

Infineon

Pioneering 300

Setting the Pace for Semiconductor Manufacturing

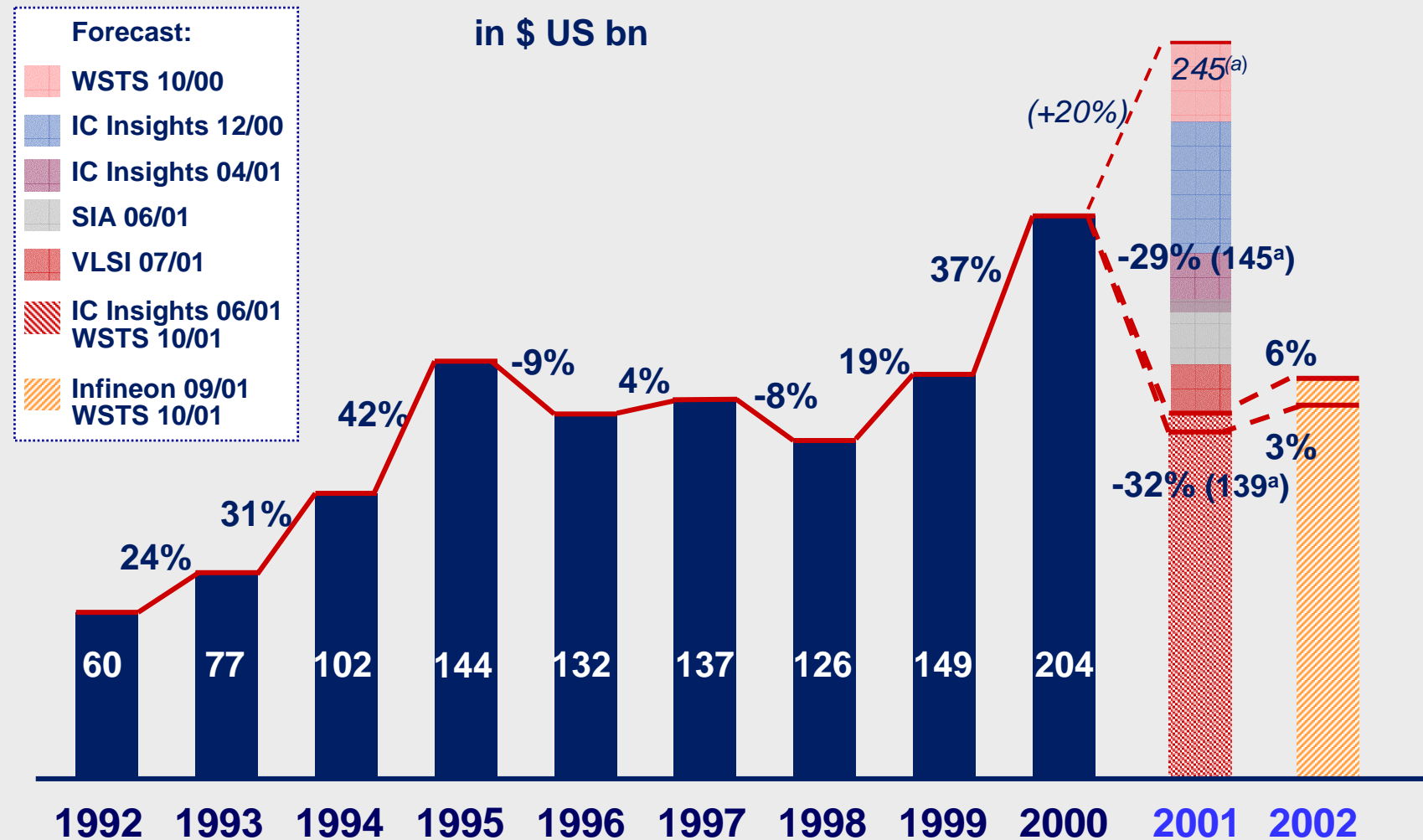
December 12, 2001

Dr. Ulrich Schumacher
President and CEO
Infineon Technologies AG



Never stop thinking.

Semiconductor Market Development



(a) Calculated by applying 2001 growth rate forecast for semiconductor market to total semiconductor sales in 2000

Declines in Infineon's Target Markets

08/00 10/00 12/00 02/01 04/01 06/01 08/01 10/01

**Personal
Computer**

**Broadband
Communications**

**Mobile
Communications**

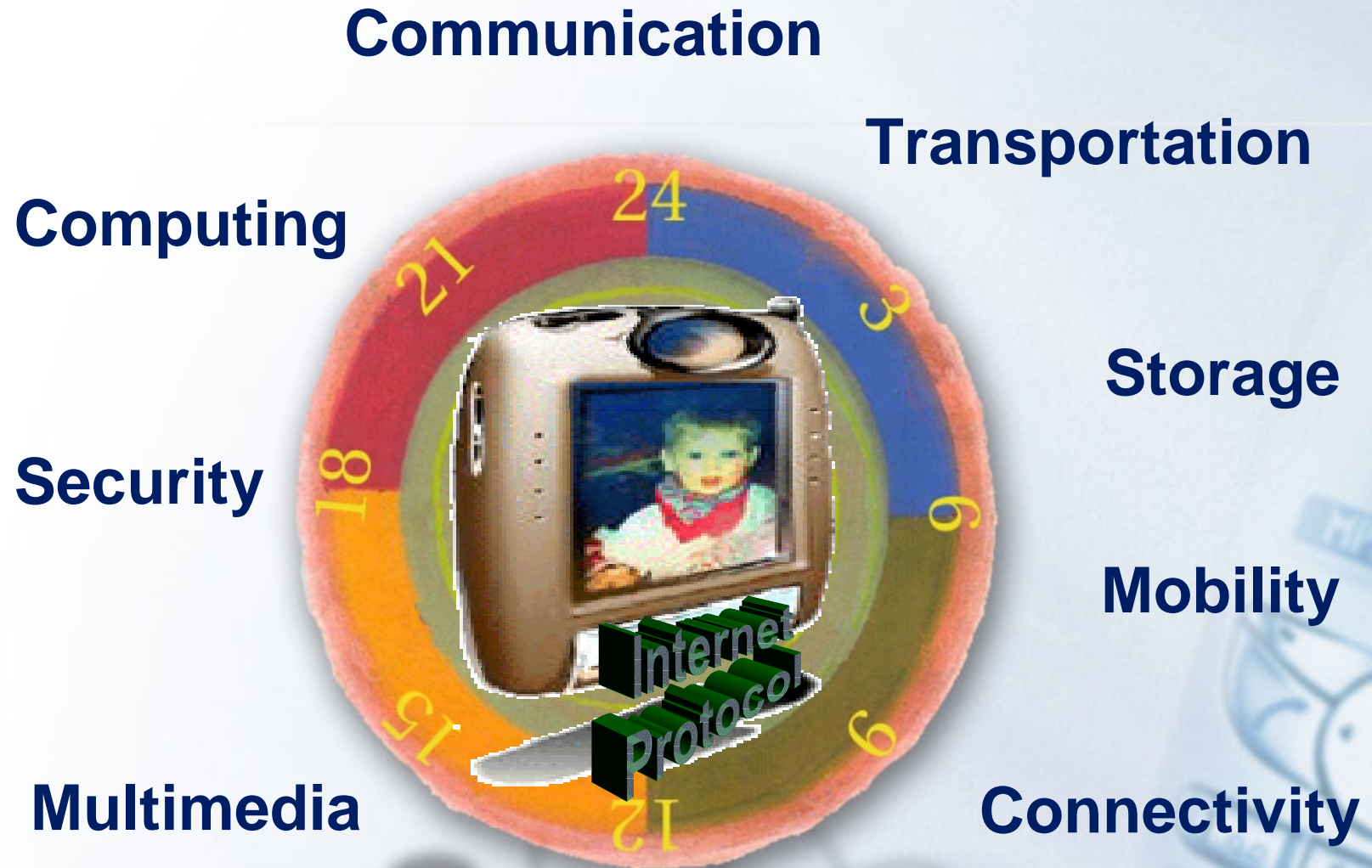
**Security- and
Chipcard-ICs**

**Traditional
Telecom
Infrastructure**

Fierce Competitive “Shake-Out” on the DRAM Market

- Comprehensive weakness in demand for memory products: not only PCs and notebooks but also server and workstations
- For the first time in 15 years PC sales will drop by 6% in 2001
- Strong price erosion for 128Mb SDRAM - average price September 2000: US\$ 15; October 2001: below US\$ 1
- Currently fierce competition among DRAM-manufacturers following a “shake-out” strategy
- Massive distortion of fair competition in the market though US\$ 7 billion bailout of Hynix since December 2000 supported by the Korean government clearly breaching WTO regulations on subsidies

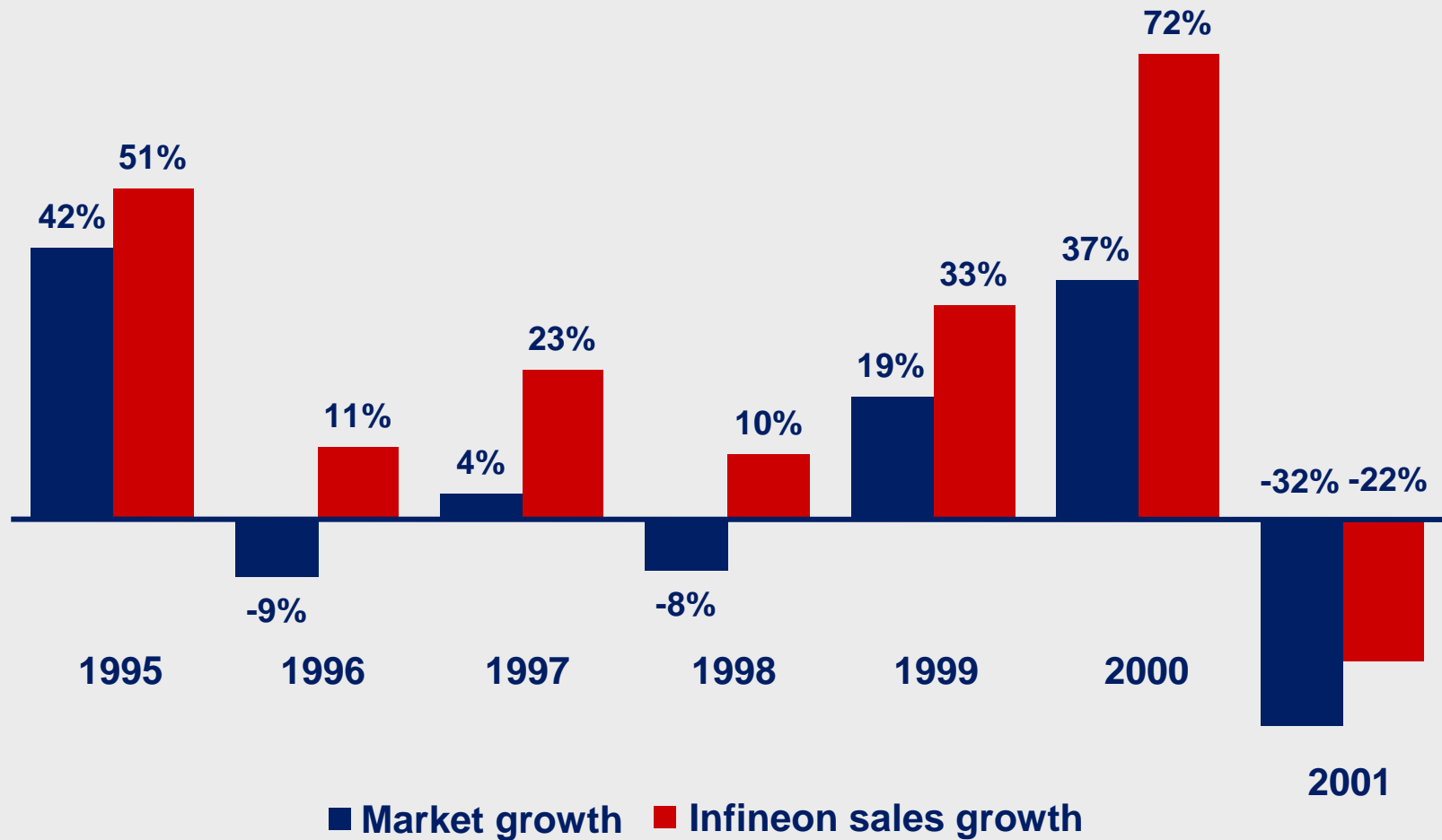
Converging Trends Towards a Networked Internet Society



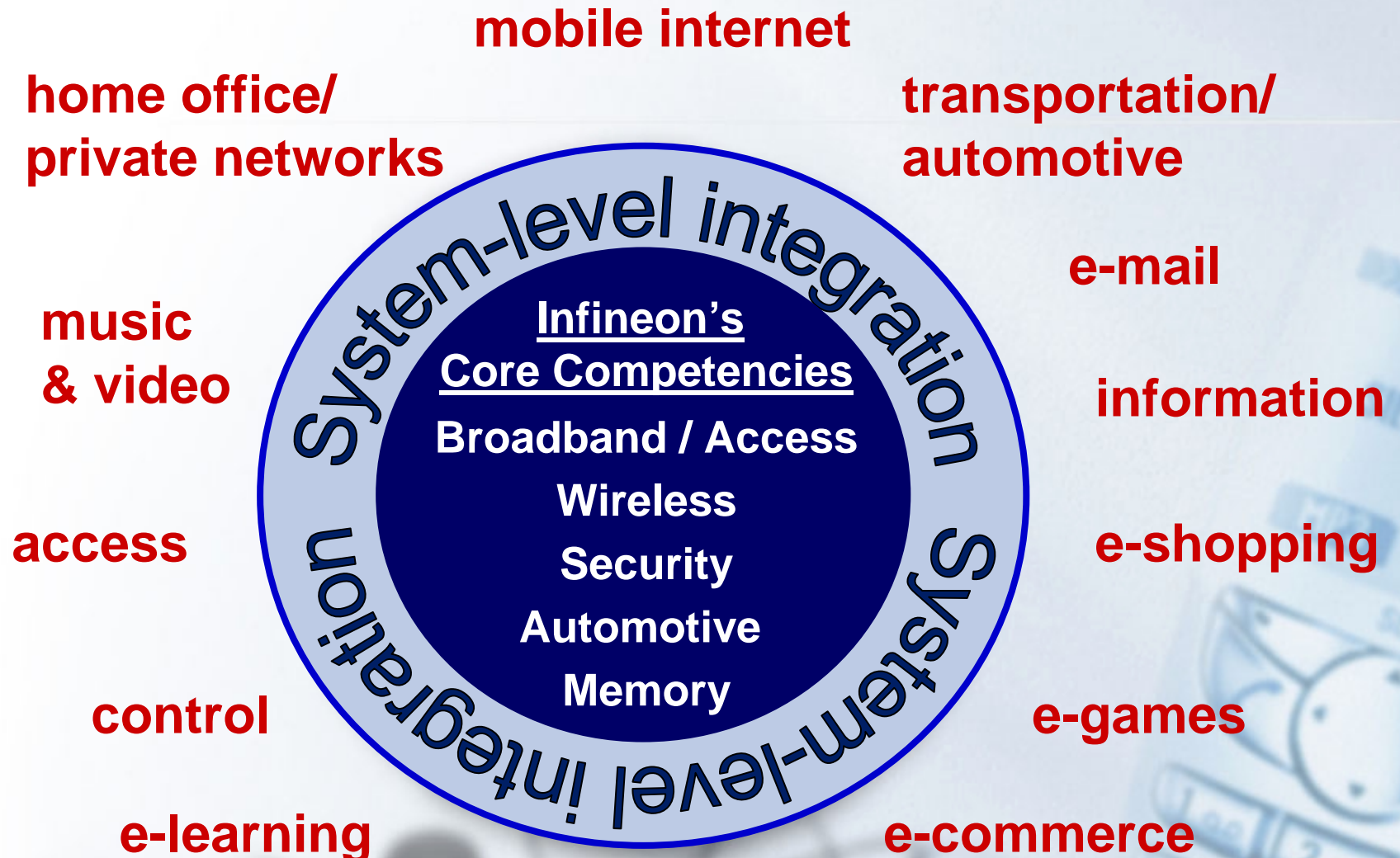
Infineon at a Glance

- Infineon - a top 10 semiconductor company
- Revenues of €5.67 billion in FY 2001
- Maintaining top 3 position in our target markets in a deteriorating semiconductor market environment
- Gaining market share in our growth segments
- Approx. 33,800 employees (incl. 5,500 R&D engineers) as of September 30, 2001
- Strong technology portfolio with more than 32,000 patents and applications; 29 major R&D locations worldwide
- Most advanced fab cluster and world leader in 300mm production
- Best positioned for converging markets in a networked society
- Focus on communications, automotive and memory products

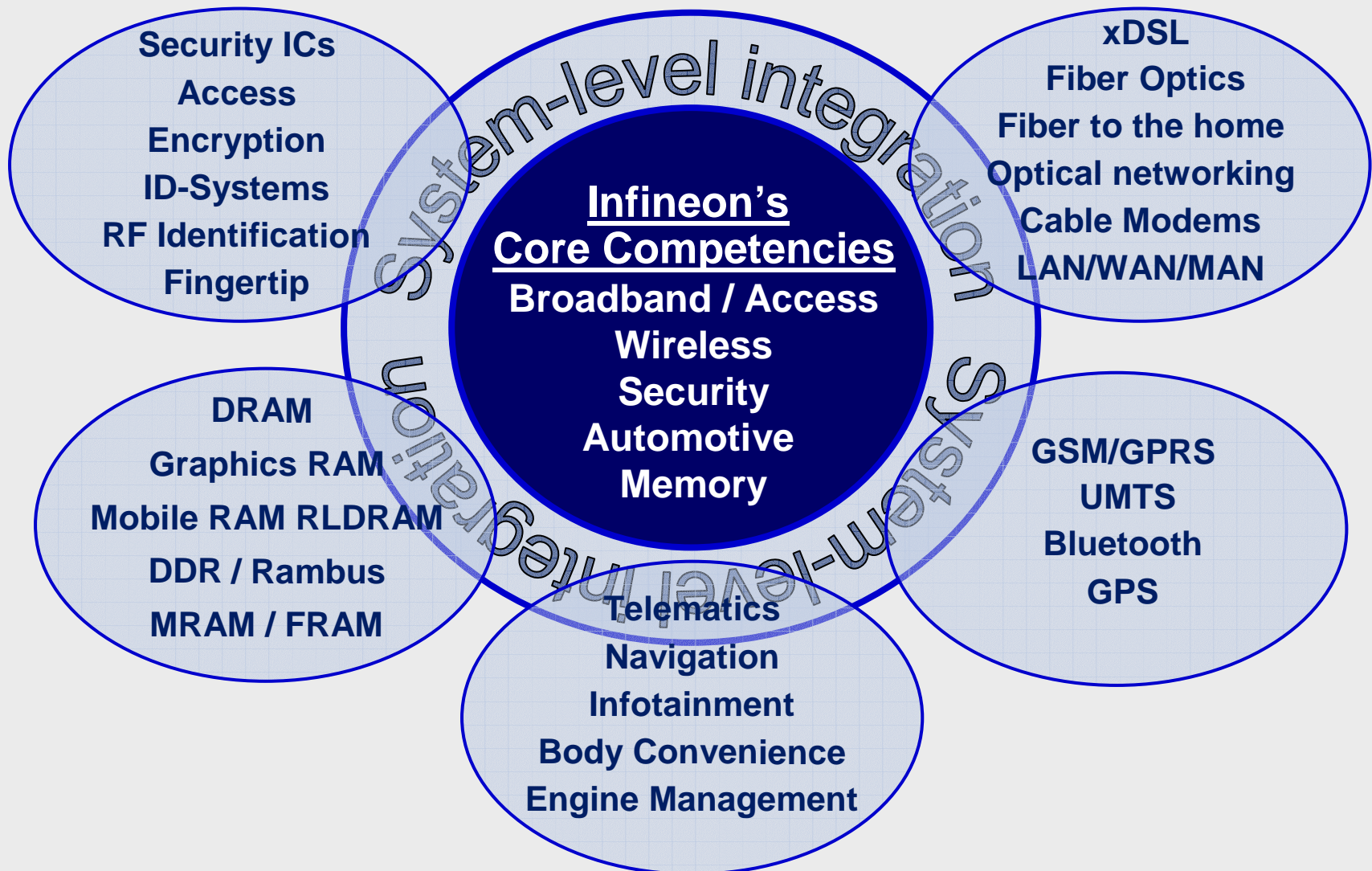
Outgrowing the Industry



Infineon's Core Competencies Enable Converging Applications



Infineon's Target Applications



Infineon - Unique Combination of Core Competencies

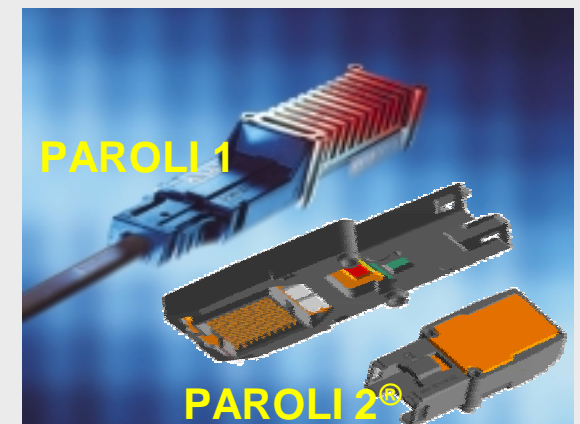
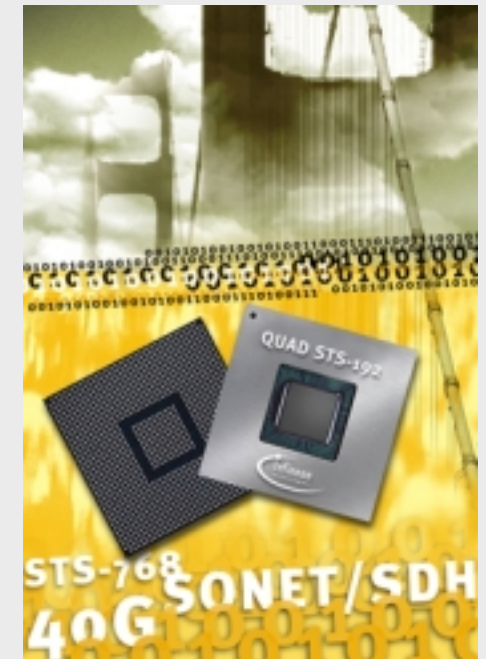
- Infineon has a world-leading position in four core technology competencies that drive the networked i-society:
 - **broadband and access**
xDSL and Fiber Optics → making communication much faster ...
 - **mobile communication**
GSM/GPRS, UMTS, Bluetooth, telematics → connecting people anywhere, anytime ...
 - **security**
smart card ICs, advanced ID-systems, biometrics → securing access and privacy ...
 - **memory**
DRAM, specialty DRAM, Mobile DRAM → managing the dramatic increase of data to be stored ...
- Infineon is uniquely positioned with semiconductor solutions across the entire spectrum of the networked i-society

Highlights Wireline Communications

- Increased market penetration in broadband communications with:
 - VDSL/10BaseS “Ethernet-to-the-home” solutions with approx. 2 million 10BaseS chipsets shipped
 - first splitterless ADSL chipset for Digital Loop Carrier
- Continued technology leadership in optical networks with 10/40 Gigabit per second solutions
- Maintaining strong market position in traditional telecommunication infrastructure (ISDN / analog line card)
- Successful focus on target markets Access, LAN, WAN, MAN

Building Leadership in Optical Networking

- Most comprehensive high-speed line card solution from the optics to the protocol
- First 40G solutions and first 10G and 40G framer / mapper devices
- Advanced OC-48 & OC-192 transponders for telecom backbone and 10 Gbps networks up to 10 km and beyond
- Next generation PAROLI 2 to meet today's challenges of dramatic network growth with limited space - featuring 30 Gbps total data rate
- Successful penetration of key optical players, e.g.: Cisco, Alcatel, Sycamore, Fujitsu, Nortel Networks, Siemens

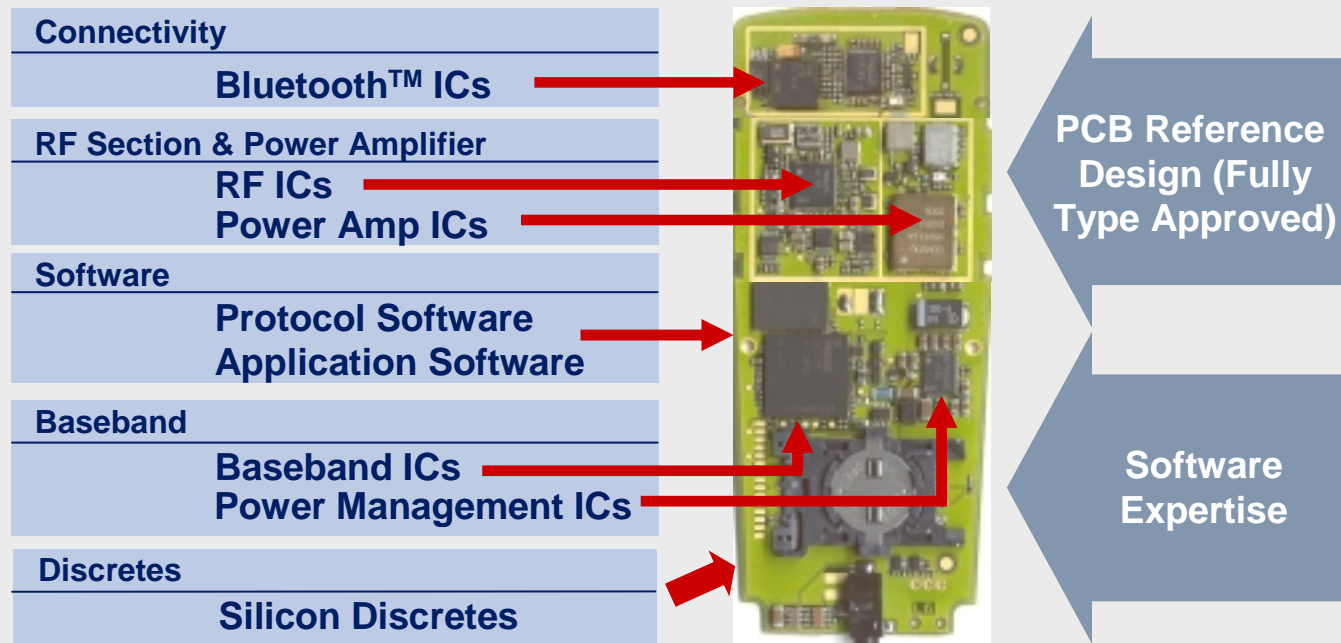


Highlights Wireless Solutions

- Proven expertise in wireless systems solutions, offering complete solutions for GSM/GPRS Mobile Phones
- Advanced technology leadership in short range wireless communications with introduction of Infineon Bluemoon™ Bluetooth solutions at major customers, e.g. Acer, Panasonic, Samsung, Sony, Murata, Siemens and Nokia
- Restructured business group according to target markets

Wireless Communications - Leading Systems Offering

System design + software expertise for 2G, 2.5G and 3G



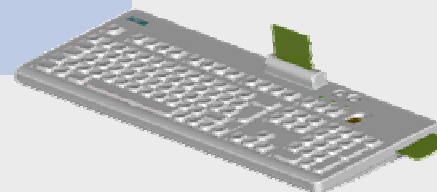
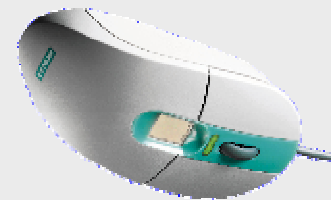
- Providing up to 80% of silicon content in mobile phones
- Among top three suppliers for GSM ICs; # 1 in RF discretes

Highlights Security and Chip Card ICs

- Maintaining world leadership in security and chip card ICs for three consecutive years
- Strengthening of system expertise for security applications which meet highest certification standard
- Growing market share in MultiMediaCard through strategic contracts with Palm, Siemens ICM and founding of joint venture Ingentix
- Leading technology expertise in biometric systems with FingerTIP™ sensor
- Strategic cooperation with Sony for contactless chip card systems for advanced access applications, e.g. electronic tickets/public transport

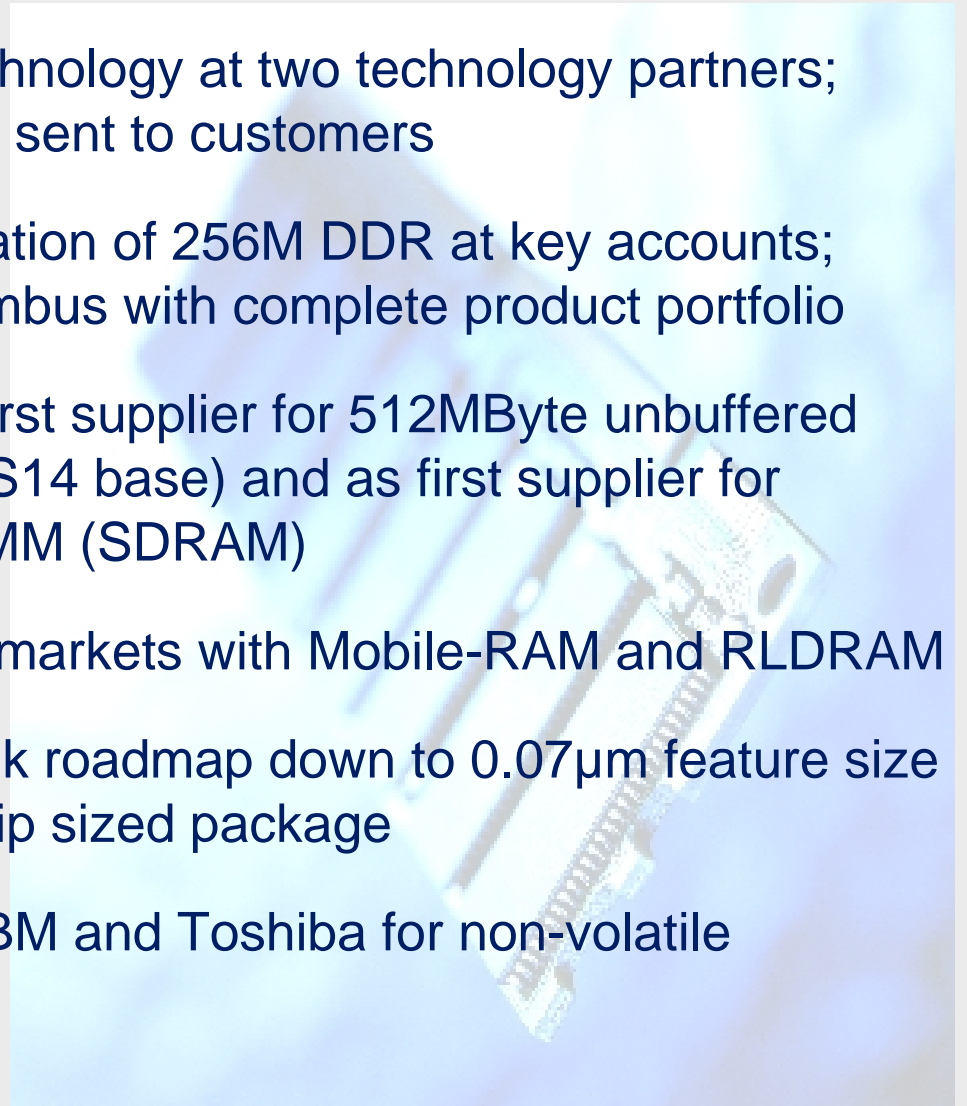
Leading in Biometric Solutions with FingerTIP™ Solution

- Physical access
- Electronic banking
- Electronic shopping
- Information and service access (internet, intranet, phone)
- Time keeping systems
- Mobile phones
- Cars
- Identity systems



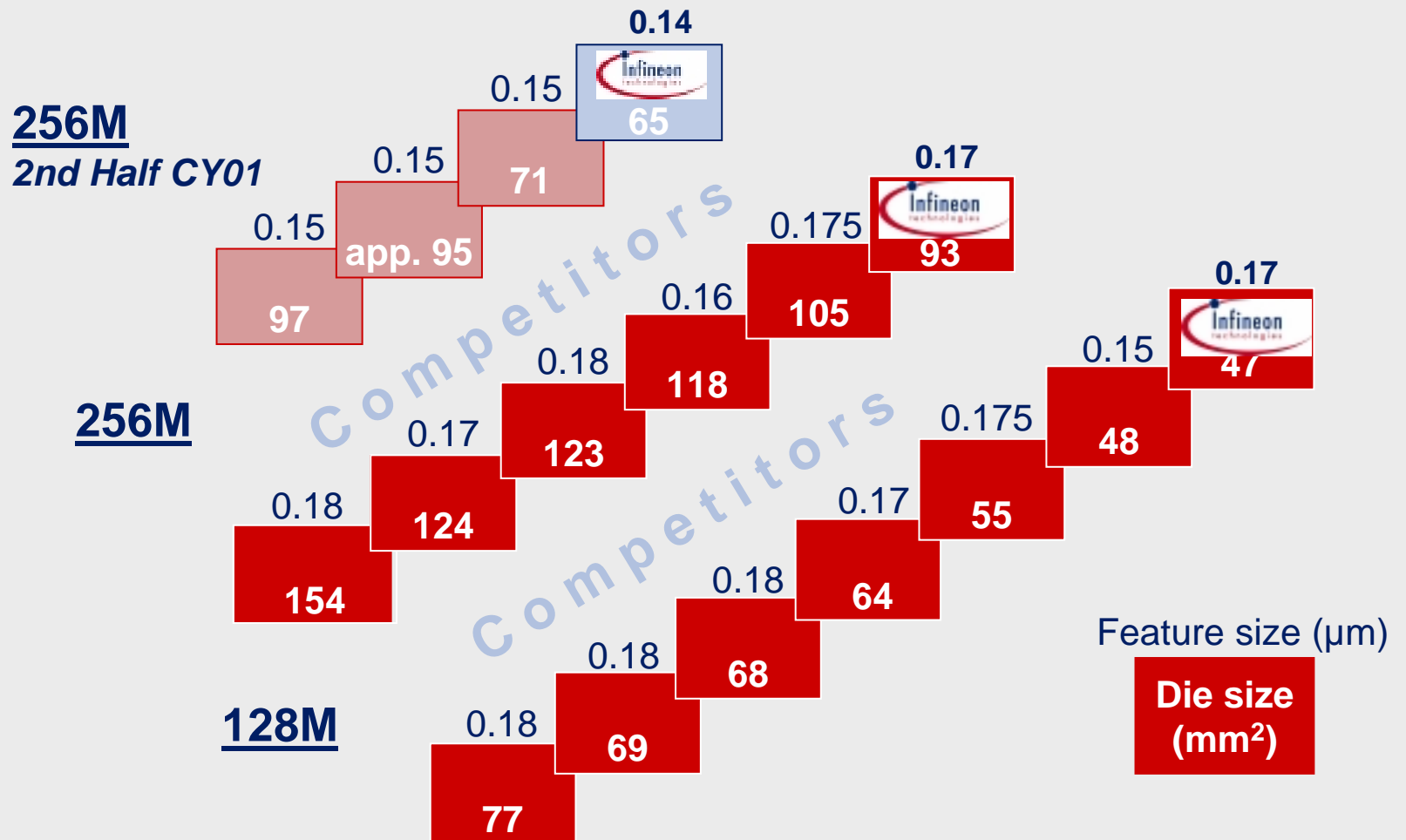
Memory Products - Innovations and Technology Strength

- Qualified 256M in 0.14 μ m technology at two technology partners; first 512M samples in 0.14 μ m sent to customers
- Successful ramp and qualification of 256M DDR at key accounts; production ramp of 288M Rambus with complete product portfolio
- INTEL validates Infineon as first supplier for 512MByte unbuffered PC 133-222 modules (256M S14 base) and as first supplier for reduced height registered DIMM (SDRAM)
- Enter mobile and networking markets with Mobile-RAM and RLDRAM
- Technology leadership - shrink roadmap down to 0.07 μ m feature size enabling small die sizes in chip sized package
- Development alliances with IBM and Toshiba for non-volatile memories



Memory Products – Leadership in Die Size

Smallest Die Sizes

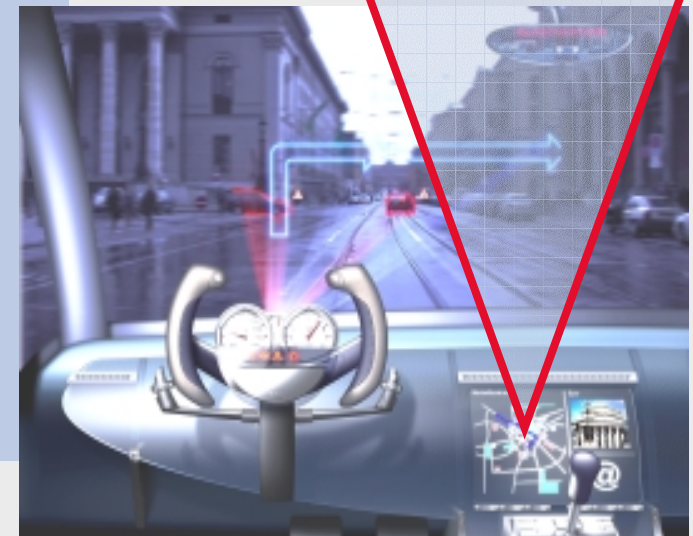
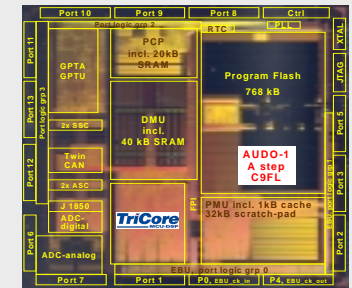


Automotive and Industrial Electronics

- # 1 market position in automotive semiconductors in Europe*;
2 market position worldwide*
- Successful introduction of Audo 32-bit TriCore microcontroller for next generation engine management with design-wins at all leading automotive systems
- Increased share in the Automotive Power market, especially Japan and Asia, and rapid growth in power management and supply systems
- Combined systems expertise for future telematics market (infotainment + navigation)
- Outstanding growth with power modules for electrical drives

System Expertise for Telematics: Navigation & Infotainment

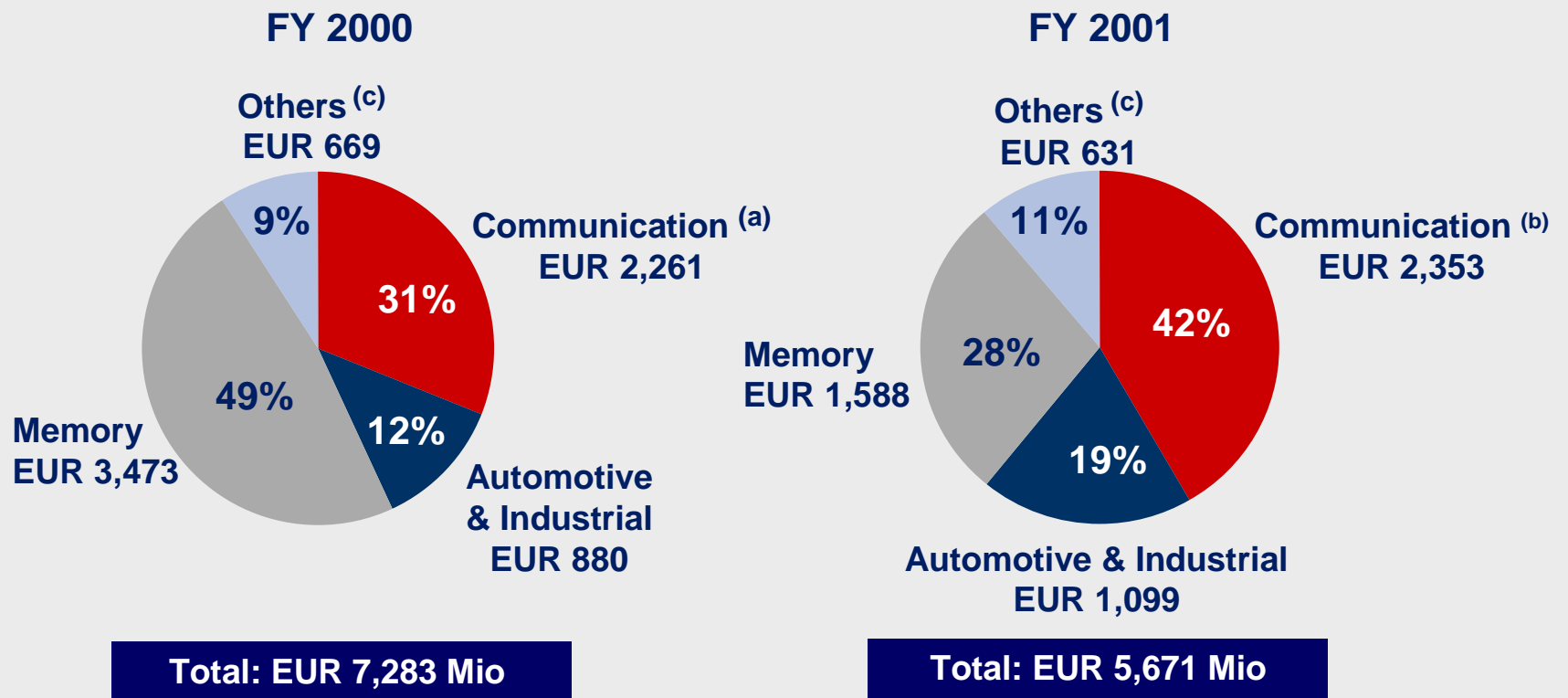
- World market for Telematics will grow to US \$ 47.2 billion in 2010; “every new vehicle will be equipped”
- Infineon provides automotive specific turnkey solutions enabled by strategic partnerships with market leaders (e.g. Mecel, Trimble)
- Key products include
 - Bluetooth, GPS and cellular chipset (incl. software) and modules
 - Scalable controller based solutions
 - Broad range of power supply IC's



Infineon utilises its combined wireless and automotive know-how to build a leading position in Infotainment

Sales by Segments, FY 2000 versus FY2001

Sales by Segments



(a) includes COM: EUR 665 (9%); WS: EUR 1,221 (17%); CC: EUR 375 (5%)

(b) includes COM: EUR 768 (14%); WS: EUR 997 (18%); CC: EUR 588 (10%)

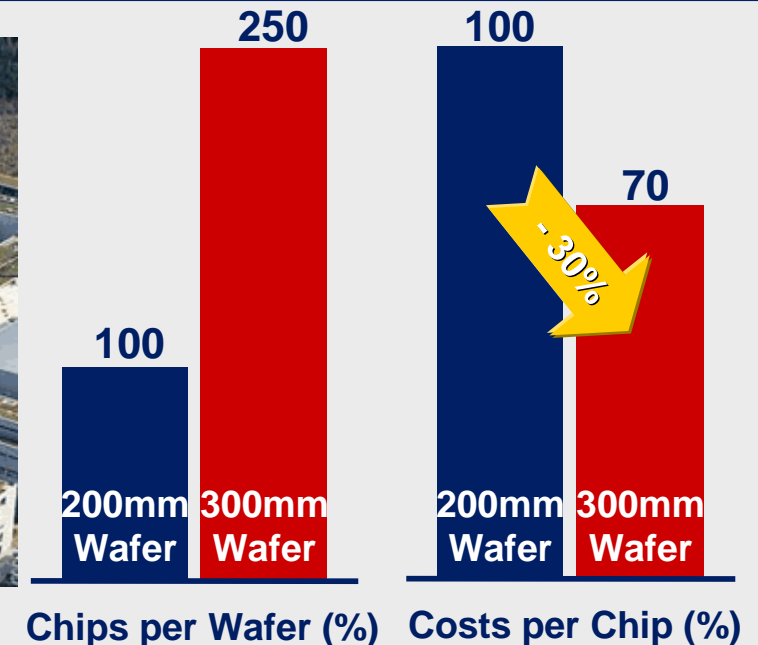
(c) includes corporate functions and other segments without CC

(according to US GAAP in EUR Mio)

Dedicated Customer Orientation

- Strong partnership with a global customer base - Infineon delivers highest dedication in service and customer specific support
- Infineon's "Go to the Market" model based on corporate accounts, accounts, electronic manufacturing services (ESM) and distributors
- strategic customer partnerships for innovation and leading-edge products based on superior technology and system expertise, e.g:
 - **Nokia:** RF products for next generation mobile communication
 - **Cisco:** partnership for complete framer/mapper 40Gbps solution
 - **Giesecke & Devrient:** long standing partnership for smart cards: payment, health insurance and communication (prepaid, GSM)
 - **Bosch:** long standing partnership for development of next generation engine management (32bit power train) and telematics
 - **Compaq:** top supplier ranking with excellent product portfolio, logistics, worldwide service and support - Infineon received Compaq Supplier Partnership Award 2000 (two out of 400 suppliers awarded)
 - **Siemens:** strategic partnership in key segments traditional telecom (ISDN, ADSL), mobile communication (GSM/GPRS, BB&RF) and automotive

Global Market Leader in 300mm Production



Worldwide first functional 300mm pilot line in Dresden

Successful production of standard memory chips since 1999

Dresden:

Investment Euro 1.1 bn

Technology:

Ramp up in October 2001 with 256Mb in 0.14µm

Volume production:

256M/512M in 0.14µm

Capacity:

Approx. 16.000 WSPM end 2002, max 25.000 WSPM

Future roadmap:

512M/1G in 0.14/0.11/0.09µm

Strategic Importance of 300mm Production

- Infineon is world wide the first semiconductor company to begin 300mm volume production at its new 300mm module in Dresden
- Long-term productivity increase maintaining a technological lead of approximately 15 months with regard to competition
- Infineon world wide first company to deliver 64M DRAMs from its 300mm pilot line in Dresden in 1999; Infineon today delivers as world wide first company qualified 128M DRAMs from 300mm pilot line to customers
- No competitor currently achieves Infineon's 300mm manufacturing quality
- Strategically well positioned to build up market leadership for future high performance memory products (512M and 1G DRAMs)

Key Facts Pioneering 300

- 1998: Founding Semiconductor 300 Joint Venture Infineon/Motorola (until end of 2000) - supported with development funding by German Federal Ministry for Education and Research
- April 2000: Groundbreaking 300mm module
- April 2001: Begin installation equipment for volume production
- End 2001: Begin 300mm volume production with 256M DRAM in 0.14 μm technology => smallest chips on largest wafers
- 300mm module will produce next generation high performance DRAMs (512M and 1G)
- Spring 2002: Ramp-up of capacity according to market development
- With maximum capacity of the 300mm module Infineon Dresden will reach almost double manufacturing capacity (including all production lines)
- Total investment: Euro 1.1 billion; Partners: Messe-Leipzig GmbH Euro 118 million Euro, M+W Zander Euro 51 million
- Investment funding requested by federal government and state of Saxony: Euro 219 million (currently approval of European Commission pending)

Employment Effects

Infineon Technologies Dresden

- Direct employment effect:
approx. 4,300 employees
- Indirect employment effect nation wide:
approx. 7,740 employees
- Dresden region and state of Saxony benefit up to 80%
from indirect employment effect

**Total employment effect:
approximately 12,000 jobs**

300mm DRAM Competition

Company	Location	Initial Production	
Infineon	Dresden pilotline	4th quarter	1999
	Dresden volume production	4th quarter	2001
ProMOS	Hsinchu volume production (Taiwan)	1 quarter	2002
Micron ^(a)	Boise pilotline (Idaho/USA)	2 half year	2002
	Lehi volume production (Utah/USA)	(2 quarter	2003) ^(a)
Macronix ^(b)	Hsinchu (Taiwan)	1 quarter	2002
PowerChip	Hsinchu pilotlinie (Taiwan)	2 quarter	2002
	Hsinchu volume production	1 half year	2003
Elpida	Hiroshima (Japan)	3rd quarter	2003
Samsung	Hwasung pilotlinie (Korea)	4th quarter	2001
	Hwasung volume production	4th quarter	2002

(a) announced Feb. 2001 postponement of plans to equip Lehi shell pending market improvement

(b) focuses on non-volatile memory technologies and logic

Infineon Manufacturing Strategy – 300mm Migration

- Initiative for logic production will replace DRAM manufacturing on 200mm wafers in the mid-term
- Successful establishment of Infineon in high-end server market with 256M DRAM and further improvement of market position with 512M and 1G DRAM
- Infineon plans to manufacture DRAMs completely on 300mm wafers in the mid-term and to increase the usage of its 200mm production for logic products
- Cooperation with UMCi for logic production on 300mm wafers
- To maintain Infineon's market share in the DRAM market it is necessary to further build up our 300mm capacity

Roadmap - Pioneering 300

■ Dresden 300mm-Module

Ramp-up: Q3 CY 2001

Technology: 256M in 0.14 μm



300mm Modul, Dresden

■ Promos Taiwan

Ramp-up: Q4 CY 2001

Technology: 256M in 0.14 μm

Infineon share: 26 %, output 48 %



ProMOS, Taiwan

■ JV UMCi Singapur

Technology: advanced logic in 0.13 μm

Infineon share: 30 %, output up to 37.5 %

Investment depending on market development



JV UMCi, Singapur

■ Infineon Richmond, Virginia

Investment in 300mm module depending on market development



Richmond, Virginia



„Never stop thinking“