

Automotive, Industrial & Multimarket

- > Greater concern for safety and comfort issues means more chips in automobiles.
- > We supply semiconductor components for the entire energy distribution chain.
- > More and more customized chip configurations include our security functions.

The operational business of the Automotive, Industrial & Multimarket (AIM) group is divided into three businesses: Automotive, Industrial & Multimarket, and Security & ASICs.

Automotive

With our range of microcontrollers, power semiconductors and sensors, we cover the three most important fields of automotive applications – the power train, safety and body & convenience electronics. Our product portfolio is completed by communication components for on-board power networks and by wireless communication modules.

Industrial & Multimarket

Our power semiconductors and modules help supply electricity throughout the entire power grid – from energy generation through energy transmission to energy consumption. Power MOSFETs, IGBTs (Insulated Gate Bipolar Transistors), thyristors and diodes are the most important components in this field. We supply semiconductor components for control and commutation of motors of all shapes and sizes, as well as for the activation of light sources, energy-saving lamps and light-management systems.

Security & ASICs

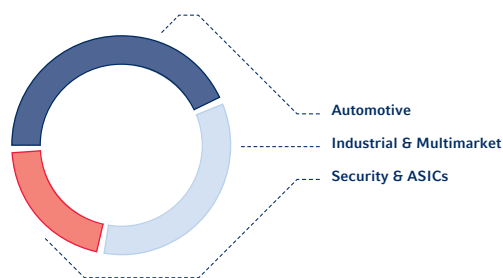
Our wealth of experience with chips for security applications has been translated into SIM cards, cards for banking, health insurance and PayTV, into biometric personal identity cards and passports, as well as contactless applications. Furthermore, we are developing and manufacturing chip designs to meet customer specifications for applications such as hard-disk drive controllers, Trusted Platform Modules (TPM), game consoles and hearing aids.

The proportions of AIM sales volume for the 2006 financial year are presented in the diagram "Sales by businesses of the Automotive, Industrial & Multimarket group."

Orientation to Global Trends

Regarding AIM applications, two global trends have been identified towards which we will orient our business and which today, as in the future, will drive our growth.

SALES BY BUSINESSES OF THE AUTOMOTIVE, INDUSTRIAL & MULTIMARKET GROUP



Energy Efficiency – When we refer to saving energy, we are really speaking about making our energy use more efficient. The focus of our attention is on electrical plants and equipment as well as on combustion engines. For electrical plants and equipment we distinguish between three areas: efficiency in energy generation, efficiency in energy transmission and reduction of power consumption by electrical devices, e.g. household appliances or consumer electronics, engines and drives in industrial plants and trains. In the case of combustion engines, legal provisions as well as the self-imposed restrictions of the automotive industry are driving developments towards reducing fuel consumption. All these efforts must be seen against a background of growing worldwide energy demand, dwindling natural resources and the rapid expansion of motorization and consumption in Asian societies.

Safety & Security – Safety drives our growth, because motorists have the right to expect vehicles which offer the highest standards of safety features, and governments demand that the automotive industry comply with increasingly strict safety regulations. Accordingly, programs are running in Europe and in the USA which aim to achieve significant reductions in the number of casualties in traffic accidents. Security guarantees the safeguarding of data and protection of intellectual property. This trend will play a major role in the lives of citizens, firms and governments in the future. Chip-based cryptographic procedures for encoding and decoding transmitted data is one of our particular fields of competence.

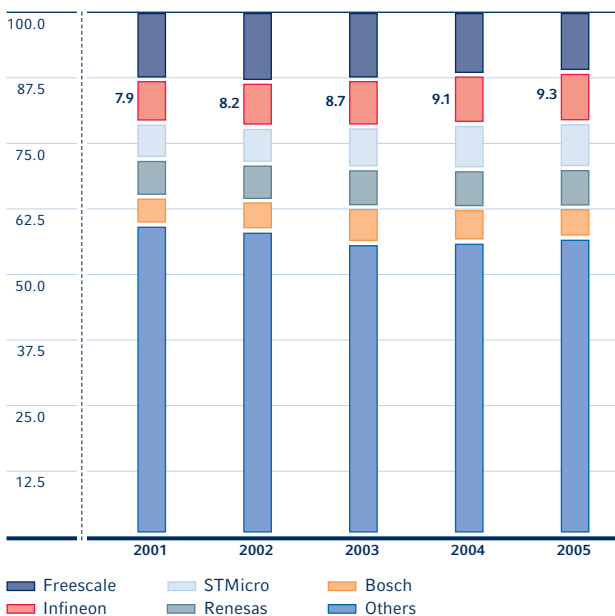
Automotive

The total market for semiconductor products for automotive electronics applications achieved a volume of U.S. \$16.4 billion in the year 2005. With sales growth of 11.9 percent, Infineon was able to grow much faster than the world market, which grew by 7.5 percent, and to achieve a current market share of 9.3 percent. The company thus reinforced its second-place ranking and closed the gap still separating it from the world leader (see Chart "Development of market shares of semiconductor products for automotive electronics"). In Europe Infineon is, and remains, the unrivalled market leader.

As a result of the efforts it has made with regard to quality and reliability, Infineon attained sixth-place ranking in sales on the most intensely competitive Japanese market, the best position achieved by a non-Japanese company. This achievement is thanks to the Automotive Excellence Program which has been running for three years now with the goal of zero-defect products. Since the automotive sector has the highest quality standards of all, Infineon uses its own production facilities to manufacture chips for the automotive industry which are designed to meet these quality standards. The pursuit of this multi-fab strategy is further advanced with the start-up of a facility for chip production in Kulim, Malaysia.

Europe continues to be the most innovative automotive market in the world. It is not by chance that we have our

DEVELOPMENT OF MARKET SHARES OF SEMICONDUCTOR PRODUCTS FOR AUTOMOTIVE ELECTRONICS IN %



Source: Strategy Analytics, May 2006

major customers here: Siemens VDO, Bosch and Continental Automotive Systems. Yet we foster close relations not only with our European customers, but with our customers all over the world – the decisive prerequisite for us to drive innovation.

The Automobile Is Still the Most Popular Means of Transportation

The automobile is a permanent feature of our daily mobile lives and – when compared with other traffic systems – by far the most widely used means of transportation. However, automobiles are also responsible for more than one-tenth of CO₂ emissions in Europe. This is why regulations governing toxic and particle emissions are becoming increasingly stringent and, consequently, there is demand for increasingly sophisticated engine management systems. Infineon's microcontrollers, power semiconductors and sensors ensure that modern vehicles comply with both European and American exhaust emission regulations. Our 32-bit microcontrollers, such as the > **TC 1796**, are incorporated into many high-performance management systems for diesel and gasoline engines and guarantee reduced fuel consumption and low emission levels.

As a consequence of the growing demand by vehicle users for greater safety and comfort, the number of electronic components and semiconductors in motor vehicles has constantly risen over recent years. It is increasingly the case, for example, that middle-class and economy-class cars are equipped with ABS and airbag systems. Comfort – just think about automobile air-conditioning or power windows – is the second factor that is driving growth in automotive electronics.

The Vehicle's Sensory Organs

Sensors act as the vehicle's "sensory organs"; they are alive to any changes in routing/direction, angle, engine speed, vehicle speed, acceleration, vibration, pressure, temperature and other influential parameters. Their signals have become indispensable to a vehicle's control and regulation functions. Infineon is one of the few semiconductor manufacturers which offers all three main sensor groups: pressure, magnetic and inertia sensors.

The safety applications that we contribute to include side-impact protection, for example the > **KP series of pressure sensors**, measurements of wheel rotation (for example for ABS or electronic stability control) and of tire pressure as well as rollover sensors. Semiconductor sensors also play an important role in engine management. Here they ensure the optimal fuel-air mixture for ideal fuel combustion.

Particular attention here is given to the development of suitable packages which protect the chip sensor yet permit access to environmental influences which must be measured, such as barometric pressure. We thus develop solutions which integrate sensors as well as evaluation and control electronics on one chip located in one package. An example of this is the steering-angle sensor for power steering systems.

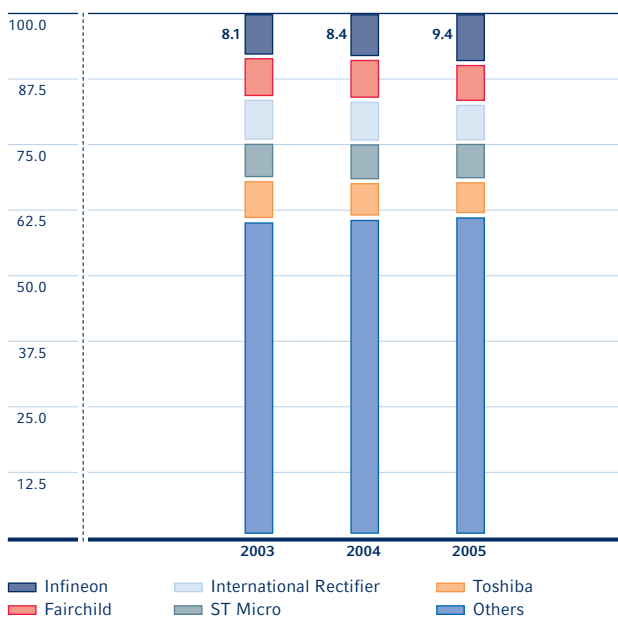
Like all its other components for automotive applications, Infineon's sensors must comply with the provisions of our Automotive Excellence program. Our competence with such systems and our understanding of customers' wishes are our success factors in the automotive field.

Industrial & Multimarket

According to IMS research, in the power semiconductors sector with a market volume of more than U.S. \$11 billion in the 2005 calendar year we achieved a market share of 9.4 percent and thus maintained our market leader position for the third successive year (see Chart "Gains in market share for power semiconductors"). And the market continues to grow: According to the same market researchers we can expect annual growth of 6 to 8 percent over the next five years.

Power semiconductors are the prerequisite for efficient energy management, whether in switching power supplies

GAINS IN MARKET SHARE FOR POWER SEMICONDUCTORS IN %



for PCs or in drive controls for electric motors in washing machines, industrial plants and locomotives. In households, which consume the greatest proportion of energy worldwide, our components help significantly reduce the energy requirements in refrigerators, air-conditioning systems, electric stoves and in economical cooking systems such as induction stoves. What is more, our semiconductors have already been used for many purposes in wind generators and solar energy plants as well as in power stations and transformer stations (for example the > light-triggered thyristor). In addition, our > CoolMOS® products considerably reduce energy consumption in stand-by mode.

Security & ASICs

The requirement for greater security in the private sector, in companies and in government is on the increase, as is privacy protection and the protection of material and intellectual property. As a consequence, we are witnessing particularly high rates of growth in what is known as e-Government. This encompasses such things as passports, personal identity cards, health insurance cards and other official documents. As the market leader for security chips, Infineon supplies more than twenty countries worldwide which are already in the process of introducing electronic identification documents or which have begun trial projects. In line with the constant improvements in its national security measures, the U.S. government has chosen to incorporate Infineon's > high-security chips into its next generation of passports.

However, we still achieve our highest sales revenues in the intensely competitive market for SIM cards for mobile telephones. The measures already introduced a year ago to improve profit margins – such as partial withdrawal from unattractive, price-sensitive segments, conversion to more modern manufacturing technologies, focusing on high-quality SIM cards based on 32-bit controllers and with greater functionality – are beginning to pay off. The SIM card market is a market with an attractive volume growth potential. As market and technology leader, for example with our 130-nanometer Flash-based SIM cards, we are confident that we can again achieve a sustainably profitable chip-card business.

Customized Chips with Security Functions

The issue of security also plays an increasingly prominent role in customer-specific projects. This development has been appropriately acknowledged by a reorientation of

this department to facilitate a better approach to certain customer projects. Some examples of customized chips, or so-called ASICs, with security functions are the projects executed for Microsoft: a series of chips and modules for the Xbox 360 game console as well as the FlexGo Project, in which we are working in a cooperation partnership. We are expecting new impetus for the Trusted Platform Module (TPM) as a result of the introduction of Microsoft's new operating system Vista, which provides better support for TPM than operating systems on the market today.

In addition to the security applications, we are also achieving growth above all in our greatest ASIC business activity, hard-disk drive controllers for Hitachi Global Storage Technologies.

Semiconductor Facility Opens in Kulim

Our facility in Kulim, Malaysia, officially opened on September 12, 2006. This plant is a further addition to our existing chain of production facilities. Together with Villach in Austria and Regensburg in Germany it forms a strong association for the future – what we call the Power Logic Cluster. In Regensburg and Villach, we specialize in the development of new technologies and applications. Further growth in our high-volume product manufacture will come from the new facility in Kulim. In this way, the cluster benefits from the cost advantages of an Asian site as well as the many years of expertise and innovative capacity of our two European locations. The opening of the Kulim plant, which currently employs about 800 people, is an important milestone in the preparation of our company for a successful future, and marks the beginning of a further important chapter in our history of success in Asia.

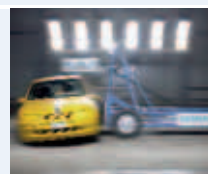
Infineon Applications for Automotive, Industrial & Multimarket

> TriCore® TC 1796 for engine management

This is the world's first automotive 32-bit controller in 130-nanometer technology with embedded Flash. With the help of the TC 1796, we are able to control gasoline and diesel engine units. For example, fuel efficiency and toxic emissions depend on the precise injection of the air mixture and the exact moment of spark plug ignition. Both these parameters are optimally governed by the TC 1796.

> KP series pressure sensors for side airbags

Modern side airbag systems evaluate both acceleration and pressure. The acceleration sensor is generally embedded in the frame of the vehicle, whereas the pressure sensor is mounted in the door and more quickly detects the increase of pressure during side impact. This triggers the airbag much sooner.



> CoolMOS® in flat screen televisions

CoolMOS® is the name of our family of power transistors in the range above 300 volts. Their particular advantage is their low power dissipation rate. This means they can control other major power consumers without generating much heat themselves and thus without using energy. As a result, there is no need for a cooling fan which, in a television, would obviously be a disturbance.

> Light-triggered thyristors in power stations and transformer stations

The world's longest undersea power cable connection brings renewable energy from the island of Tasmania to Australia. The connection provides a 400-kilovolt HVDC (high-voltage direct current) transmission. At the receiving end, the direct current is converted with the help of light-triggered thyristors into alternating current. These need a great deal less control electronics than electronically triggered thyristors.



> Contactless chips for U.S. passports

The new electronic passport will have one of Infineon's chips in its back cover that will store all the information contained in the passport in encoded form. This means that Infineon has a contract to supply the largest national passport project in the world. To achieve this, our chips have successfully passed the world's most stringent security checks.