

# Review of the 2004 financial year

2003

## October

- Improved security for Hewlett-Packard business notebooks:** Infineon provides security chips that improve access control to networked computers and ensures greater data protection – both in the office and when traveling.
- Up to 25 percent power savings with fluorescent tubes:** The new LightMOS chip saves up to 25 percent power and, installed inside electronic lamp ballasts, provides more comfort – in the future, fluorescent lights will flicker less and can be dimmed.

... Our contribution to ecology, p. 42



LightMOS chip

2003

## November

- High-speed data transmission using existing infrastructure:** The XPAK transceiver module transmits data up to 300 meters error-free at a rate of ten gigabits per second. On average, more than 80 percent of a company's infrastructure today utilizes such multimode optical fiber networks.
- Internet, video, and multimedia applications via satellite:** Constellation, developed by Infineon in cooperation with ViaSat of the U.S. and ZyXEL of Taiwan, enables VDSL to achieve a transmission rate up to 200 times that of conventional 56k modems.

Constellation .....  
Via VDSL up to  
**200 times faster**  
than conventional 56k modems

2003

## December

- Broadband applications using conventional telephone infrastructure:** The MetroMapper 622 network chip allows data and traditional telecommunications equipment manufacturers to develop flexible Ethernet systems using existing optical fiber networks.
- Improved RFID chips for logistics:** In cooperation with Magellan Technology of Australia, Infineon has developed RFID chips that can be identified, read and written 25 times faster than previous components. The smart labels are gaining increasing acceptance.

... Secure Mobile Solutions, p. 18



RFID tags with chip and aerial

2004

## April

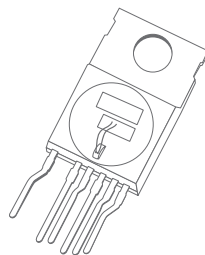
- Planar memory with more capacity:** The 36 individual 512 Megabit chips in the 2 Gigabyte DDR2 memory module are not stacked as in previous modules, but placed next to each other in a planar design. The module is only 4.1 millimeters thick.
- Finisar acquires fiber optics business:** The Finisar Corporation and Infineon agree to the transfer of Infineon's fiber optics business to Finisar. Upon approval, with the acquisition of Infineon's development, production, and various marketing activities for fiber optics components, Finisar is expected to become one of the world's largest companies specializing exclusively in optical components.

2004

## May

- Chipset reduces power consumption:** The CoolSET F3 optimizes power efficiency and reduces stand-by power consumption to 75 milliwatts in power supply units – half as much as previously available, and well below the consumption levels specified by law.

... Our contribution to ecology, p. 42



CoolSET F3

2004

## June

- More sensors for automotive safety:** Infineon presents three new safety sensors for applications such as side airbags, tire-pressure monitoring and anti-lock brake systems.
- Breakthrough in non-volatile MRAMs:** Infineon and IBM have developed the world's first magneto-resistive memory with a 16 Megabit capacity and, thus, the highest memory density currently available.
- More efficient language and data communications:** The GOLDMOS high-power radio frequency transistors, for use in mobile communications base stations, digital radio and television, combine high bandwidths with an improved efficiency rate.

... Secure Mobile Solutions, p. 18

2004

## January

- Research and development in China:** In Xi'an, China, Infineon opens a new design center, which develops chips for communications, automotive and industrial as well as memory applications. The design center will become one of the largest in Asia.  
... Innovation, p. 24
- Infineon acquires ADMtek Inc.:** The acquisition of the Taiwanese semiconductor company, specialized in networking and communications systems, strengthens the Wireline Communications business group. The unit will concentrate on the development of chips for broadband Customer Premise Equipment (CPE) and open up the market of home gateway systems to Infineon.  
... Wireline Communications, p. 16

2004

## February

- More performance for Linux:** The 32-bit TC1130 microcontroller for industrial and communications applications is now compatible with all common operating systems, and outperforms previous capability by a factor of three.
- New platform introduced:** The multimedia mobile phone platform supports UMTS, EDGE and GPRS; the platform P2002+ offers features such as camera functionality and color displays.
- Extension of Dresden development center:** With the extension of its design center for memory products in Dresden, Infineon creates 120 new jobs and consequently increases the importance of the site for the development of process technology, especially in the field of DRAM products.

2004

## March

- Samsung joins development partnership:** A group of now four semiconductor companies including Infineon, Chartered Semiconductors and IBM is focusing on the logic processes of the next generation, involving initially 65-nanometer and later 45-nanometer technology. ... Innovation, p. 24
- Communications processor bridges access networks:** The ConverGate-C links together previously incompatible network protocols, enabling advanced communications services such as Voice over IP and Video on Demand.  
... Wireline Communications, p. 16



ConverGate-C processor

2004

## July

- Fingerprints in passports:** A new chip card controller with twice as much data storage space and over 50 security mechanisms provides enough capacity for biometric data.
- All on one chip:** SMARTi SD, the world's first single-chip radio frequency transceiver, combines all the functions for the GSM/GPRS mobile-phone standard, so that it requires only half as much space.



SMARTi SD

2004

## August

- Partnership with Winbond expanded:** Infineon transfers its 90-nanometer DRAM trench technology developed using 300mm wafers, to the Taiwanese Original Equipment Manufacturer Winbond. Infineon, in turn, holds an option for the memories produced using this technology.
- Memory module for the next generation of servers:** Infineon successfully tests a newly developed advanced memory buffer chip, which will fulfill the speed and memory capacity requirements of future workstations and servers. ... Memory Products, p. 22

2004

## September

- Outstanding supplier:** Sun Microsystems presents its Meritorious Award for Supply Chain Excellence to Infineon for its excellent work in the 2004 financial year.
- Wireless automobile communications:** Infineon and Volkswagen cooperated on developing a platform that will soon make wireless telecommunications and the use of local information services a standard feature for all classes of vehicle.
- Chinese milestone:** In Suzhou, China, Infineon opens a new back-end facility – to begin volume production in early 2005 – and an IT development center. ... Production, p. 34

## Did you know that ...

- ... of the total of about 35,600 employees at Infineon, one in five is involved in the area of research and development?
- ... worldwide annual revenues in the semiconductor sector grew more than 40,000-fold between 1958 and 2003 to 166 billion U.S. dollars?
- ... there were about 30,000 circuit components on a regular chip twenty years ago and that, today, over 125 million of such miniature components are fitted into the same amount of space?
- ... today, there is an average of 110 million transistors per inhabitant on earth?
- ... the semiconductor chips in today's vehicles provide more computing power than those in the spacecrafts of all Apollo missions?