost.

FCOS

Flip Chip On Substrate (FCOS) is a new process that connects silicon dies with the golden contact surface of the chip card. The chip is secured with its surface face down (flip chip) on the substrate.

TPM 1.2

Delivery has begun of the second generation of TPM chips for PC and notebook manufacturers. Over time, we expect these chips also to be used for set-top boxes, game consoles, and mobile phones.

Plug-in memory module, security chip, gamepad controller

These ASICs are used, for example, in the basic equipment and accessories. The plug-in memory module can store scores of games. The security chip ensures accessories function properly. Furthermore, the gamepad controller works remotely thanks to our wireless chips.