



# Investor Presentation

Summer/Fall 2011

# Disclaimer

This presentation contains forward-looking statements relating to the business, financial performance and earnings of SUSS MicroTec AG and its subsidiaries and associates. Forward-looking statements are based on current plans, estimates, projections and expectations and are therefore subject to risks and uncertainties, most of which are difficult to estimate and which in general are beyond the control of SUSS MicroTec AG. Consequently, actual developments as well as actual earnings and performance may differ materially from those which are explicitly or implicitly assumed in the forward-looking statements. SUSS MicroTec AG does not intend or accept any obligation to publish updates of these forward-looking statements.

# Content

- I. Executive Summary
- II. Products and Markets
- III. Growth Opportunities
- IV. Financials
- V. Outlook
- VI. Appendix

# SUSS MicroTec Spotlight

- + SUSS MicroTec: A global leader in semiconductor equipment
- + Our equipment and process solutions create the micro structures that build and connect micro electronic devices
- + We are focused on high growth market segments: Semiconductors, MEMS, LEDs



## Key Data\*:

- + Bloomberg Symbol: SMH
- + TecDax
- + Share price: 8.72 €
- + Market Cap: 166 Mio. €
- + Net Cash: 35.5 Mio. €

\* July 29, 2011

# Optimizing Structures – Shaping the Future



## Garching

- + SUSS MicroTec AG HQ
- + Development and production:
  - **Mask Aligner**
  - **Bond Aligner**
- + Core competencies:
  - **Exposure**
  - **Alignment**



## Sternenfels

- + Development and production :
  - **Bonder**
  - **Coater and Developer**
  - **Photomask Equipment**
- + Core competencies :
  - **Wet processing**
  - **Wafer bonding**

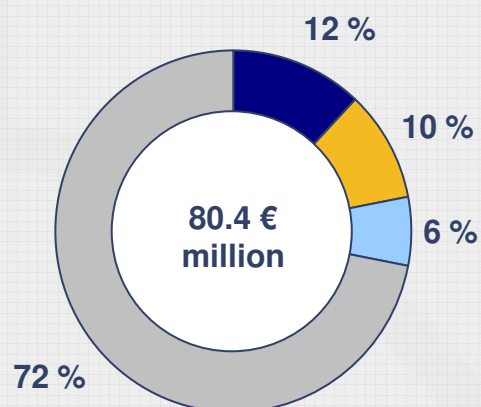
# SUSS MicroTec – A Global Player



# Order Intake and Sales by Region H1 2011

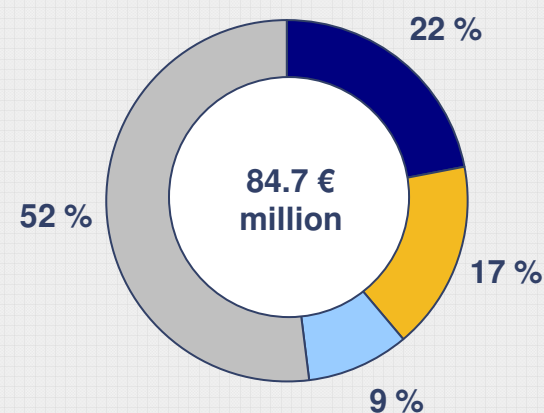
continuing operations

## Order Intake



■ Europe	9.4 € million
■ North America	7.7 € million
■ Japan	5.2 € million
■ Rest of Asia	58.1 € million

## Sales



■ Europe	18.8 € million
■ North America	14.7 € million
■ Japan	7.6 € million
■ Rest of Asia	43.6 € million

# Content

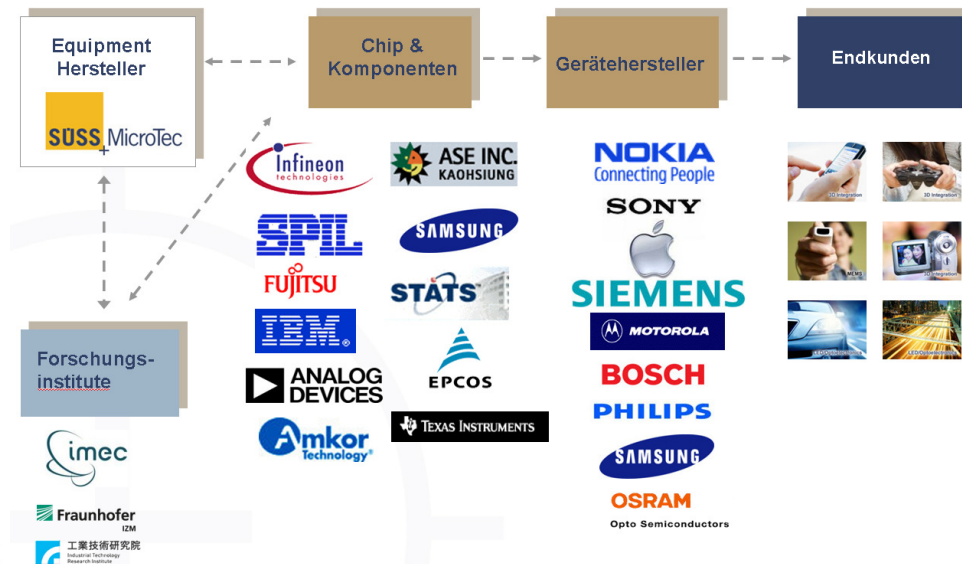
- I. Executive Summary
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# SUSS MicroTec In The Value Chain

- + SUSS MicroTec is a key player in providing state-of-the-art semiconductor manufacturing equipment

- + With industry and R&D partners we develop highly innovative systems addressing the fundamental challenges of semiconductor manufacturing



- + With SUSS MicroTec's manufacturing solutions the components are built out of which cell phones, PCs, tablet computers, TV sets etc. are made

# Divisions and Products

## Segments

**Photomask  
Equipment**

**Lithography**

**Substrate Bonder**

## Products



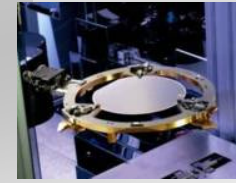
**Mask Track**



**Mask Aligner**



**Coater/  
Developer**



**Wafer Bonder**

## Process Steps

**Frontend**

**Backend**



**Photomask Cleaning**



**Alignment  
Exposure  
Nano Imprinting**



**Coating  
Developing**



**Bond Alignment  
Permanent Bonding  
Temporary Bonding**

## Key figures 2010

**Sales: 18.4 € million  
EBIT: 2.1 € million**

**Sales: 88.9 € million  
EBIT: 17.0 € million**

**Sales: 24.7 € million  
EBIT: -7.1 € million**

# Products and Markets

## Products



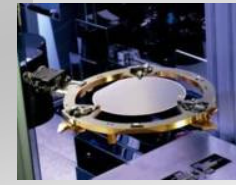
Mask Track



Mask Aligner



Coater/  
Developer



Wafer Bonder

## Process Steps

Frontend



Photomask  
Cleaning

Backend



Alignment  
Exposure  
Nano Imprinting



Coating  
Developing



Bond Alignment  
Permanent Bonding  
Temporary Bonding

## Markets

Mask Making

Advanced Packaging

3D - Integration

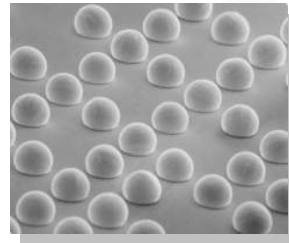
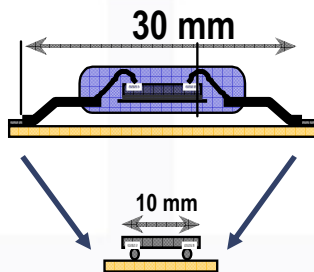
MEMS

LED

# Semiconductors

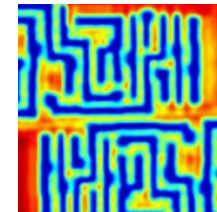
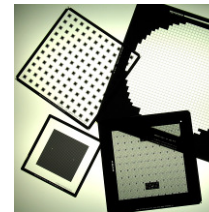
- + SUSS MicroTec offers solutions for performance and yield critical steps in semiconductor manufacturing
- + Front End: Mask Cleaning
- + Back End: Advanced Packaging  
3D Integration

## Advanced Packaging



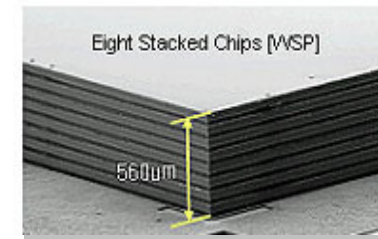
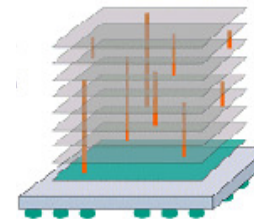
Micro-bumping replaces wire-bonding for high-end integrated circuits

## Mask Cleaning



Maintains mask integrity of 193i sub 22nm, EUVL and NIL lithography

## 3D Integration



Stacking chips allows for higher device complexity

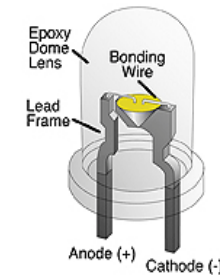
# MEMS and LED

## MEMS



- + **Micro Electro Mechanical Systems** are micromechanical devices with electrical functions typically sensors
- + They are found in an increasing number of applications
  - Automotive
  - Industrial process control sensors
  - Consumer electronics

## LED



- + Light Emitting Diodes (LED) - are used for signaling and illumination
- + Ultra High Brightness LED allow solid state lighting
- + UHB LEDs go into rapidly growing markets like
  - Automotive
  - Consumer electronics
  - Room lighting

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# Mega Trends driving the Industry

- + Global mega trends drive the micro electronics industry and create long term opportunities
  - **Digital Lifestyle**
  - **E-Mobility**
  - **Energy efficiency**
- + Micro chips, MEMS und LEDs are the building blocks for the technological product advancement
- + SÜSS MicroTec's focus is to offer development and manufacturing solutions for these components in markets that have a sustainable long term growth perspective



3D Integration

Digital lifestyle



Pressure Sensors

MEMS

E-mobility



LED/Optoelectronics

Energy efficiency

# Enabling Semiconductor Trends

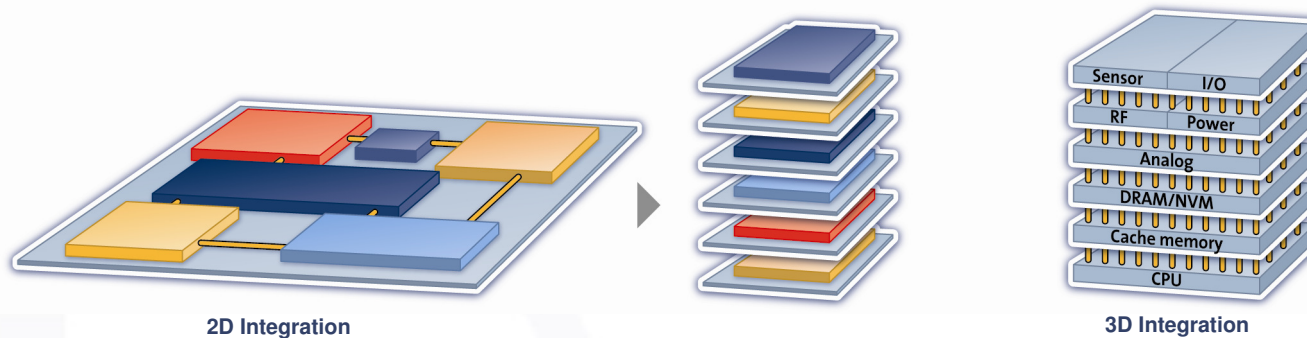
- + The further increase in complexity and performance of future semiconductor device generations demands the continuous progress in scaling of these devices
- + SÜSS MicroTec's equipment and process solutions enable the 2-dimensional reduction of feature sizes ("Moore's Law") as well as the 3-dimensional stacking of integrated circuits ("More than Moore")





# 2-D vs. 3-D Scaling

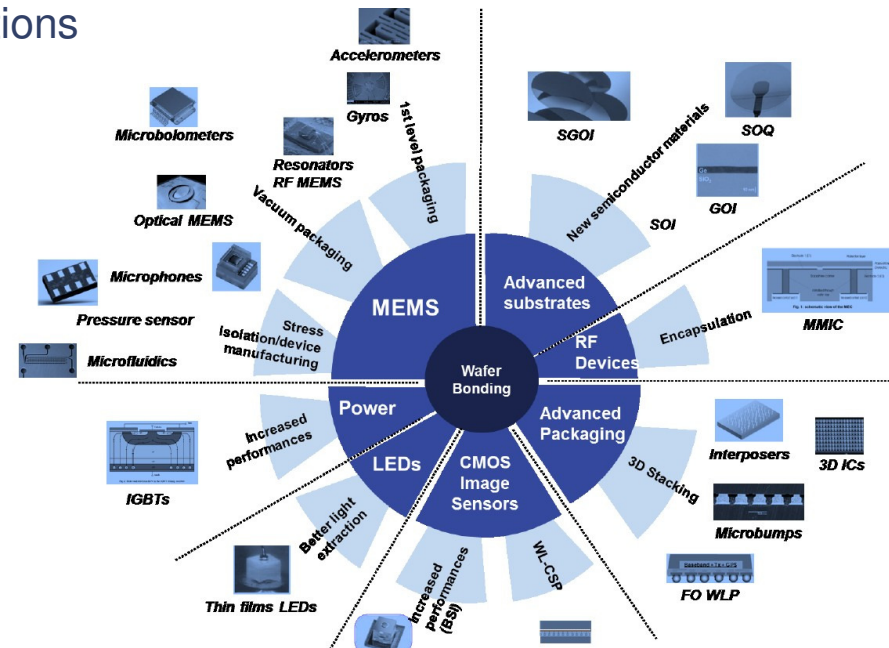
- + Technical challenges and limitations make it increasingly more expensive to pursue the shrink roadmap of integrated circuits
- + While alternatives like 3D integration promise greater space efficiency, lower power consumption and a significant increase in performance they will not replace shrinking



- + For the years to come shrinking and stacking technologies will coexist, each having its unique set of challenges
- + SUSS MicroTec is one of the few companies offering HVM equipment and process solutions for 2-dimensional and 3-dimensional scaling

# Growth Opportunities

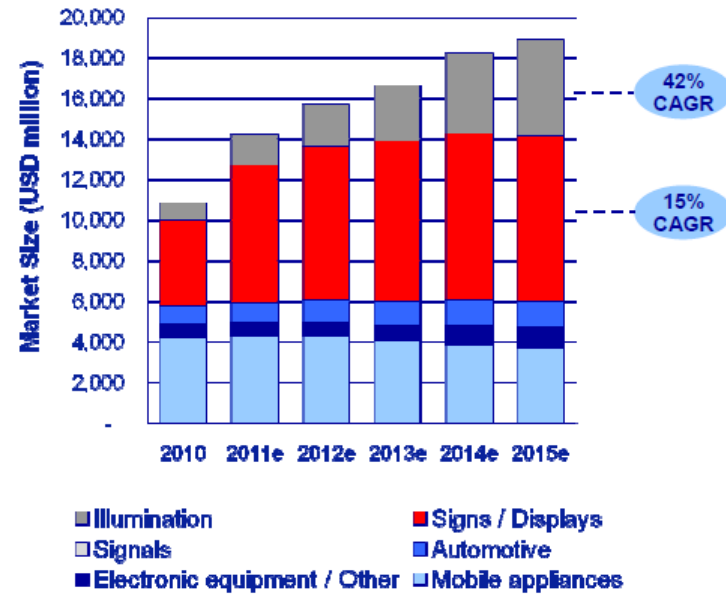
- + The company's long term growth perspective derives from the double digit growth rates of the target markets 3D Integration, Advanced Packaging, LED and MEMS
- + SUSS MicroTec is one of the leading suppliers for wafer bonders in the semiconductor industry offering a broad portfolio of permanent and temporary bonding equipment and process solutions
- + The wafer bonder equipment market is estimated to grow rapidly to a size of larger 500 million \$ within the next few years
- + SUSS MicroTec targets a market share of 30%+ which is in line with the current market position



Source: Yole Développement

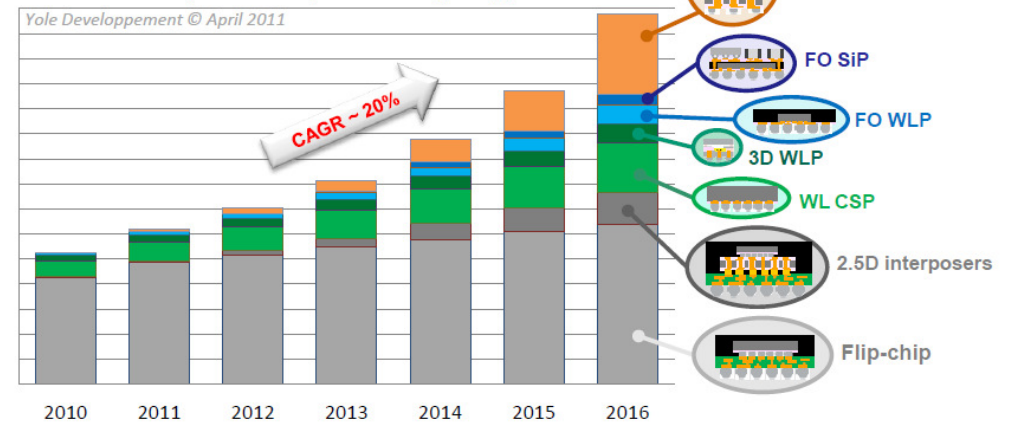
# Market Forecasts

HB LED summary forecast by application

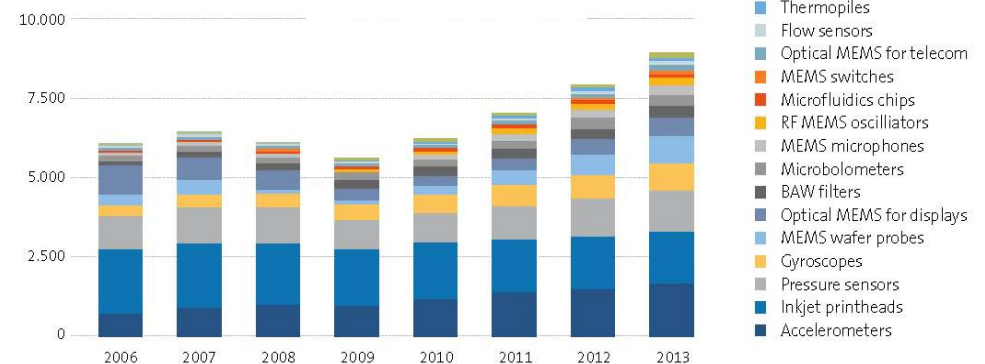


Source: Strategies in Light February 2011

Global Wafer-Level-Packaging demand  
(in Munits of 300mm wafer eq.)



DER MEMS-MARKT In Mio. USD Quelle: isuppli Pressemitteilung, Januar 2011





# Sternenfels – Site for volume manufacturing

- + Three product lines under one roof
  - Photomask Equipment - Coater / Developer - Bonder
- + Modern production facility (15,000 m<sup>2</sup>) with two large clean rooms supporting future business expansion



# Shaping the future

+ SÜSS MicroTec is a successful global player with

- Strong brand standing for
  - + Precision
  - + Reliability
  - + Longevity
- Technological innovation
- Tailored equipment and process solutions
- Global footprint

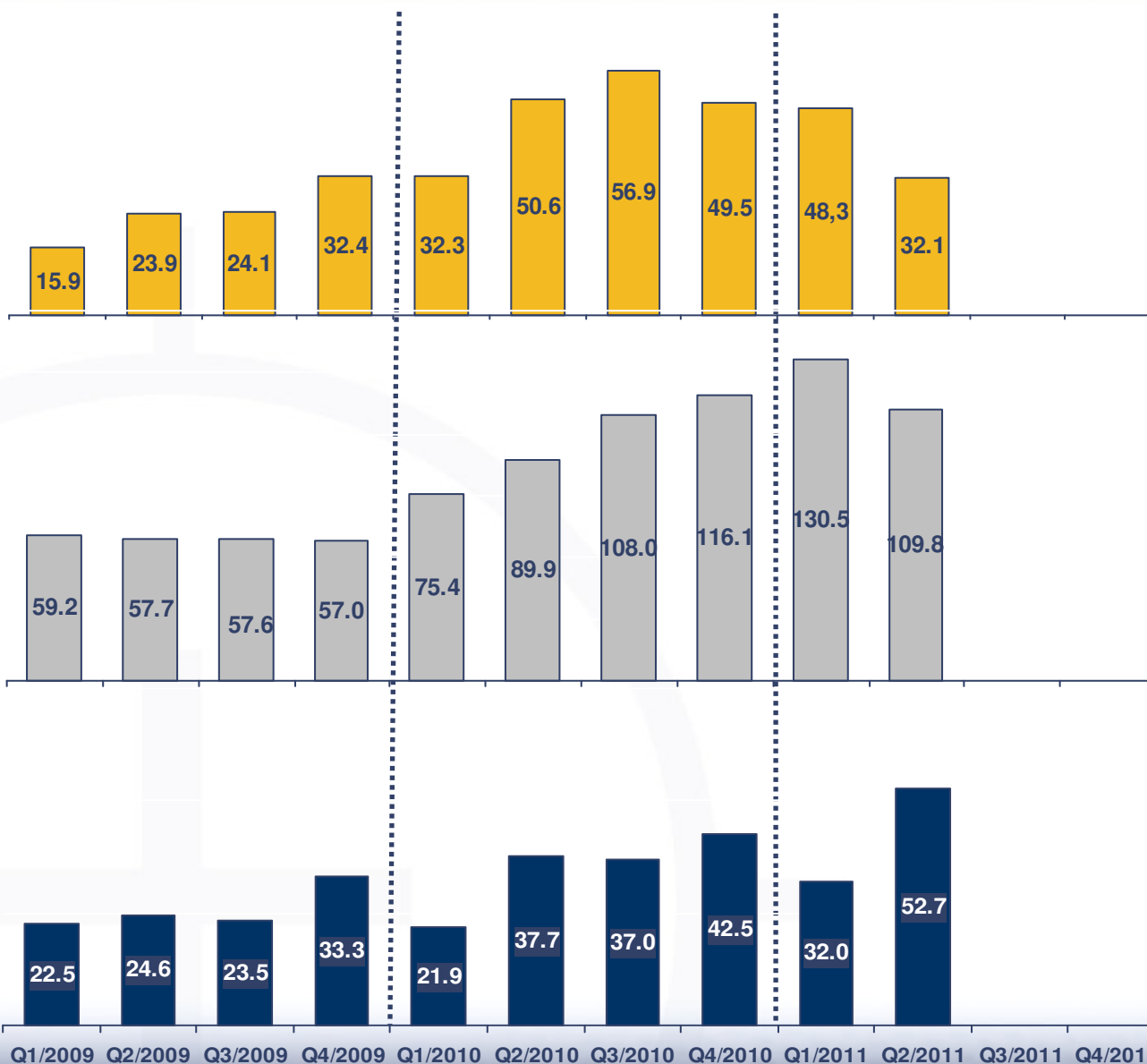


+ SÜSS MicroTec is the industry's reliable partner to meeting today's and tomorrow's challenges in semiconductor manufacturing

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# 30 Months Business Development

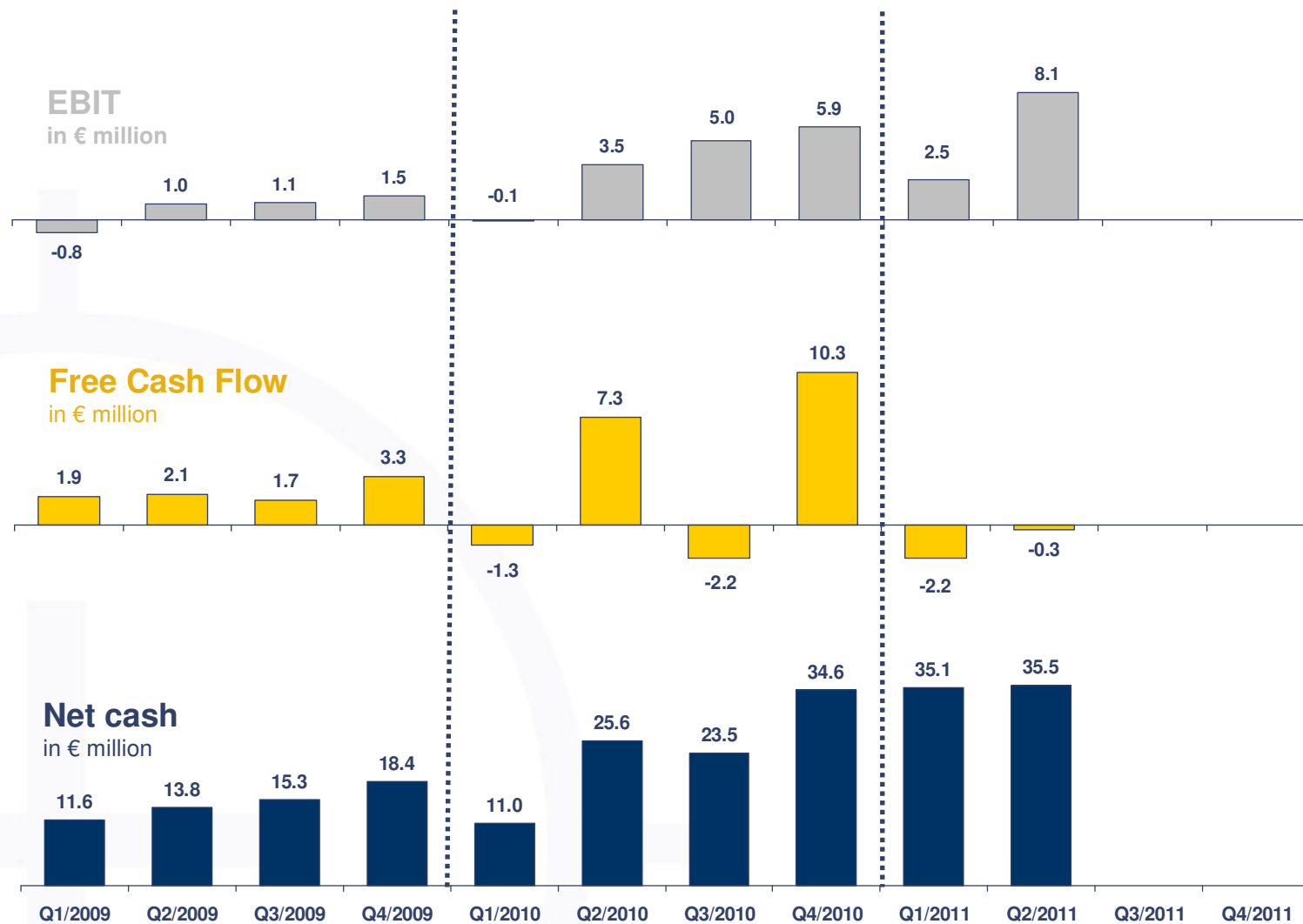


**Order Entry**  
in € million

**Order Backlog**  
in € million

**Sales**  
in € million

# EBIT, Free Cash Flow and Net Cash Development





# Key Financials continuing operations

in € million	H1 2011	H1 2010	FY 2010	FY 2009
<b>Order Intake</b>	80.4	82.9	189.3	93.3
<b>Order Backlog</b> (end of period)	109.8	89.9	116.1	57.0
<b>Revenue</b>	84.7	59.6	139.1	103.9
<b>EBIT</b>	10.6	3.5	14.3	2.8
<i>EBIT in % of Sales</i>	12,5%	5.9%	10.3%	2.7%
<b>Earnings after tax</b>	8.3	1.1	13.0	0.5
<b>EPS in € (basic)</b>	0.44	0.06	0.71	0.03
<b>Free Cash Flow*</b>	-2.5	6.0	14.1	8.9
<b>Net Cash**</b>	35.5	25.6	34.6	18.4

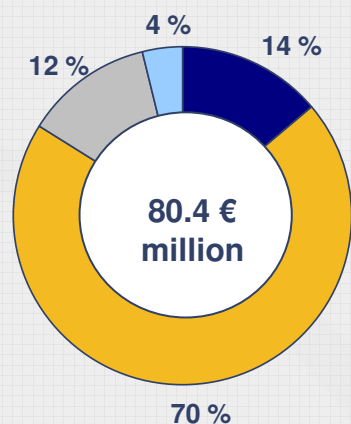
\* Before consideration of purchase or sale of available-for-sale securities and before consideration of extraordinary items from purchase or sale of subsidiaries

\*\* incl. interest-bearing securities

# Segment Reporting H1 2011

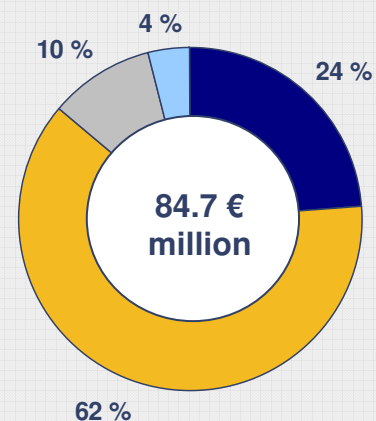
continuing operations

## Order Intake



■ Photomask Equipment	11.4 € million
■ Lithography	56.3 € million
■ Substrate Bonder	9.3 € million
■ Others	3.4 € million

## Sales



■ Photomask Equipment	20.7 € million
■ Lithography	52.5 € million
■ Substrate Bonder	7.7 € million
■ Others	3.8 € million

# Segment Reporting H1 2011 continuing operations

in € million	Lithography	Substrate Bonder	Photomask Equipment	Others	Total
<b>Oder Intake</b>					
H1 2011	56.3	9.3	11.4	3.4	80.4
H1 2010	54.9	10.5	14.0	3.5	82.9
<b>Sales</b>					
H1 2011	52.5	7.7	20.7	3.8	84.7
H1 2010	38.5	12.1	6.1	2.9	59.6
<b>Segment-EBIT</b>					
H1 2011	13.1	-5.0	4.3	-1.9	10.6
H1 2010	7.0	-4.1	-0.2	0.7	3.5
<b>Employees as of 06/30</b>					
H1 2011	330	134	108	60	632
H1 2010	319	125	84	53	581

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# Outlook

## Outlook

- + Strong competitive positioning: first or second in the target markets
- + Double-digit growth rates in target markets for the years to come
- + Strong growth potential for the Substrate Bonder Division
- + Expansion of the solid financial situation and increasing profitability

## Guidance

- + FY 2011e:
  - Sales of more than 170 € million
  - EBIT-margin 10% – 15%
- + Q3 2011e:
  - Order Intake € 30 – 40 million
  - Sales of approximately 35 - 40 € million

# Investment case

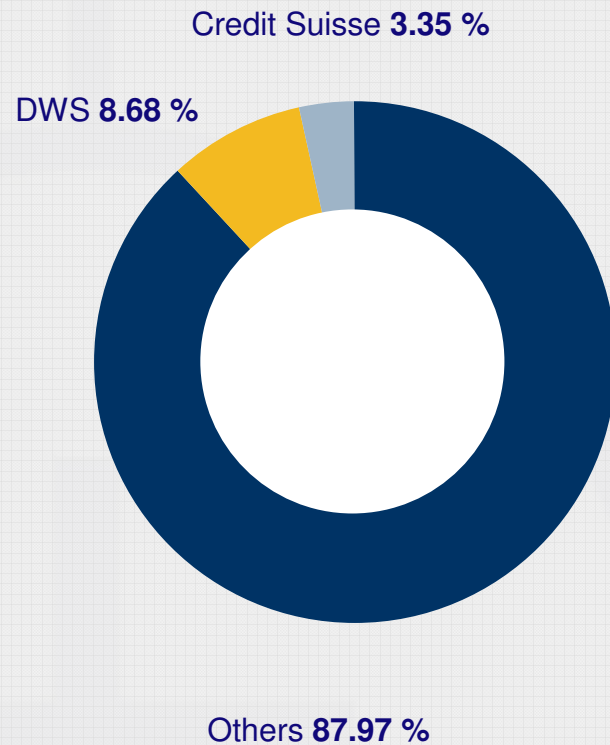
- + Strong balance sheet, lean cost structure
- + Strong fundamental growth in target markets
- + Significant mid term revenue opportunity
- + Strong competitive positioning: first or second in the target markets
- + Evolve to a leading company in the semiconductor backend, enabling 3D integration while supporting “Moore’s Law” as well as “More than Moore”
- + Participate in the consolidation of the backend

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# SUSS MicroTec Share - Overview

## Shareholder Structure



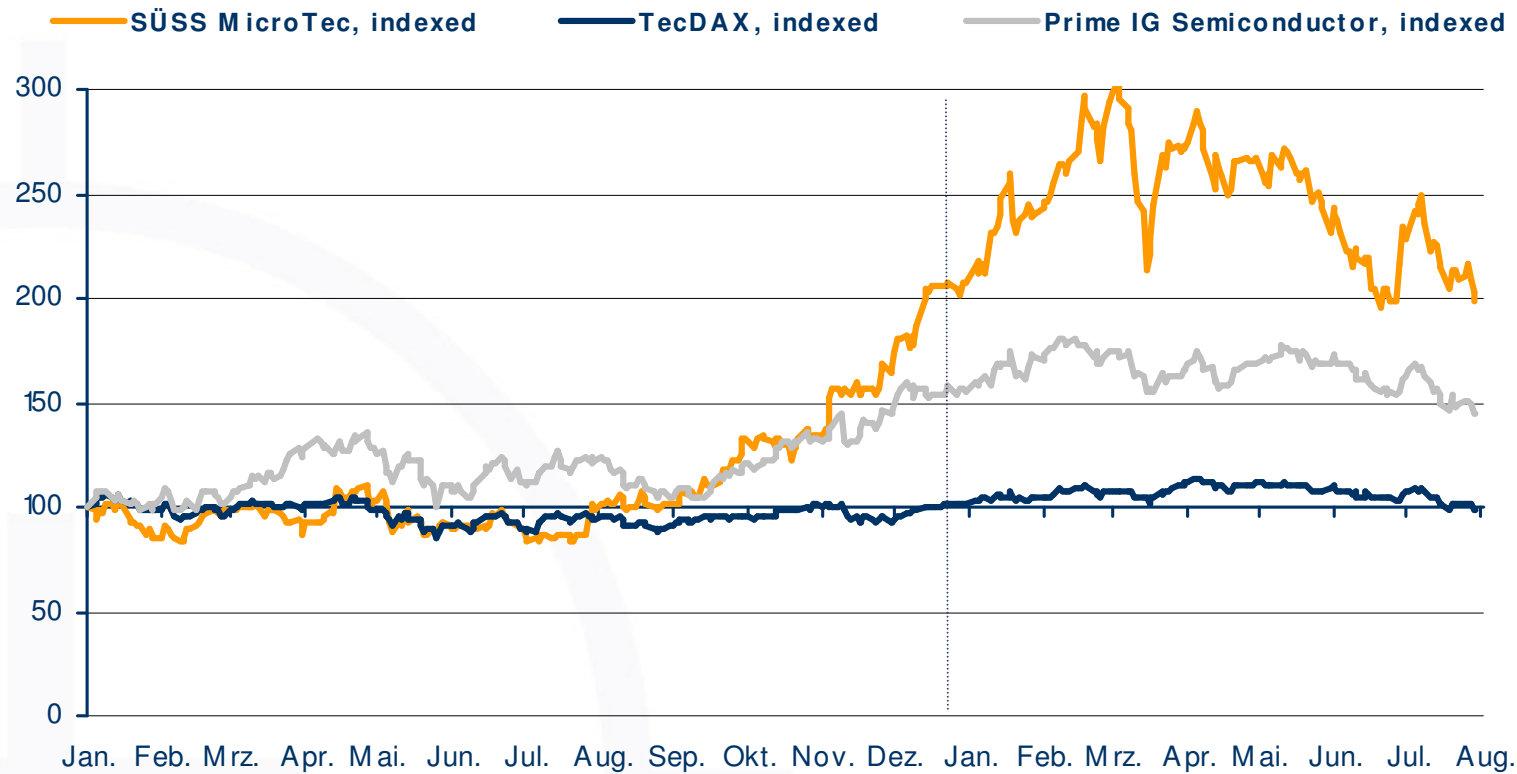
## Share price and Trading Volume

- + Average daily trading volume:
  - 2009: 46 ths.
  - 2010: 120 ths.
  - 2011: 265 ths.
- + Share price development in 2010/2011:
  - Year high: 9.14 €
  - Year low: 3.71 €
  - Year end: 9.14 €
  - Year high in 2011: 13.57 €
- + Analyst coverage increased from 4 to 6



# Long Term Development of the SUSS MicroTec Share

(Price of the SUSS MicroTec Share at January 4, 2010: € 4,40)



# Investor Relations Information

## Contact

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**Fax.:** +49 (0) 89-32007- 451

**Email:** [franka.schielke@suss.com](mailto:franka.schielke@suss.com)

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**Schleissheimer Strasse 90**  
**85748 Garching (Munich)**  
**Germany**  
**[www.suss.com](http://www.suss.com)**

## Financial Calendar 2011

Interim Report 2011	August 4
TMT Conference Commerzbank, Frankfurt	August 31
UBS Best of Germany Conference, New York	September 14 / 15
Berenberg Investment Conference, Paris	September 15
UniCredit Investment Conference, Munich	September 27
Nine-month Report 2011	November 8
TMT Conference Morgan Stanley, Barcelona	November 17
German Equity Forum Fall 2011	November 21 - 23

# The Restructuring Measures in Numbers

## Purchase of HamaTech

Purchase price ground and building: 4.4 € million

Purchase price HamaTech: 3.8 € million

Earn-out payment in 2011: 300,000 €

## Sale of Test Systems

Cash inflow in 2010: 3.3 € million €

Cash inflow in 2011: 3.3 Mio. € (from Cascade-shares)

further possible cash inflow until 01/2012: 1.5 € million

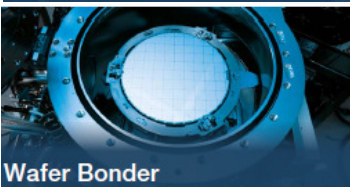
## Transfer Substrate Bonder

Costs in 2010: 3.9 € million

Costs in Q1 2011: 1.1 € million

further costs in 2011: ~1.0 € million

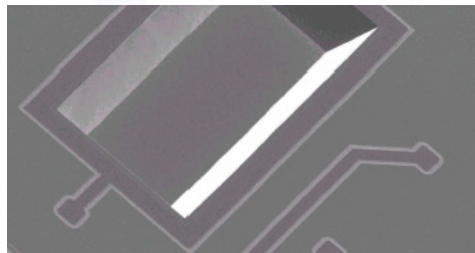
# Example: MEMS



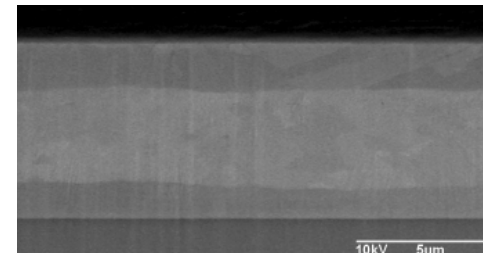
## Increase yield:

- + High-performance exposure optics
- + Cost-efficient alignment verification
- + High –topography spray coat & develop
- + Full-wafer imprint in one step
- + High force, high temperature wafer bonding for metal bonds

Photolithography



Substrate Bonding



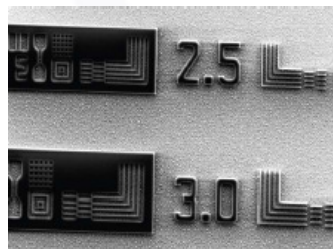
# Example: LED



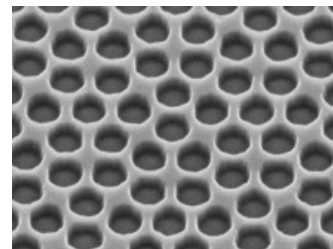
**Reduce cost per lumen with efficient process technologies:**

- + Multi-wafer processing and handling
- + High performance exposure optics
- + Warped wafer tooling
- + Special pattern recognition

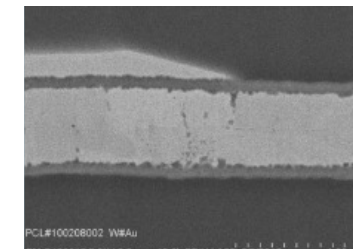
Photolithography



Nano Imprinting



Substrate Bonding



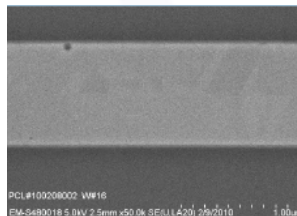
# Example: 3D-Integration



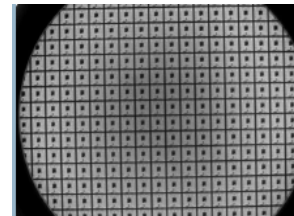
## 3D-Scaling:

- + Flexible equipment for multiple temporary bond and debond processes
- + Superior pressure uniformity at bonding
- + Thin wafer handling
- + TSV processing with high performance exposure optics
- + Uniformity spray coating for high topographies

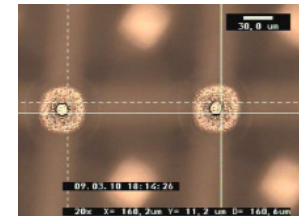
Permanent Bonding



Temporary Bonding

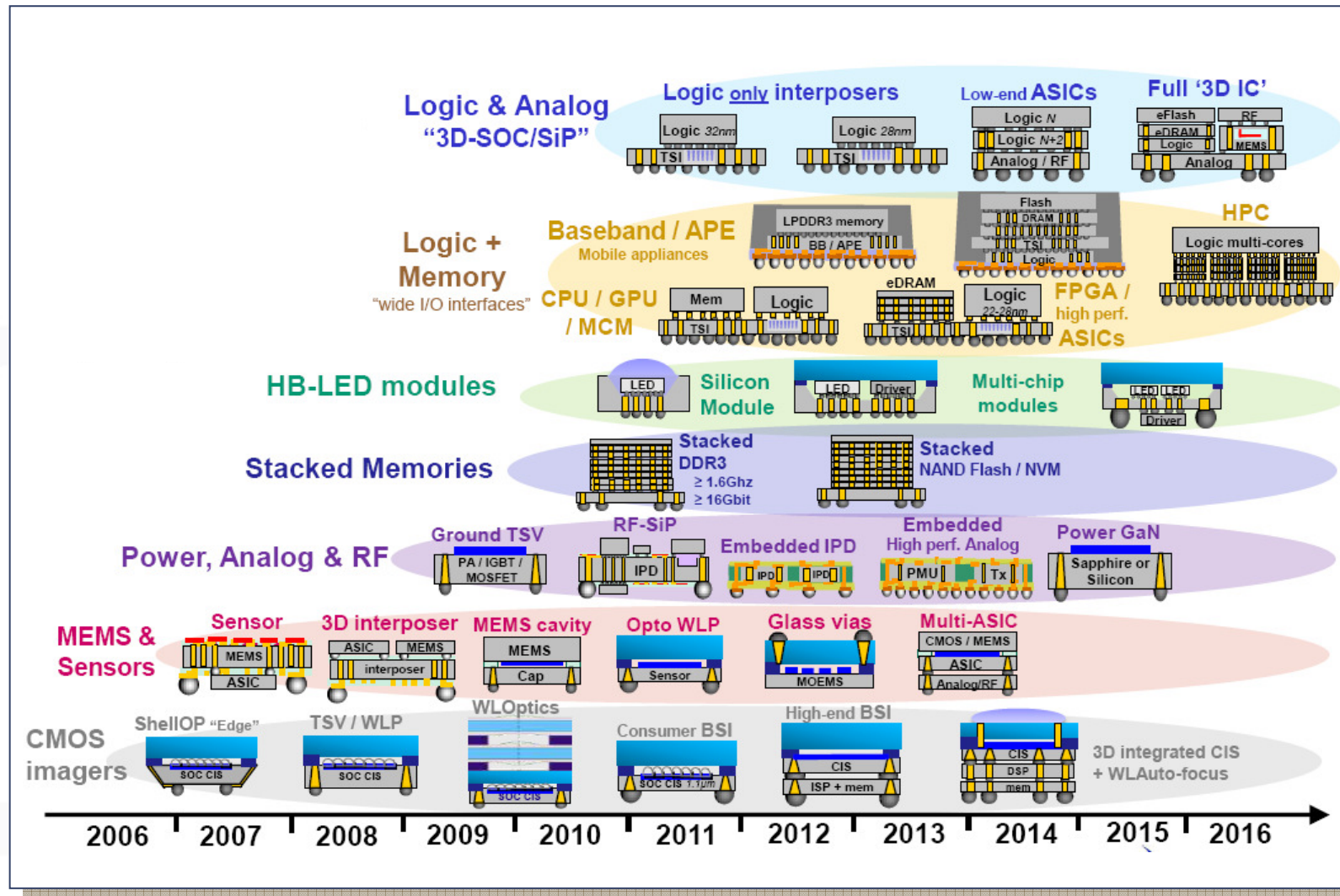


3D-Lithography



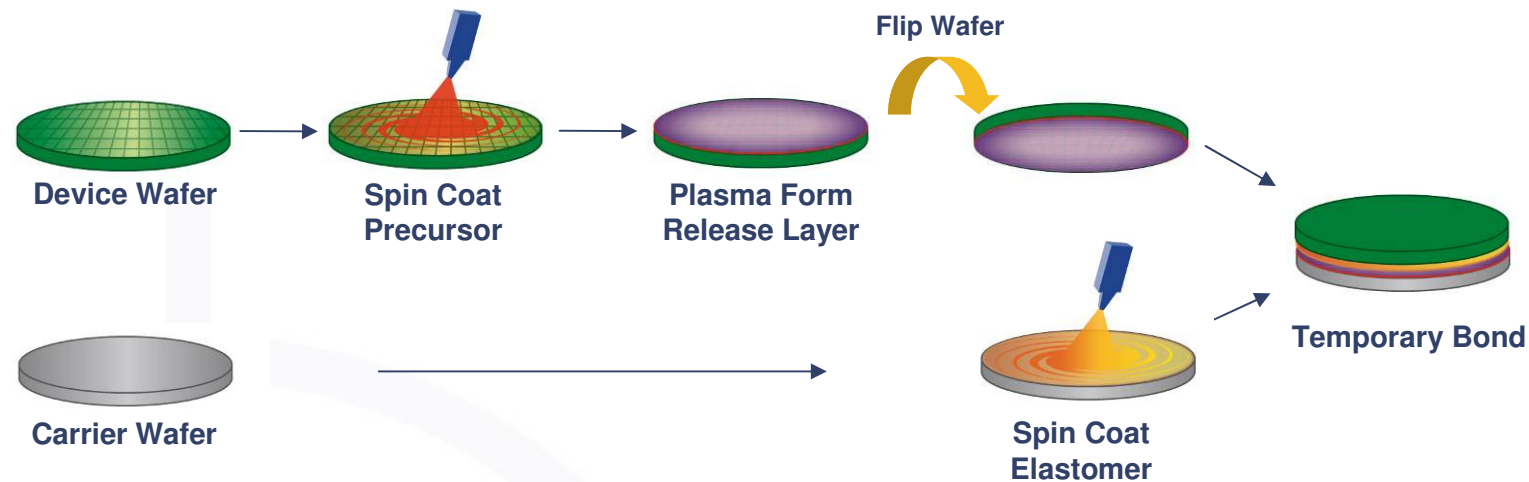


# 3D Integration: Chip Design Using the Third Dimension

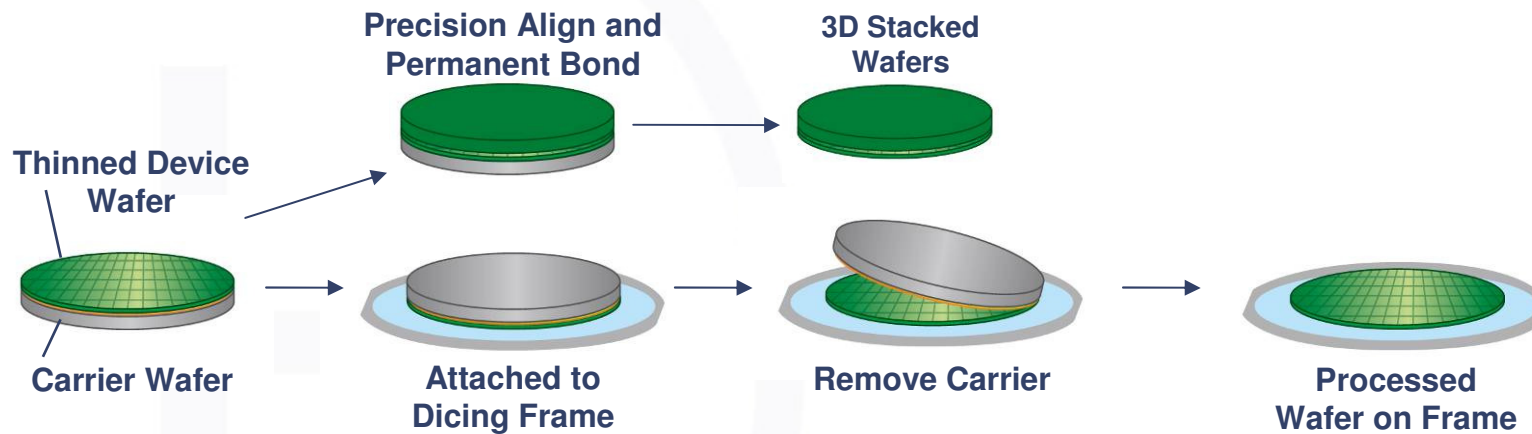


# Thin Wafer Handling with SUSS Equipment

## Temporary Bond



## Debond





# Sustainability: Example Data Traffic (3D Integration)

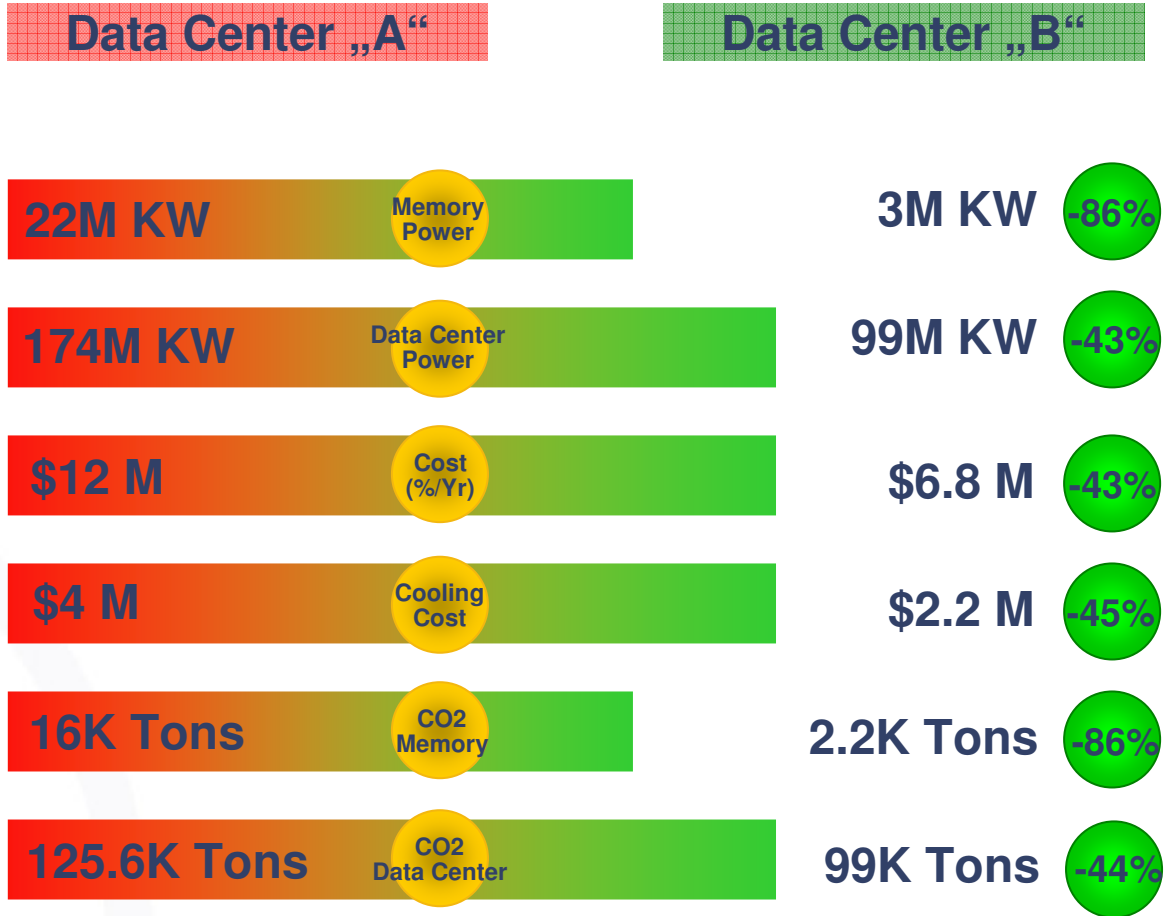
- + Smartphones & Media Tablets drive explosive data growth (+159% global increase in mobile traffic in 2010)
- + To handle the massive amounts of data the infrastructure of data centers across the globe needs to be expanded
- + Today's typical power consumption of one data center:
  - 174M KW Power (22M KW for memory)
  - 2.5W of cooling required for every 1W of power going into the server
  - 125.6K Tons of Co2 emissions
- + Advanced Silicon Technology (3D) offers dramatic reduction in power consumption

**SUSS MicroTec equipment for Advanced Packaging and 3D Integration enables the development and production of energy efficient devices**

# Sustainability: Case Study Data Centers

Example of Data Center configuration:

- 25600 Servers
- 48GB memory per server
- 1.2 M GB total



+ Advanced Silicon Technology (3D) offers dramatic reduction in power consumption

Source: [www.epa.gov](http://www.epa.gov)



# SUSS Management Board

## Frank Averdung, CEO



- + 1984: Degree in Electrical Engineering from the University of Aachen
- + 1985 to 1990: Key Account & Product Marketing Manager, Siemens AG, Munich / Santa Clara, USA
- + 1990 to 1992: Corporate Marketing Manager, National Semiconductor
- + 1992 to 1995: Marketing Director US & Far East und Head of ITT Semiconductor US, ITT Semiconductors
- + 1995 to 1998: General Manager Global Business Operations Siemens, Applied Materials
- + 1998: General Manager Central Europe & Eastern Europe, Applied Materials
- + 1999 to 2003: Managing Director Europe, ETEC
- + 2003 to 2006: Managing Director, NaWoTec GmbH
- + 2005 to 2009: Managing Director, Carl Zeiss SMS GmbH und President & General Manager, Carl Zeiss SMT Inc.
- + CEO of SUSS MicroTec AG since February 1, 2009

## Michael Knopp, CFO



- + 1995: Degree in Business Administration (finance and accounting majors) from the University of Bayreuth
- + 1995 to 1996: Associate, Wollert-Elmendorff Deutsche Industrie Treuhand GmbH (Deloitte & Touche)
- + 1996 to 1997: Financial Analyst, Sensormatic GmbH, Ratingen
- + 1997 to 1999: Corporate Investments, Gerresheimer Glas AG, Düsseldorf
- + 1999 to 2005: Commercial Director and then CFO (2001–2005), REALTECH AG (IT consulting and software company), Walldorf
- + 2005 to 2007: Commercial Director and then Managing Director, Kemmax GmbH (chemical trading and logistics company), Essen
- + Member of the Board since August 1, 2007