

# PHILIPS

## Sustaining Profitable Growth in MultiMarket Semiconductors

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Philips Semiconductors

Financial Analysts Day 2004

# Agenda

- **Multimarket semiconductors**
  - Standard products with global reach
  - Aligned with the market
- **Key Success Factors**
  - The right portfolio
  - Operational excellence & cost competitiveness
  - Service leadership
- **Conclusions**

## The world of multimarket semiconductors

Original Equipment Manufacturers (OEMs)

Electronic Manufacturing Systems Integrators (EMSI)

Original Design Manufacturers (ODM)

Distributors (global and regional)

*A dynamic network  
that requires global visibility,  
insights and relationships*

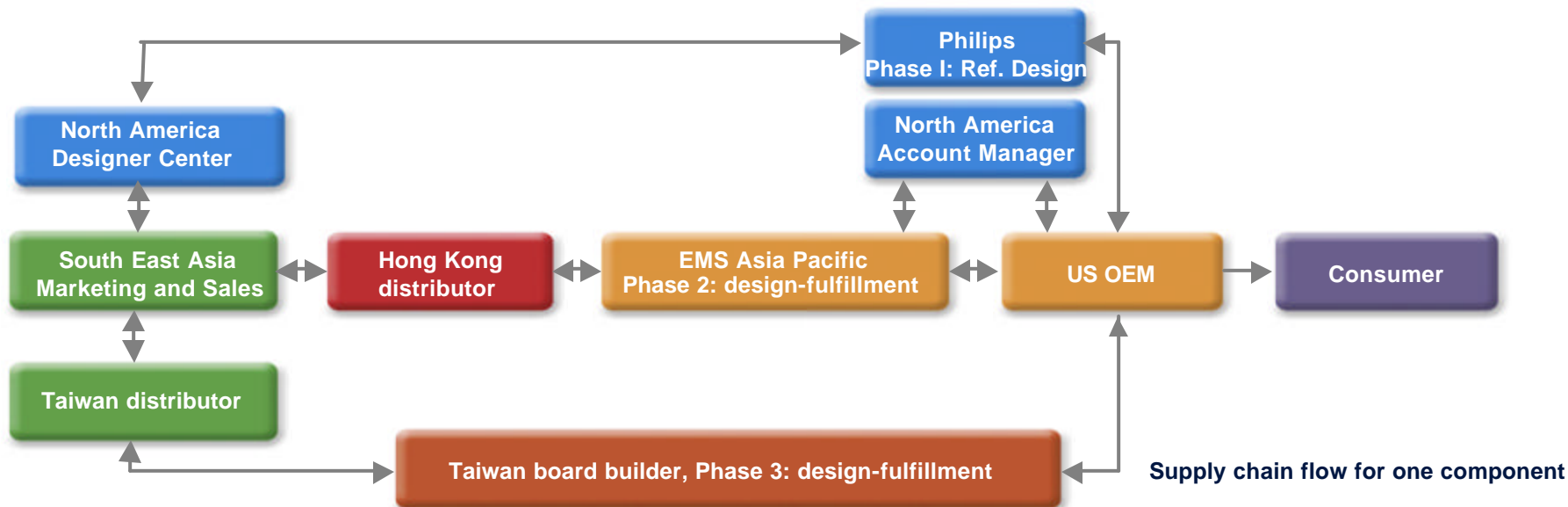


# Multimarket now means multiple lines of interaction

One-stop-shop of the past  
Linear, simple supply chains



Today's multimarket component supply chain  
Multi-tiered, multi-directional, multi-dimensional



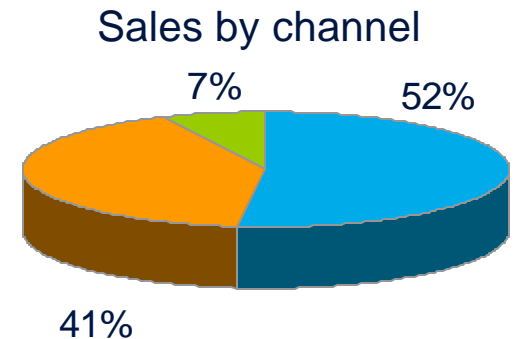
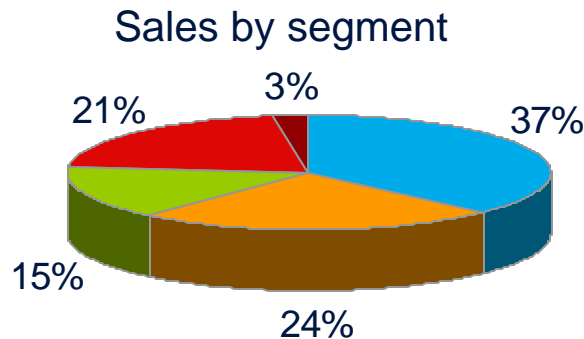
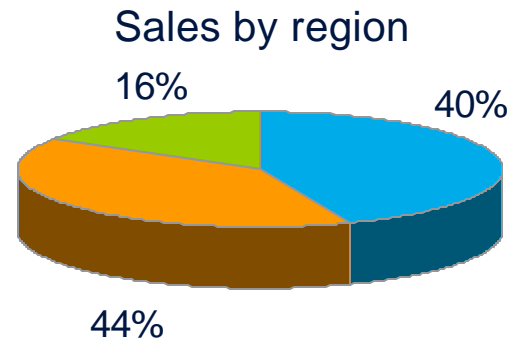
# Major trends influencing the supply chain

- Move toward design activity at distributor level
- OEM push to outsource assembly and manufacturing to EMS and design to ODM/EMS
- Supply chain management as an important differentiator
- Different geographies demand different distributor dynamics
- China is a major player



*Suppliers who understand the decision points and have the right products, costs and service levels will succeed*

# Making our mark in the industry: Facts and figures (1H 2004)



Europe America Asia Pac

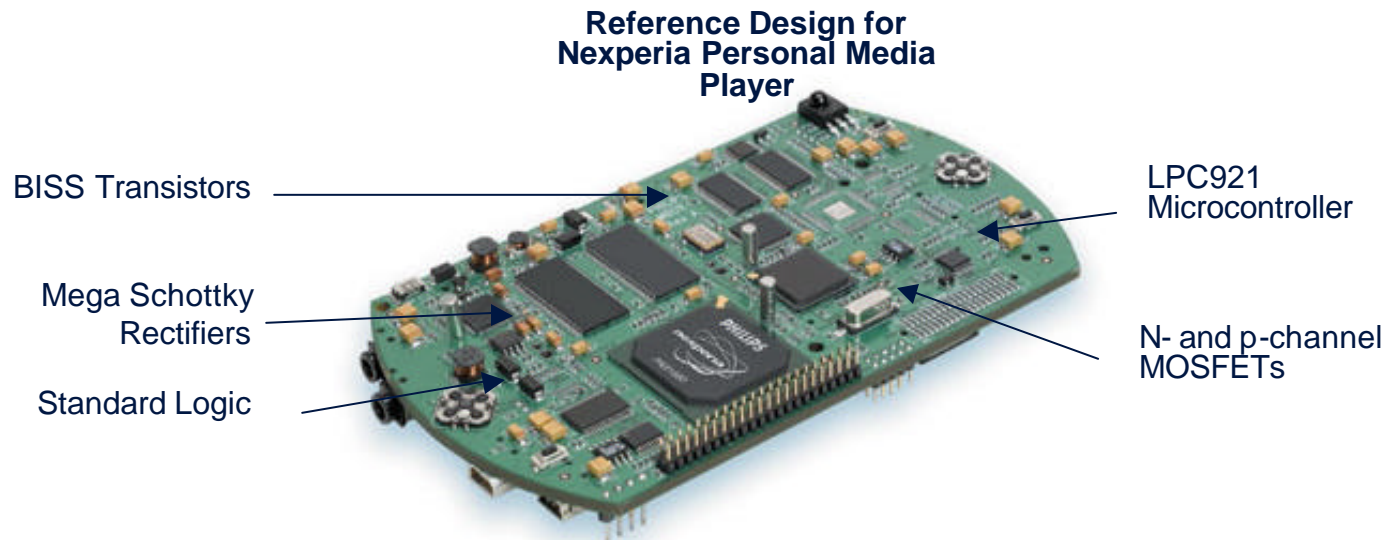
Automotive Computing  
Communications Consumer  
Identification

OEM EMS Distribution

- Standard products account for 21% of total semiconductor market
- MultiMarket Semiconductors (MMS) is 27% of total Philips SC sales
- MMS Sales in 2003: \$ 1.2 billion

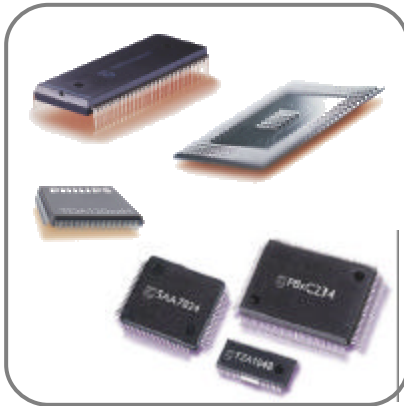
# All systems need multimarket products

- System-on-Chip (SoC) solutions rarely provide total solutions; they are usually the core system among many other sub-systems
- To provide a complete solution, multimarket products are needed:
  - Power management (Battery management, power control)
  - Interface products (I<sup>2</sup>C, clock, UARTs)
  - Standard ICs (Microcontrollers, logic, RF analog)
  - General Application Discretes (Transistors and diodes)
- Major MMS product trends
  - Smaller, faster, lighter, cheaper



# Meeting the challenges

## Key success factors for a broadline multimarket supplier



The right product portfolio



cost competitiveness  
and operational  
excellence

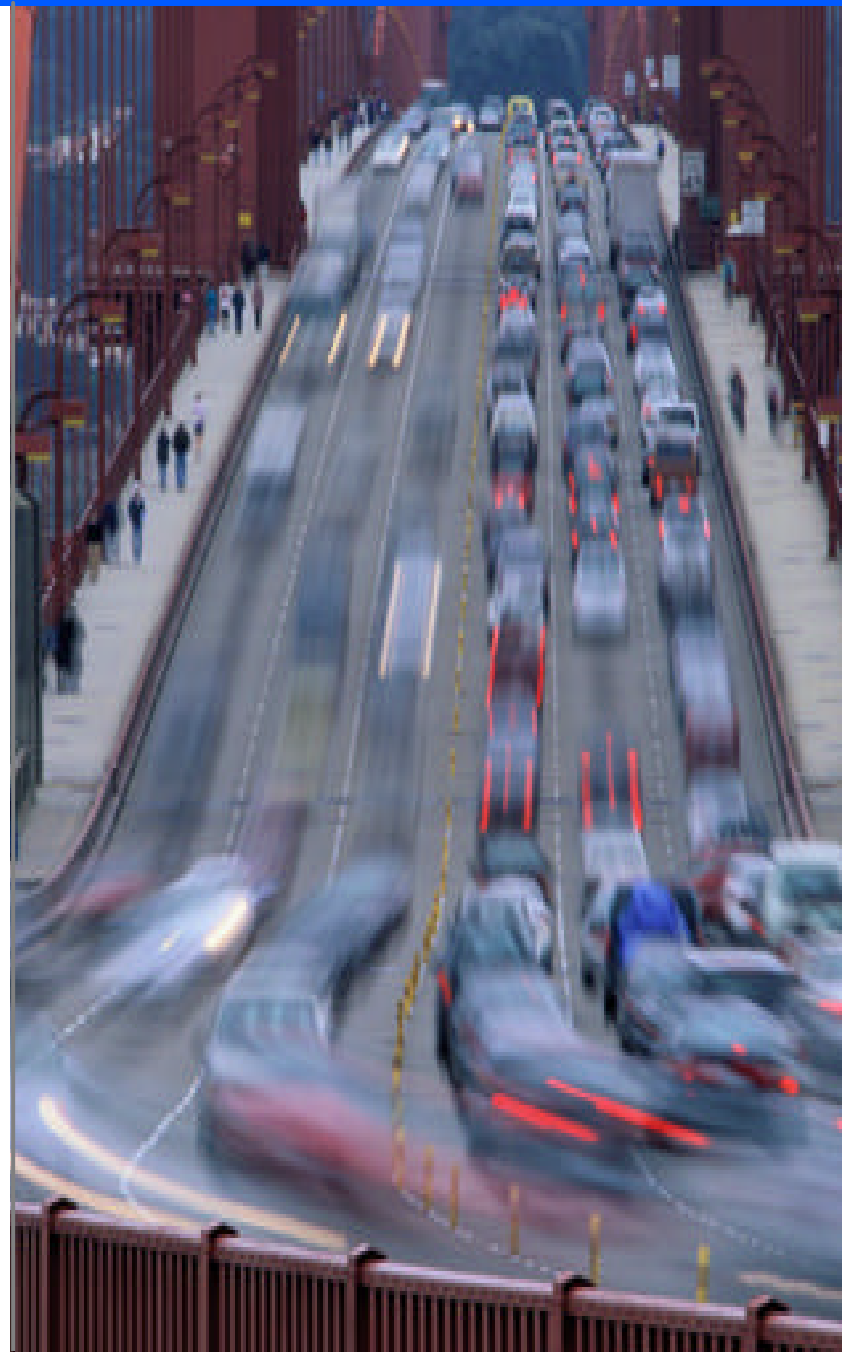


service leadership



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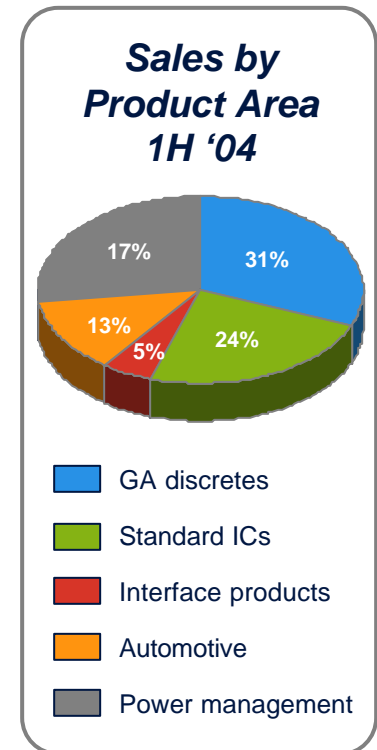
## Key success factors: Broad portfolio Creating value for our customers

### Partner for growth – innovation in design-in products

- Business Lines: Power Management, Interface Products, Automotive
- System/application orientation
  - Complete power management capabilities
  - Customer-specific interface solutions
  - In-vehicle network automotive solutions

### Partner for share – cost leadership

- Business Lines: Standard ICs, General Application Discretes
- General purpose product orientation
  - Continued development of our broad portfolio of microcontrollers, transistors, diodes and standard logic



# Investing in the portfolio...

Innovative power management solutions  
GreenChip Power IC, MicroTrenchMOS(FETs)

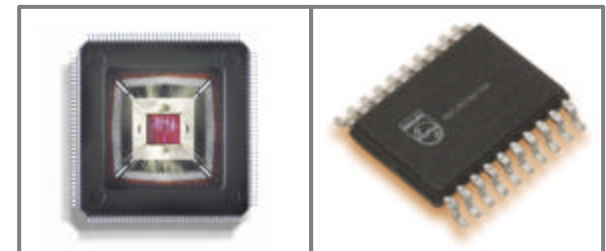
- 1 in 5 desktops & 1 in 10 laptops use Philips MOSFETs
- 50% of all laptops produced annually use a Philips GreenChip power supply controller



# Investing in the portfolio ...

## Industry leading microcontrollers

- Industry first ARM-based 32-bit Microcontroller with 0.18 micron embedded flash memory
- October launch of world's smallest 8-bit microcontroller for space-constrained applications



# Investing in the portfolio...

## Packaging innovations

- Transition to 100% lead-free portfolio
- Loss free packaging for maximum power management
- Miniaturization by chip scale technology



# Investing in the portfolio ...

Application-specific products

Motor controller for DVD recorders, Sensors for automotive

- #1 in consumer application specific standard products
- In 2003, every 3<sup>rd</sup> car produced worldwide had at least one Philips sensor on board



## ...and innovating mature technologies

### New features & functionality for mature technologies

- I<sup>2</sup>C product development with IBM, Sun
- Electro Static Discharge diodes for surge protection in consumer applications
- #1 supplier of 5V CMOS logic products to the automotive industry



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# Key success factors: operational excellence

## Best-in-class manufacturing

- Philips Guangdong
  - Ramp-up from 0 to 10 billion pieces in 10 months
  - 50% manufacturing cost reduction within 2 years via economies of scale, low costs, proprietary BIM-line technology
  
- Philips Jilin Semiconductor Co. Ltd.
  - Joint venture formed in Nov. 03
  - Construction began 1/04, first wafers 2/05
  - Cost savings of over 30% through transferred production to Jilin
  
- Capital efficient manufacturing
  - Transfer of production from Philippines to subcontractors in China





## Commitment to China – Market & Manufacturing

- Investment in regional MMS business and application team, transfer of knowledge:
  - More than 65 dedicated people (management, sales and engineers)
- Philips Jilin Semiconductor Co. Ltd. Joint Venture:
  - Front-end production of bipolar power products 60% owned by Philips
- Philips Semiconductors Guangdong
  - US\$40 Million investment in Assembly sites
  - 4 Billion unit annual capacity in 2003 – increase to 23 Billion by end of 2005

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# Service leadership: Collaborating throughout the supply chain

- Close partnerships with top distributors
- Global key account managers
- Increasing focus on design-in activities
- Innovative products for a large customer base
- Value-added programs

	 ARROW ELECTRONICS, INC.
 世平興業 WORLD PEACE INDUSTRIAL	 FUTURE ELECTRONICS
	

## Value-added program: global design win program

- Fair compensation to reward for distributor design effort
- Worldwide tracking and visibility for global partners
- Focus products: Audio/video, connectivity, identification, power management, control
- Goal: By July 2005, double conversion rate of design registrations into sales (introduced July 2004)

*“With this system, Philips proactively addresses the need for distributors and suppliers to collaborate on designs across geographic boundaries.”* (Jan Salsgiver, VP Global Strategy & Operations, Arrow Electronics)

*“Avnet is pleased to participate with Philips in the launch of its new Global Design-Win program. We believe the program will serve as a key element for Avnet’s continued success with Philips.”* (Lalit Wadhwa, Avnet, Director, Worldwide Business Migration)

# Value-added program to strengthen relationships with top distributors

## Executive Partnership Program:

- Launched to address feedback from distributors for enhanced executive-level communications
- Quarterly meetings to share strategies, tactics and increase business partnerships
- Involvement from executives on joint promotional activities



Mike Chang  
WPI  
CEO

K.Y. Chen  
SAC  
Chairman

Raymond Tseng  
Avnet  
President (Asia)

Skip Streber  
Arrow  
Sr. VP

# Differentiation through outstanding 'Supply Network' management

## Information transparency:

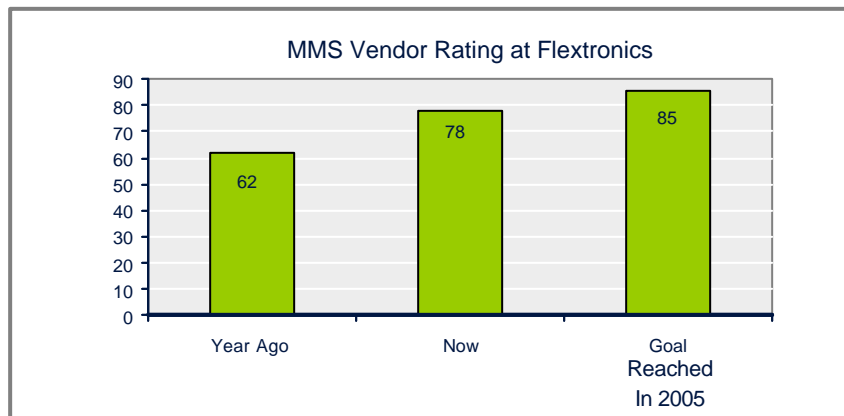
- Electronic data sheet capabilities
- Multi-level, integrated communications
- Global design win tracker with RosettaNet as backbone
- Collaborative planning and sophisticated supply chain solutions with EMS

*Strong position in distribution channel with #2 global ranking.*

Rank	Supplier
1	TI
2	PHILIPS SEMICONDUCTORS
3	ST
4	XILINX
5	ANALOG DEVICES
6	MOTOROLA
7	NS
8	INTEL
9	ALTERA
10	FAIRCHILD

# Building strong relationships with EMS and ODM

- By 2007, almost 40% of all semiconductor purchases will be by EMS\*
- Focused participation in EMS & ODM business results in better market position
- Direct key account management of top tier EMS companies
- Strengthening ODM relationships in line with PD strategy
- Key Account “breakthrough” service program with Flextronics to improve preferred supplier position





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# Summary



- MultiMarket Semiconductors is an intrinsic part of Philips Semiconductors
- We serve the entire electronics industry
- Strong EMS and distributor strategy provides the flexibility the industry needs
- Focus and investments in China will pay off in worldwide market position
- Service, cost and the right portfolio are important; understanding the decision points is essential

