## Philips Semiconductors ...

## Managing the downturn, Ready for the Upswing

Scott McGregor President and Chief Executive Officer



## **Agenda for today**

- Managing the downturn, ready for the upswing
  - Scott McGregor, President and CEO, Philips Semiconductors
- Focus on wireless connectivity
  - Phil Pollok, Senior Vice President, Philips Semiconductors
- Focus on mobile communications
  - Thierry Laurent, Executive Vice President Philips Semiconductors
- Focus on Identification
  - Karsten Ottenberg, Senior Vice Presider Philips Semiconductors
- Summary and round-up

See our Digital Consumer demos next door Throughout the day





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**Philips Semiconductors** 

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## **Major semiconductor company**

- Revenues of US \$6.3 billion in 2000
- Focus on silicon systems and standard products for:
  - Communications
  - Consumer
  - Automotive
  - Computing
  - Industrial
- 33,000 employees
- Global organization (18 manufacturing centers, 30 design centers, 4 systems labs and over 100 sales offices)





## **Balanced sales by market segment and region**



Source: Philips based on 2000 sales





## A changing customer base - from 1994 ...

| Communications | Consumer               | Computing<br>Automotive<br>Industrial | Distributors | EMS GMS |
|----------------|------------------------|---------------------------------------|--------------|---------|
| NOKIA          | PHILIPS                | BOSCH                                 | M            |         |
|                | SAMSUNG<br>Electronics |                                       |              |         |
|                | SONY                   | Lucent Technologies                   |              |         |
|                | Thomson                | Visteon                               |              |         |





| Communications                               | Consumer | Computing<br>Automotive<br>Industrial | Distributors | EMS GMS                          |
|--|----------|---------------------------------------|--------------|----------------------------------|
| ERICSSON E<br>NOKIA<br>SAMSUNG<br>ELECTRONCS |          | Omega   DHILIPS   SIEMENS             | <image/>     | FLEXTRONICS<br>SCI Systems, Inc. |



## **Great products create leading positions**

Communication

Mobile handsets Cordless Wireless connectivity

Consumer

Automotive

Computing

Industrial

TV Tuners Digital Audio Digital STB

In-vehicle networking In-car radio Car access & immobilizers

CRT monitor drivers Display drivers PC Add-on cards

Identification Standard products RF discretes, CATV



These represent >75% of our sales



nexperk

## **Differentiating technology**

### • First in Platforms (Nexperia)

- Delivers flexibility
- Reduces time-to-market
- Efficient IP based design (Sea of IP)
  - Reuse of hardware and software (CoReUse / MoReUse)
  - HDLi for IP generation and delivery
- Rapid prototyping for first-time right design
- CMOS18 with embedded Flash
- CMOS12 now prototyping
- QuBIC4 low cost, high performance RF



## **Global manufacturing infrastructure**

**IC Capacity** • 2 million wafers per year (8 inch equivalent) - 20% BiCMOS, 25% Bipolar, 55% CMOS 170 billion pins assembly capacity **Discretes** • 1.2 million wafers per year (6 inch equivalent) • 30 billion pieces assembly capacity **Partnerships** TSMC & Amkor





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## Customer strategy: work with winners

#### Focus on Partnership

- Partner across the value chain
- Align technology roadmaps; access to Philips Research
- Jointly develop total systems solutions

#### Partner in growth markets

- Grow sales to top 20 customers from 50 to 60% by 2005
- Grow sales through Distributors and EMS from 25 to 30% by 2005





## Customer strategy: work closely with our partners

#### Some of many examples:

- Deep collaboration with major handset makers, such as Ericsson and Nokia
- A complete mobile telephone solution for DBTel (China) and CEC (China)
- A complete digital TV solution for major Digital Consumer Electronics player
- DSP in digital car infotainment system for Visteon
- Identification products Visa, Shell, Beijing City Transport





## Product strategy: supporting businesses to winning positions





## **Product strategy: strategic focus**





## **Product strategy: strategic focus**





## **Product strategy: strategic focus**

#### **Digital Displays**

- Display Drivers for mobile and large displays
- Scalers
- Display processing





## **Product strategy: strategic focus**

# **Cellular Terminals** - 2 / 2<sup>1</sup>/<sub>2</sub>G - 3G / UMTS - System Solutions





## Product strategy: the connected home

Cellular

#### **Digital Displays**

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Internet

Enhanced and linked content

Digital subscriber services (cable, satellite)







## **Technology strategy**

#### **Build on Nexperia platforms**

- High performance Digital Video Platform
- Low Power Portable Platform
- Leverage process partnership with TSMC / STM
- Joint development of CMOS10 (0.10µm)
  - TSMC compatible rules, performance and timing
  - CMOS10 end 2002

300mm R&D and pilot fab in Crolles: ready Q3/2002
 Build on leadership in RF
 Q. DIO (1997)

QuBIC4 with SiGe option





## **Manufacturing Strategy**

 Advanced standard CMOS (0.18µm and beyond) in JV's and Foundries



- Own fabs for value added process options
  - Embedded Memories
  - Analog
  - Cost-effective RF process (QuBIC)
- Low-cost fabs for commodity processes & discretes
- Flexibility by outsourcing 15 25% of total





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## Largest downturn in semiconductor industry history





## Philips took quick action to adapt to the changing market

|   | Q1     | Q2     | Q3 est. | Q4 est. |
|---|--------|--------|---------|---------|
| CAPEX (M€)                                    | 420    | 350    | 130     | 50      |
| Restructuring/<br>Headcount<br>reduction (M€) | 0      | 90     | 20      | 90      |
| Inventories<br>(index 100 in Q1)              | 100    | 95     | 83      | 79      |
| Headcount<br>(people)                         | 37,160 | 36,400 | 34,000  | 33,000  |



## Philips Semiconductors has rejoined the top 10

|                           | 1H 2000<br>Sales (\$B) | 1H 2001<br>Sales (\$B) | % change |
|---------------------------|------------------------|------------------------|----------|
| Philips<br>Semiconductors | 2.9<br>(rank 12)       | 2.6<br>(rank 10)       | -13      |
| Top ten                   | 50                     | 42                     | -16      |
| Industry                  | 96                     | 78                     | -18      |

Source: IC Insights, August 2001





## Weekly Run Rate 2001 - World Wide



## **Philips - ready for 2002**

| Industry predictions for 2002 |     |  |
|-------------------------------|-----|--|
| WSTS                          | 8%  |  |
| Dataquest                     | 12% |  |
| IC Insights                   | 14% |  |
| VLSI Research                 | 20% |  |

By Q1 2002 we will have sized our cost base for single digit growth... ...but are prepared for double digit growth...

Let's make things better.



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## **A new ambition for Philips Semiconductors**

• We have been a top ten player for a while

- To truly be a cornerstone of Philips Electronics' high technology growth strategy, we need to aim higher
- Over the coming years this will require
  - Excellence in organic growth
  - Leveraging cooperation across the Philips Group
  - Acquisitions





## **Elements of our growth strategy**

#### **FUTURE:**

New opportunities in emerging markets with high growth potential

#### **FOCUS:**

Focus on a few growth areas where we have technology and industry expertise

#### **FOUNDATION:**

Leverage strong leadership positions and competencies





## The foundation of success

- RF discretes, CATV
- Tuners
- Car access
- In-vehicle networks
- AD/DA converters
- TV chipsets
- PC Add-on cards
- CRT drivers
- STN display drivers
- Logic
- Digital audio
- Cordless phones
- Standard products









DHILIDS

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## Focus leading to success in mobile communications





## Focus on new opportunities in wireless connectivity

- Standards leadership driving wireless application development
- Wide portfolio of wireless connectivity expertise
  - First to deliver a commercial Bluetooth-compliant chipset
  - First to ship a million Bluetooth devices
  - First to offer both Bluetooth and ZigBee connectivity solutions
  - First to ship over 6 million 802.11 radio chips
  - The power behind over half of all 802.11 modules
- Integration with full systems including consumer and mobile communications





## **Focus on Digital Consumer**

Offering solutions for mid - high end

- Current focus on analog to digital transition for TV – offering solution for digital reception which runs MHP
- First to deliver architecture and working platform for advanced set top box and DTV solution



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## Creating a new image in digital display solutions

Strong position in market Partners with LG.Philips LCD

- #2 STN drivers
- #1 in CRT display (esp. TV)

Targeting new digital technologies
TFT Driver, LCD Scaler and small-panel color STN



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## **Future new growth markets**

Continue successful Emerging
 Businesses methodology

 seed: polymer electronics, new ideas: ultra wideband, MEMS, integrated discretes

weed: mass storage, SW modems

harvest: identification, networking, wireless connectivity







 Strong past performance has established solid foundation

- Strategies for customers, products, technology and manufacturing to support growth ambition
- Managing the downturn, Ready for the Upswing





## **Philips Semiconductors ...**

## Managing the downturn, Ready for the Upswing





