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Memory Products Group

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Agenda

- Market positioning and development
- New organization
- Infineon MP’s strengths and potentials

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- **Market positioning and development**
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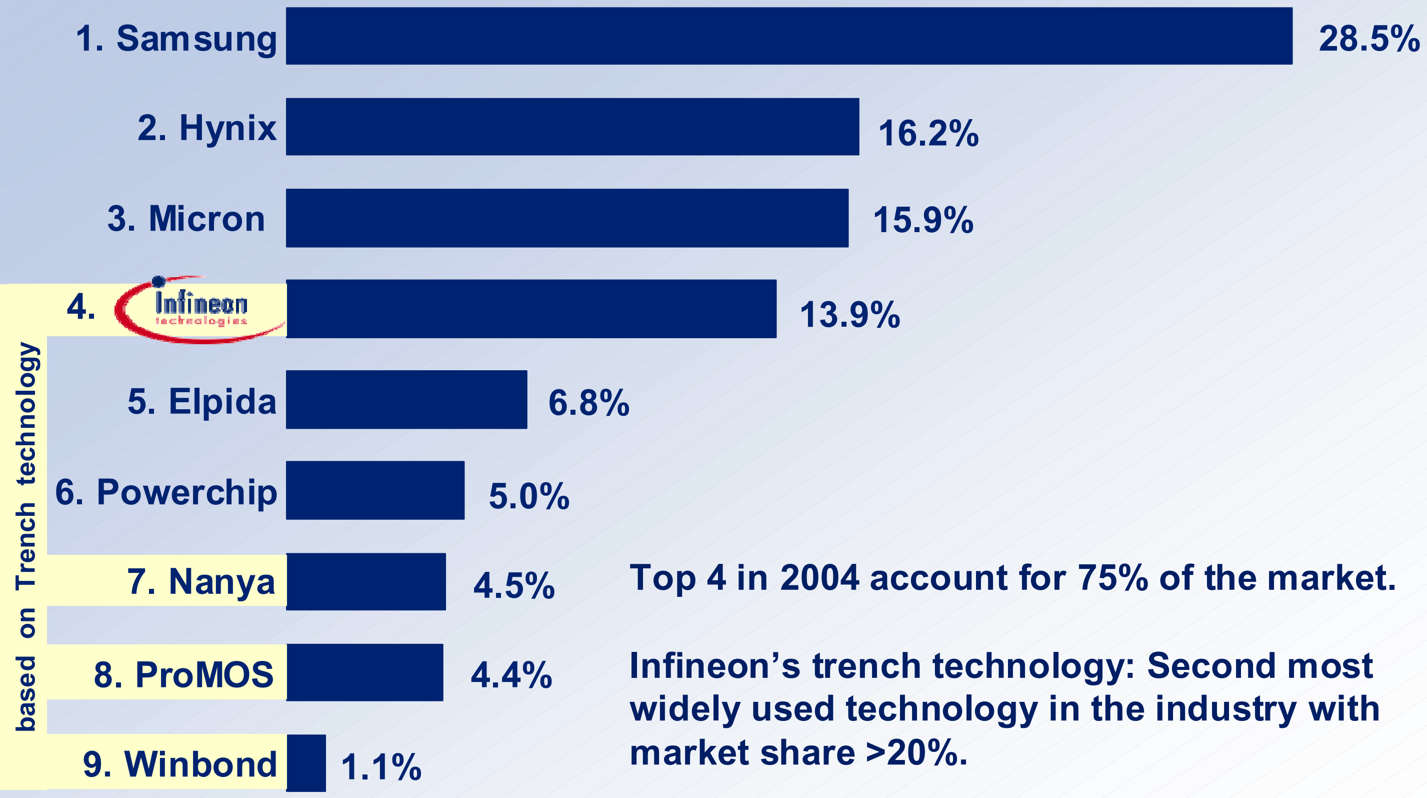
Infineon:
Leading European semiconductor company in 2004

	Gartner		iSuppli		IC Insights	
Rank	**Company**	**revs. in USD bn**	**Company**	**revs. in USD bn**	**Company**	**revs. in USD bn**
1	Intel	30.5	Intel	31.1	Intel	30.4
2	Samsung	15.6	Samsung	15.1	Samsung	16.1
3	TI	9.7	TI	10.3	TI	10.9
4	Infineon	8.9	Infineon	9.4	Renesas	9.5
5	Renesas	8.8	Renesas	9.0	Infineon	9.4
6	Toshiba	8.8	Toshiba	8.9	Toshiba	9.0
7	STM	8.8	STM	8.8	STM	8.7
8	NEC	6.8	NEC	6.7	TSMC	7.6
9	Philips	5.7	Freescale	5.7	NEC	6.7
10	Freescale	5.7	Philips	5.7	Freescale	5.7

Sources: Gartner, Dec 2004 (prelim.) iSuppli, Dec 2004 (prelim.) IC Insights, Jan 2005 (prelim.)

Worldwide DRAM revenue ranking 2004



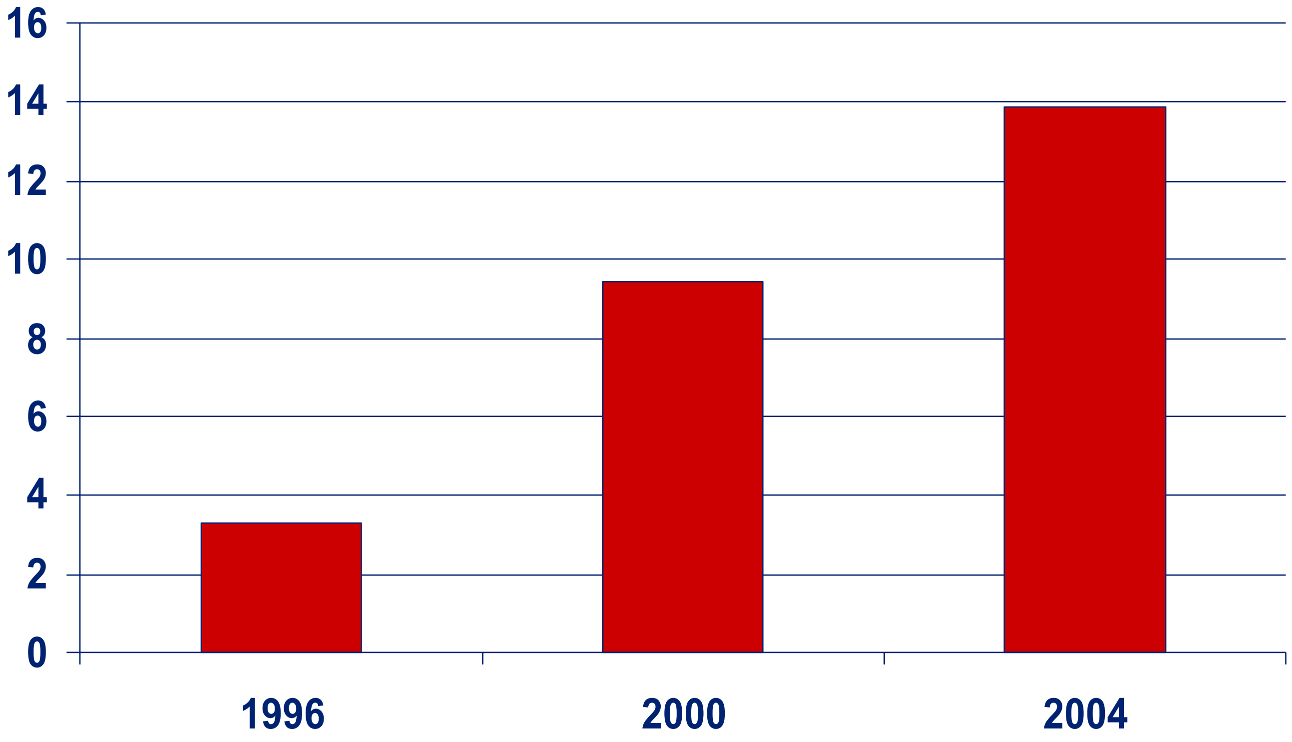
Top 4 in 2004 account for 75% of the market.

Infineon's trench technology: Second most widely used technology in the industry with market share >20%.

Source: iSuppli, March 2005

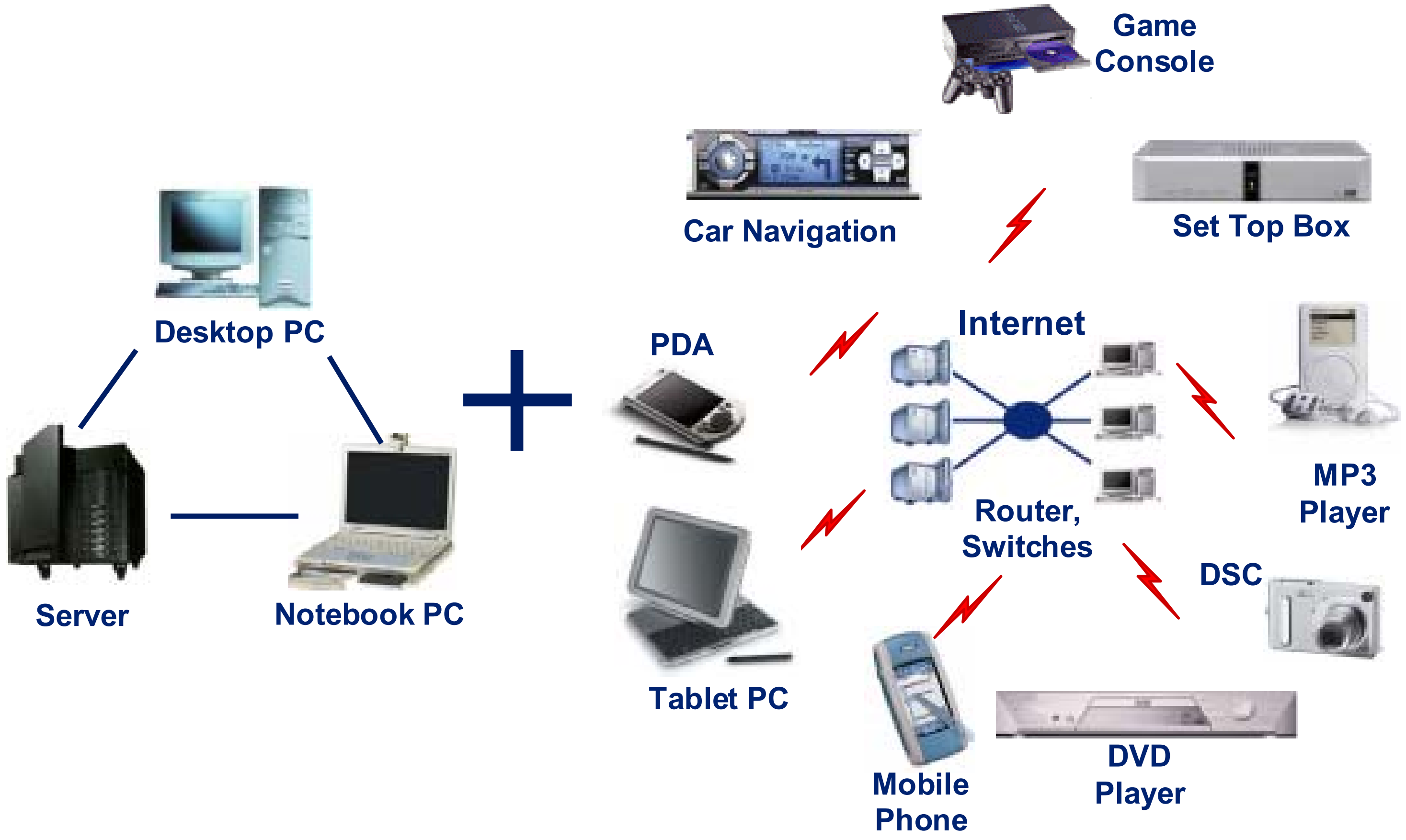
Infineon MP growth: from 3% to 14% market share

Infineon DRAM world market share in %



Source: Dataquest/IDC/iSuppli

The market place – new memory applications



Desktop PC

Server

Notebook PC

+

Game Console

Car Navigation

Set Top Box

PDA

Internet

Router, Switches

MP3 Player

DSC

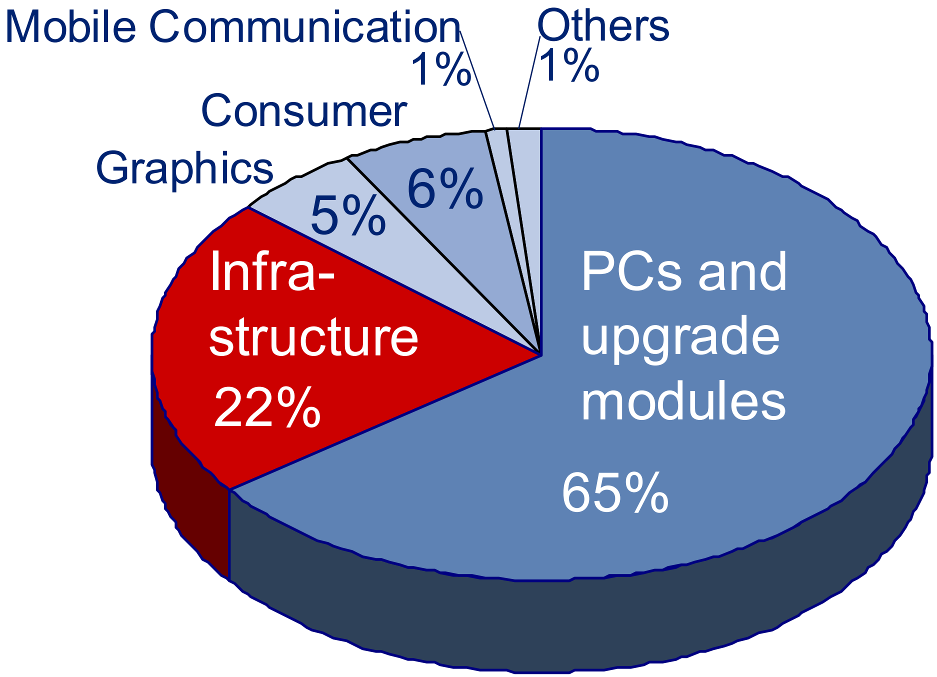
Tablet PC

Mobile Phone

DVD Player

PCs dominated the DRAM market in 2004 ...

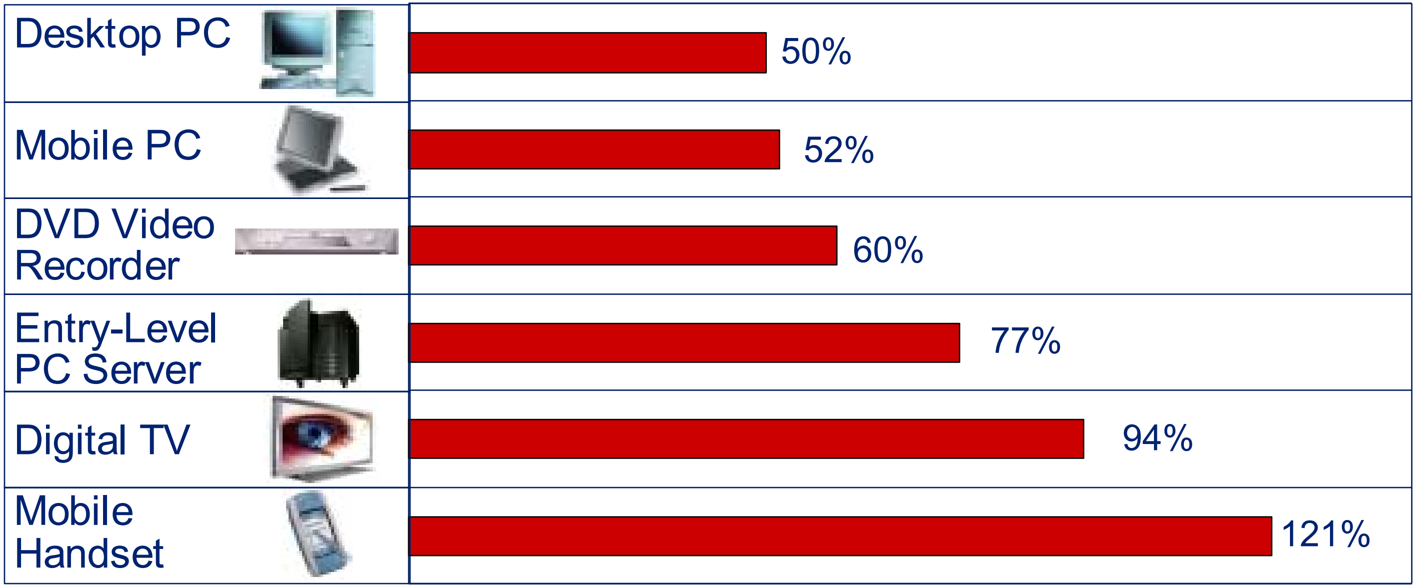
2004 application market share by bit consumption*



* Source: iSuppli, Q4 2004

… but other applications are expected to dominate in growth

Expected CAGR 2004 – 2008 of bit demand*

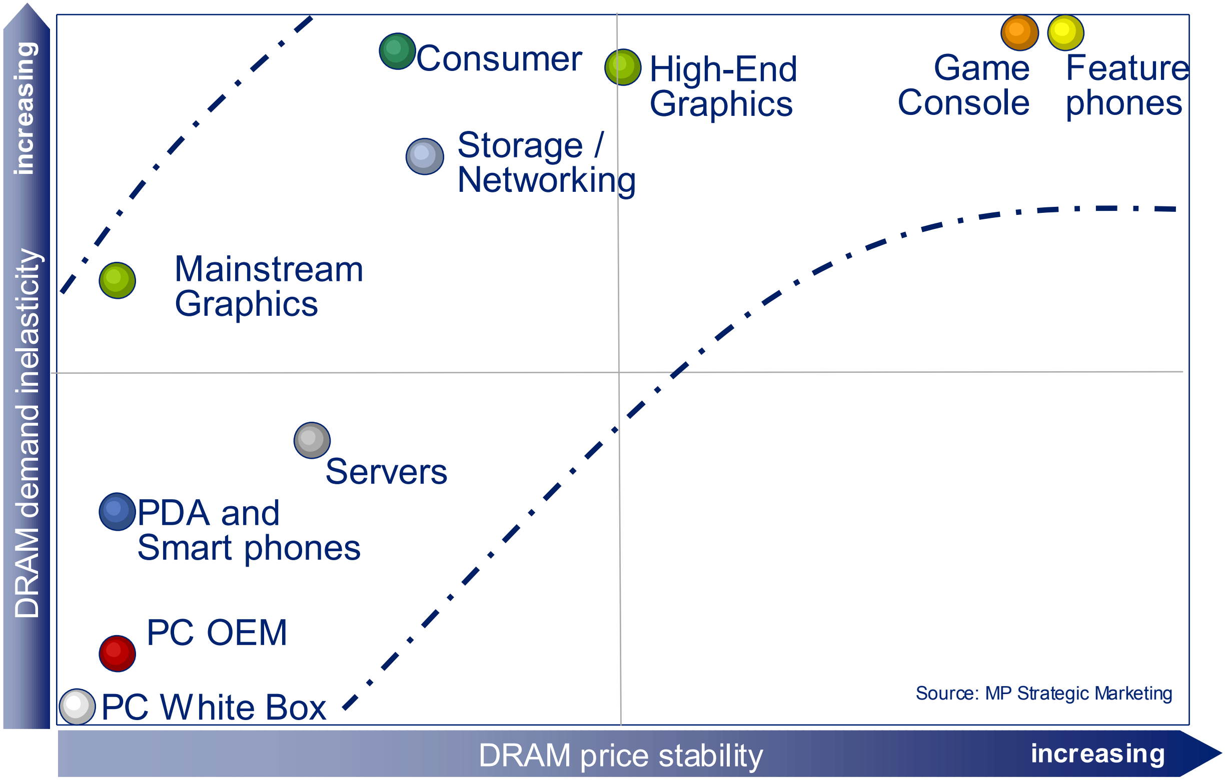


Top DRAM suppliers' challenge is the right mix of:

- ⇨ Volume products for computing segment
- ⇨ Innovative products for leading-edge applications
- ⇨ Legacy or standard products for upcoming consumer demand

* Source: iSuppli, Q4 2004

Not all DRAMs are the same



Source: MP Strategic Marketing

DRAM price and demand behavior is application specific:
Customer confidence in supplier and time-to-market for products required to enter less volatile application segments.

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Infineon technologies

The new organization of the Memory Products Group: Focus on applications and market segments

Business Units	**Computing**	**AENEON** Simply advanced	**Graphics**	**Consumer & Mobile**	**Flash**
Application (Selection)	▪ Desktop PC ▪ Notebook PC ▪ Server ▪ Workstation ▪ Storage ▪ Networking	▪ Desktop PC ▪ Notebook PC ▪ Workstation	▪ Graphics ▪ Game Console ▪ Game Handhelds	▪ Mobile Phones ▪ Set-Top-Box ▪ DVD Players & Recorders ▪ DSC ▪ MP3 Players ▪ Car Navigation ▪ PDA ▪ Digital TV ▪ Printing	▪ Mobile Phones ▪ DSC ▪ MP3 Players ▪ USB Drive ▪ Set-Top-Box ▪ PDA ▪ Flash cards
Drivers	Replacement Performance Internet Infrastructure Bandwidth Data Warehouse	Performance Emerging markets White boxes	Performance Digital Lifestyle 3D picture New games	Mobility Digital Lifestyle Low-Power Info. Mgmt. Content Download	Data Storage Digital Lifestyle Mobility

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Low-power consumption of DRAMs: Gaining in importance

- **Lower power consumption means less heat dissipation**

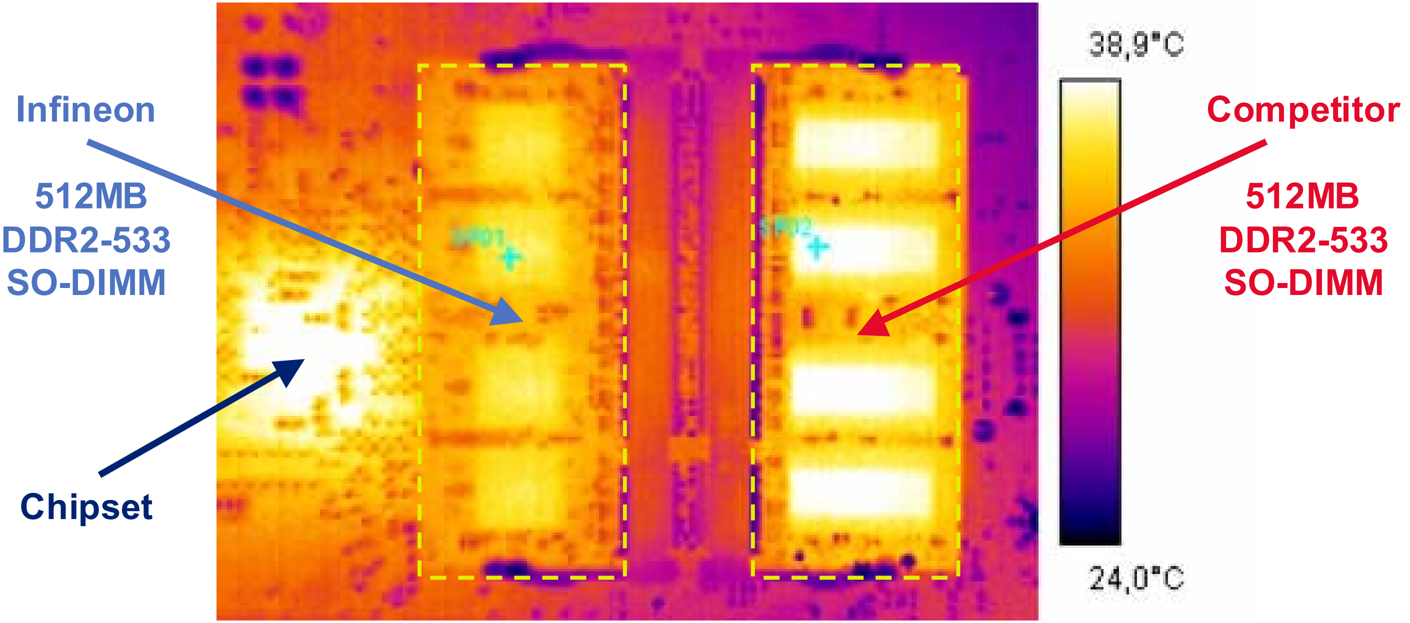
  DRAM applications like server or notebooks offer increasing performance in an ever smaller space. The dissipation of the generated heat is already challenging. Less power consumption means less production of heat.

- **Lower power consumption means longer battery lifetime**

  Battery lifetime is an important criteria of choice when purchasing mobile equipments. DRAMs with low power consumption help to increase the attractiveness of these devices.

Heat dissipation of Infineon modules in comparison: Real live measurement shows reduced power consumption

Thermal comparison of IFX and competitor DDR2 SO-DIMMs



Infineon

512MB DDR2-533 SO-DIMM

Chipset

Competitor

512MB DDR2-533 SO-DIMM

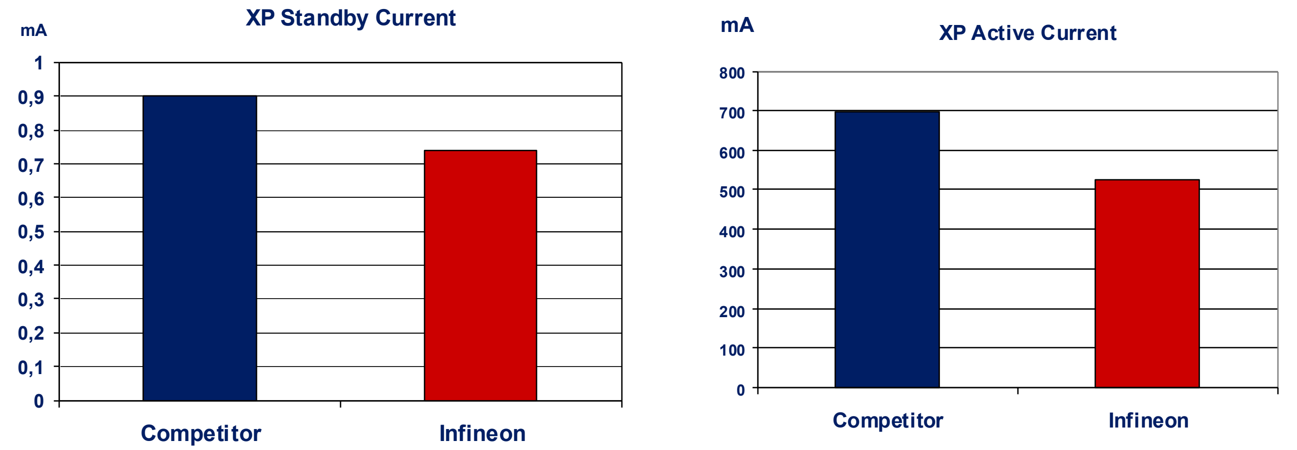
System in dual channel operation, DDR2-533, running memory test with simultaneous load on both modules

System: Intel Ohlone Alviso CRB, Test: Infineon Memory test, Butterfly subtest, Single measurement

Modules: left: Infineon HYS64T64020GDL-3.7-A, right: Micron MT8HTF6464HDY-53EA3 (Crucial)

⇨ Infineon's first generation 512Mb DDR2 is industry benchmark for active power consumption.

Infineon DRAMs are the industry benchmark for low-power: Windows XP current consumption comparison

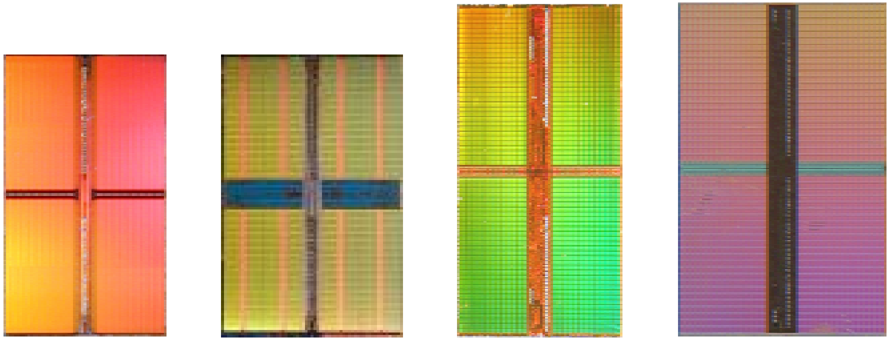


Source: Infineon

Both in standby and active modes of Windows XP, Infineon’s DDR2 modules draw less current than competitor modules.

Values shown for fully loaded Alviso system with 2 x 512MB SO-DIMMs in dual-channel mode
System: Sony Alviso DDR2 notebook   Modules: IFX HYS64T64020GDL-3.7-A, Micron MT8HTF6464HDY-53EA3 (by Crucial)
Single calibrated measurement over 1Ohm resistor in opened VDD line to the two SO-DIMMs.
Standby current measurement averaged for 10min idle time; active current measurement with XP memory test and Quake2.

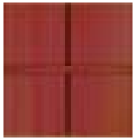
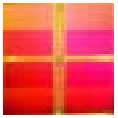
Smallest 256M DDR in 110nm volume production



Manufacturer	**Infineon**	**Micron**	**Samsung**	**Hynix**
Min. pitch [µm]	**0.22**	**0.23**	**0.22**	**0.24**
Cell area [µm²]	**0.097**	**0.079**	**0.104**	**0.120**
Die area [mm²]	**42.5**	**44.0**	**48.5**	**53.5**
Cell efficiency [%]	**61.1**	**48.0**	**57.5**	**60.2**
		6F²		

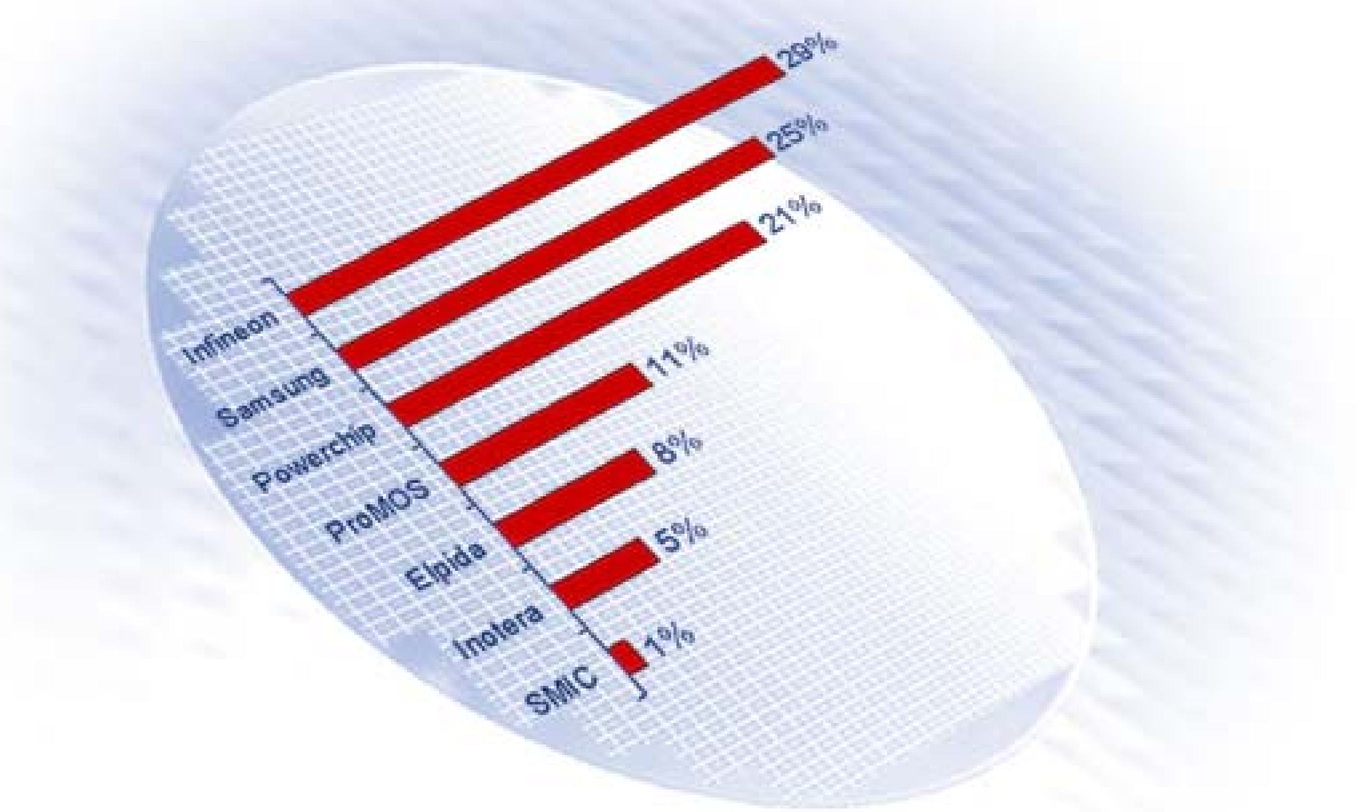
Source: Infineon, 2004

Trench technology on track for 90nm and 70nm shrinks

Node	Status
90nm 	- Key innovations: - New cell layout - Bottle-shaped trench technology - IFX is 2nd manufacturer to have 90nm-based product validated by Intel - Customer samples from 200mm: 512M DDR - Successful transfer to 300mm line: yields now comparable to 200mm wafers - Volume ramp-up on schedule for mid-2005
70nm 	- Key innovation: High-κ dielectric fill in trench technology - First demonstrators on 300mm available: 512M DDR2

Leader in 300mm DRAM manufacturing in 2004

12-inch Wafer Production Market Shares in 2004



Source: iSuppli, Feburary 2005

Expansion plans for 300mm capacities in 2005

MP's alliances: Share risks and benefits and optimize economies of scale

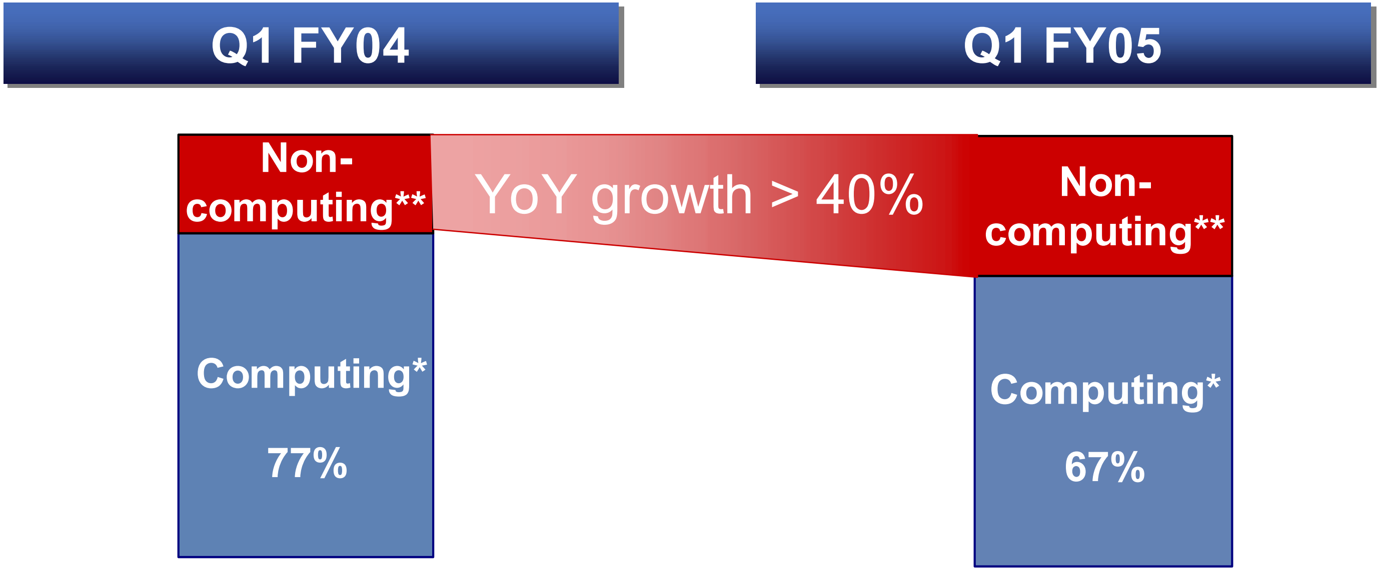
MP alliance model today

Joint development partnerships		Manufacturing partnerships
Secure mask technology development	ADVANCED MASK TECHNOLOGY CENTER DRESDEN Infineon technologies AMD DUPONT DuPont Photomasks, Inc.	Production of worldwide leading-edge masks
Co-development of 90nm and 70nm DRAM technology	NANYA Infineon technologies inotera memories	Joint manufacturing in Taiwan using 300mm technology
License from Saifun and development of Flash technology	Infineon technologies SAIFUN	Development and production of data flash and code flash
Joint development of specialty DRAM products	Winbond Electronics Corp.	License of 110nm and 90nm DRAM technology in exchange for capacity
Development of MRAM	ALTIS SMIC	Foundry agreements for 8" and 12“ capacities

Infineon – worldwide customers

Business Groups	Customers
AIM **Automotive, Industrial & Multimarket**	Autoliv Axalto Bosch Conti AS Delphi Delta Denso Gemplus Giesecke & Devrient Hella JCAE Lear Siemens TRW Visteon
COM **Communication**	Alcatel Cisco Ericsson Fujitsu Huawei Lucent Marconi Matsushita Motorola NEC Nokia Nortel Samsung Siemens Sony Vtech ZTE
MP **Memory Products**	Acer Cisco Dell Fujitsu Siemens HP IBM Kingston Lenovo NEC Sony Sun

Bit-shipment share of non-computing DRAMs grew by more than 40% YoY in Q1 FY05



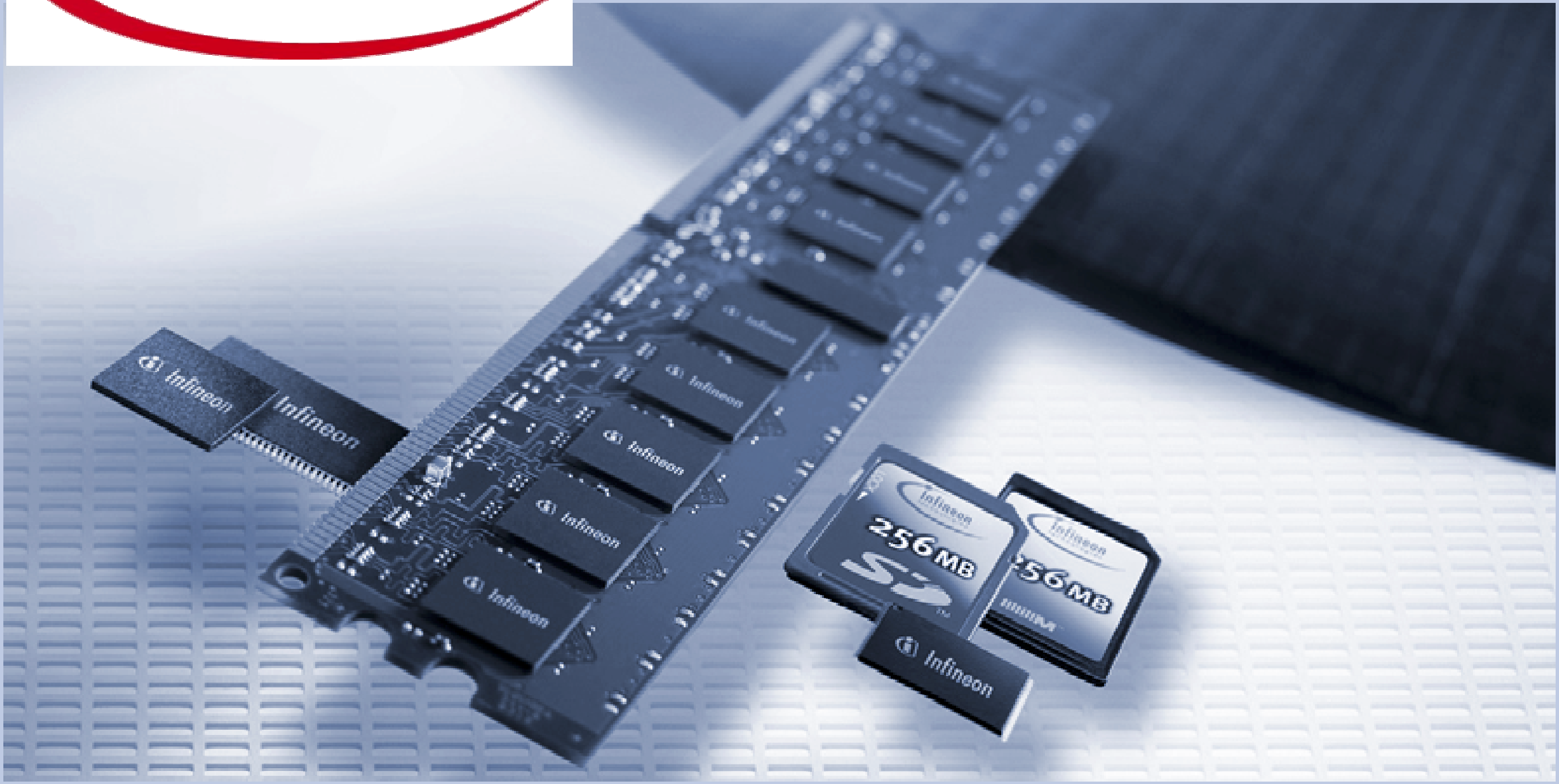
* Desktop PCs, Notebooks and Workstations; ** Infrastructure, Consumer, Graphics, Mobile Applications

- ⇨ A leading supplier to server manufacturers
- ⇨ Leading with Mobile-RAMs
- ⇨ Increasing shipments of graphics RAM
- ⇨ Increasing share of shipments for set-top boxes

Summary

- Infineon continues to focus on the development of leading-edge technology and manufacturing capacities.
- Leader in 300mm manufacturing with financially sound path to almost full conversion within 4 years.
- We leverage risks and opportunities together with partners.
- Memory market applications are broadening, offering opportunities for growth and stability of price.
- We capitalize on our broad customer base to extend our product portfolio.

Infineon technologies



Never stop thinking.