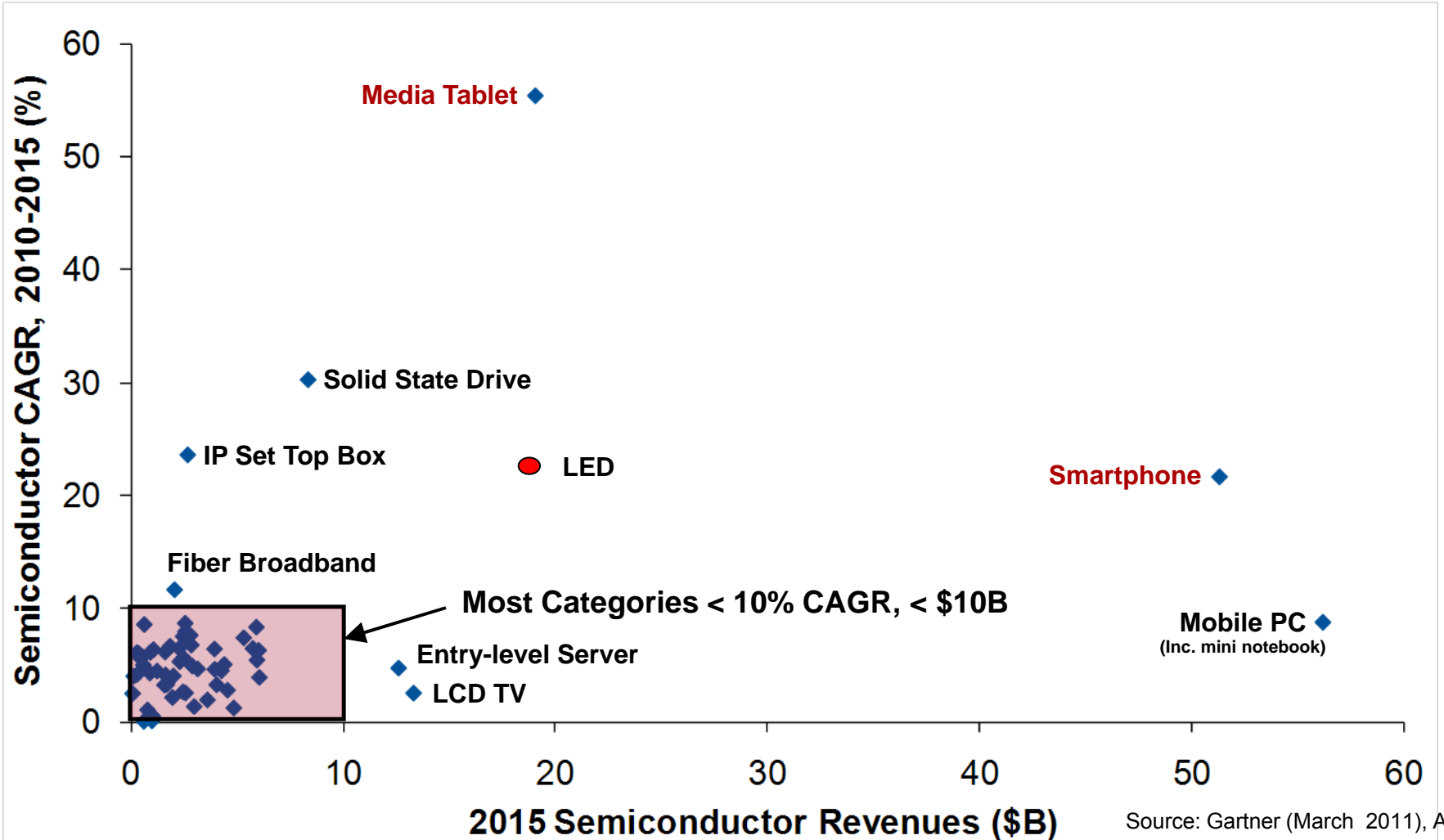


# Investor presentation

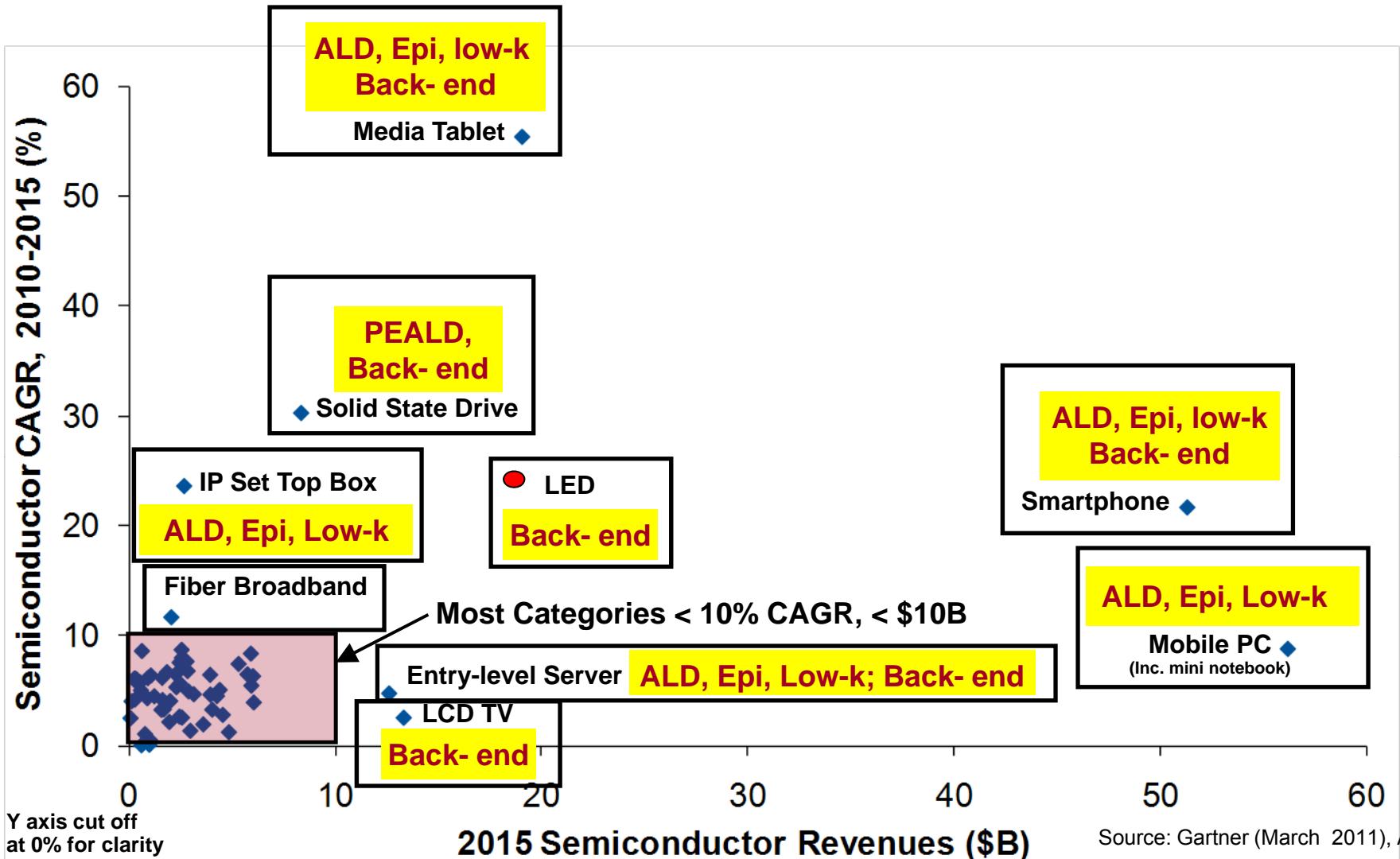
7 November 2011

All matters discussed in this business and strategy update, except for any historical data, are forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. These include, but are not limited to, economic conditions and trends in the semiconductor industry generally and the timing of the industry cycles specifically, currency fluctuations, the success of restructurings, the timing of significant orders, market acceptance of new products, competitive factors, litigation involving intellectual property, shareholder and other issues, commercial and economic disruption due to natural disasters, terrorist activity, armed conflict or political instability, epidemics and other risks indicated in the Company's filings from time to time with the U.S. Securities and Exchange Commission. All statements are made as of the date provided and we assume no obligation nor intend to update or revise any forward-looking statements to reflect future developments or circumstances.

- ✓ **One of the few companies offering both Front End and Back End equipment**
  - ✓ \$12 B market in 2010 rising to \$13 B in 2014 (VLSI Research, IC manufacturing only)
  - ✓ Leading position in our target segments
- ✓ **Technology enabling new materials and new device integration roadmaps**
  - ✓ Fast growth ALD / PEALD markets
  - ✓ Mobile devices for high performance and / or lower power
  - ✓ Customer expansion from Logic to Foundries and Memory
  - ✓ LED assembly and packaging solution
  - ✓ Strong improvement programs in the newly acquired SMT activity
- ✓ **Attractive value proposition**
  - ✓ Strong growth opportunities
  - ✓ Restructuring has significantly lowered Front End operating break-even
  - ✓ Front End gross margin up to ~40%
  - ✓ 52% stake in ASMPT
  - ✓ Dividend of Euro 0,40/share



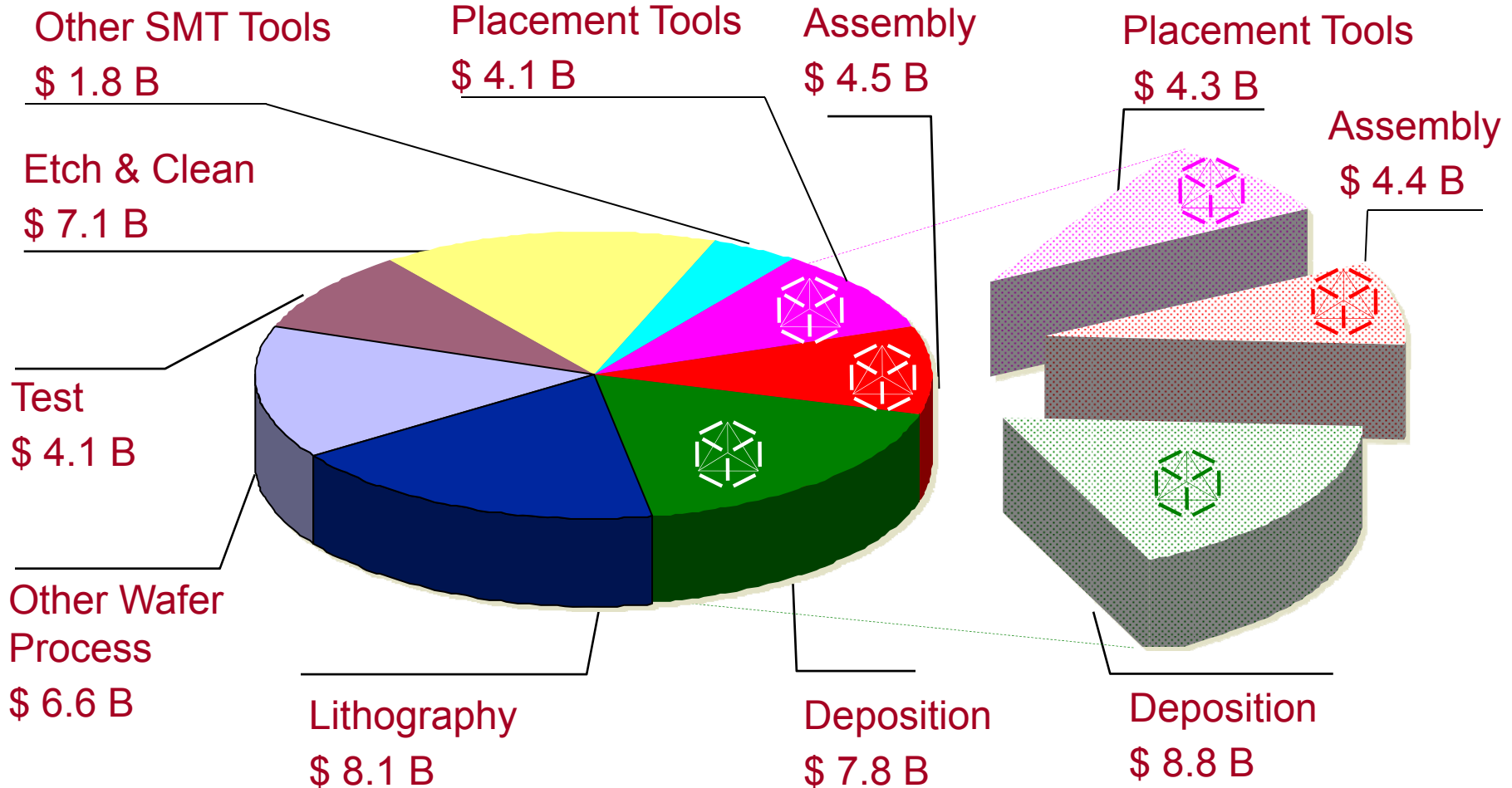
- Smartphones and Media Tablets Fuel Market
- LEDs driven by cost, thermal management, white light needs and brightness



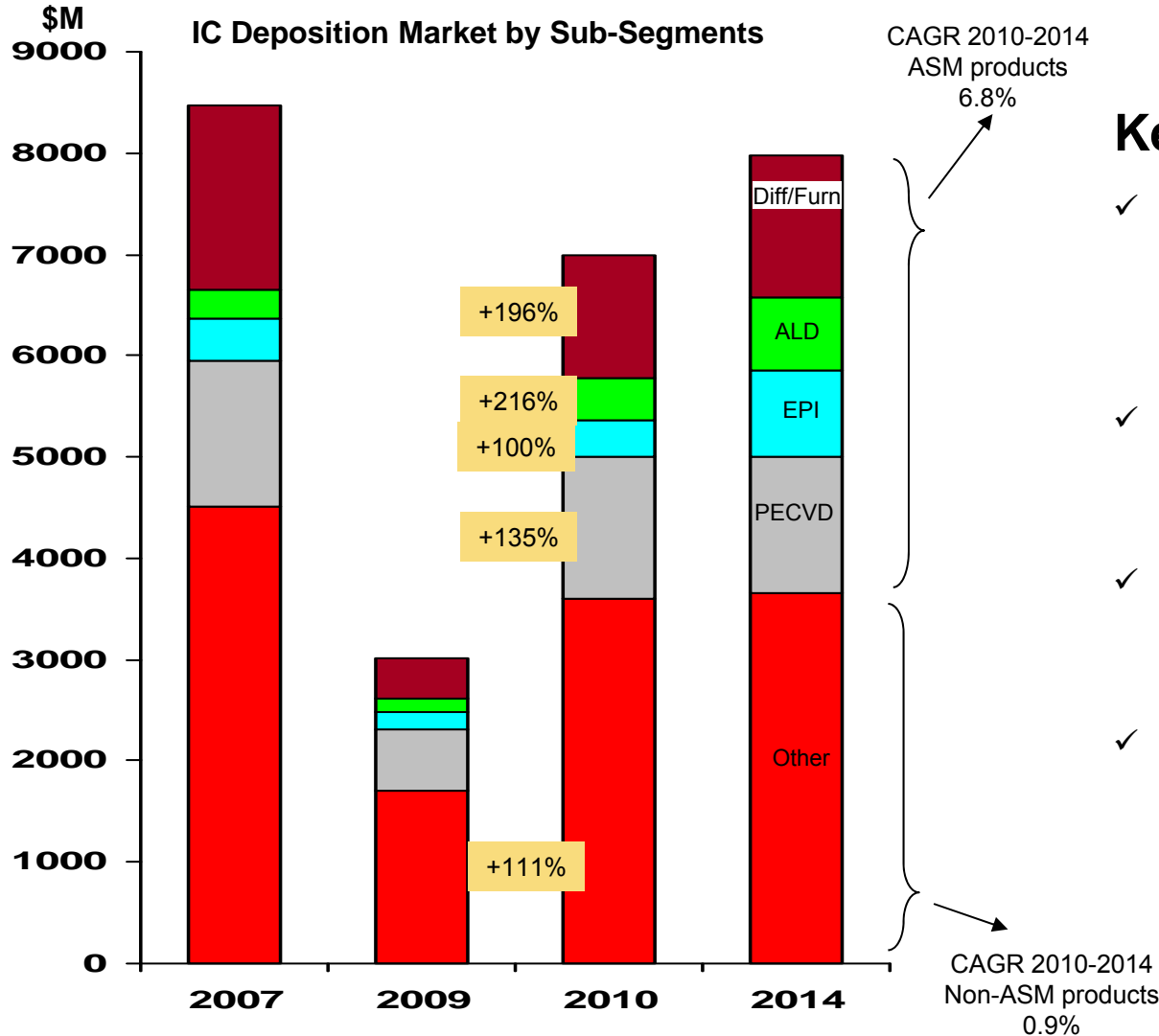
- ASM's new technologies are well positioned to supply the equipment to manufacture semiconductors and LED in the high CAGR / high revenue segments

## 2010 (\$43,3 Billion)

## 2014 (\$42,2 Billion)



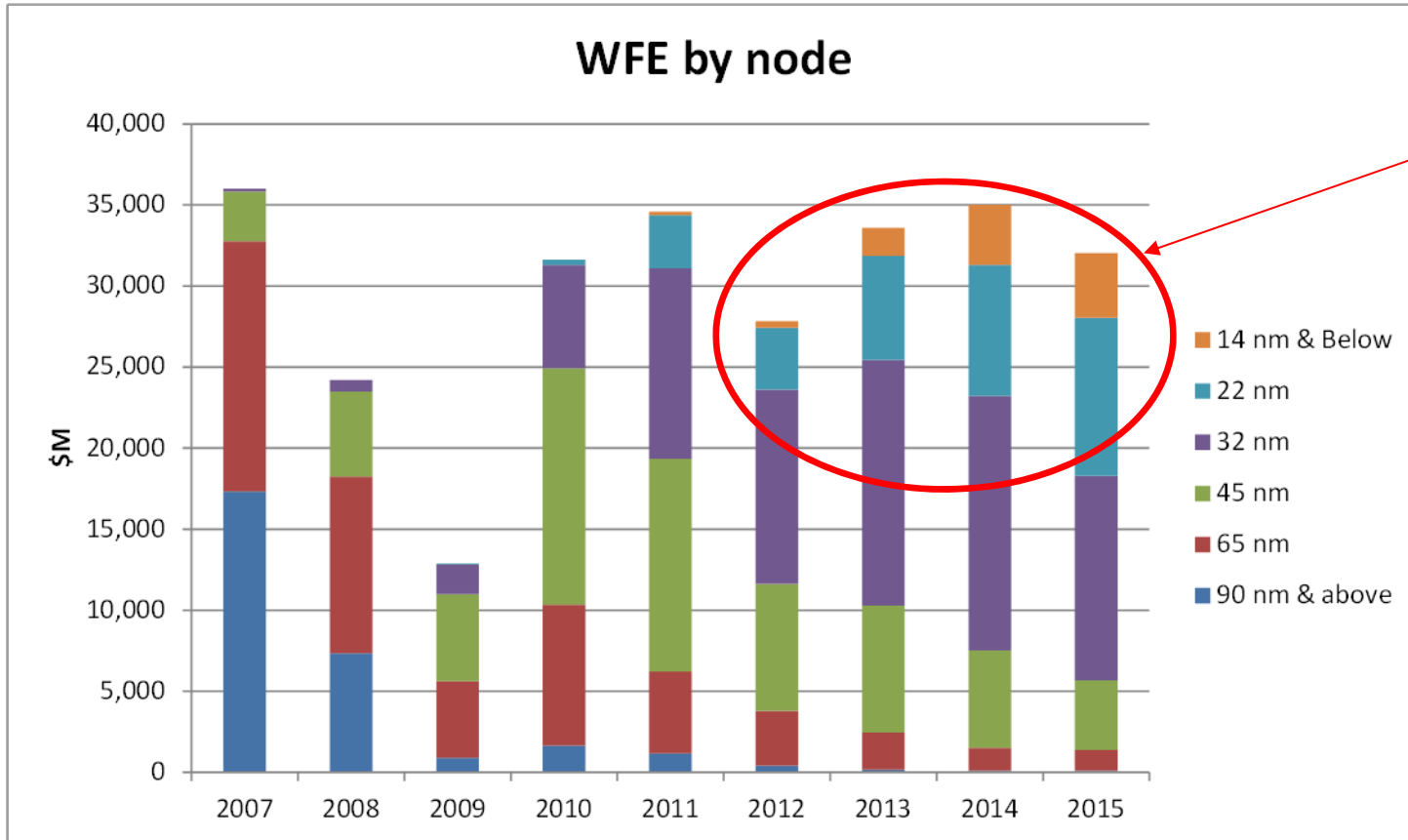
Source: IC by VLSI Research Inc., October 11, 2011  
SMT by Gartner, 2011



## Key Growth Drivers:

- ✓ Spending result of need to advance towards 32/28nm and beyond and by capacity increases
- ✓ Memory and Foundry spending expected to increase in 2011
- ✓ ASM's leading ALD technology required for miniaturization of chips
- ✓ Critical in enabling processing power in mobile devices while improving energy efficiency

Source: VLSI Research October 11, 2011



Opportunity for WFE share increase

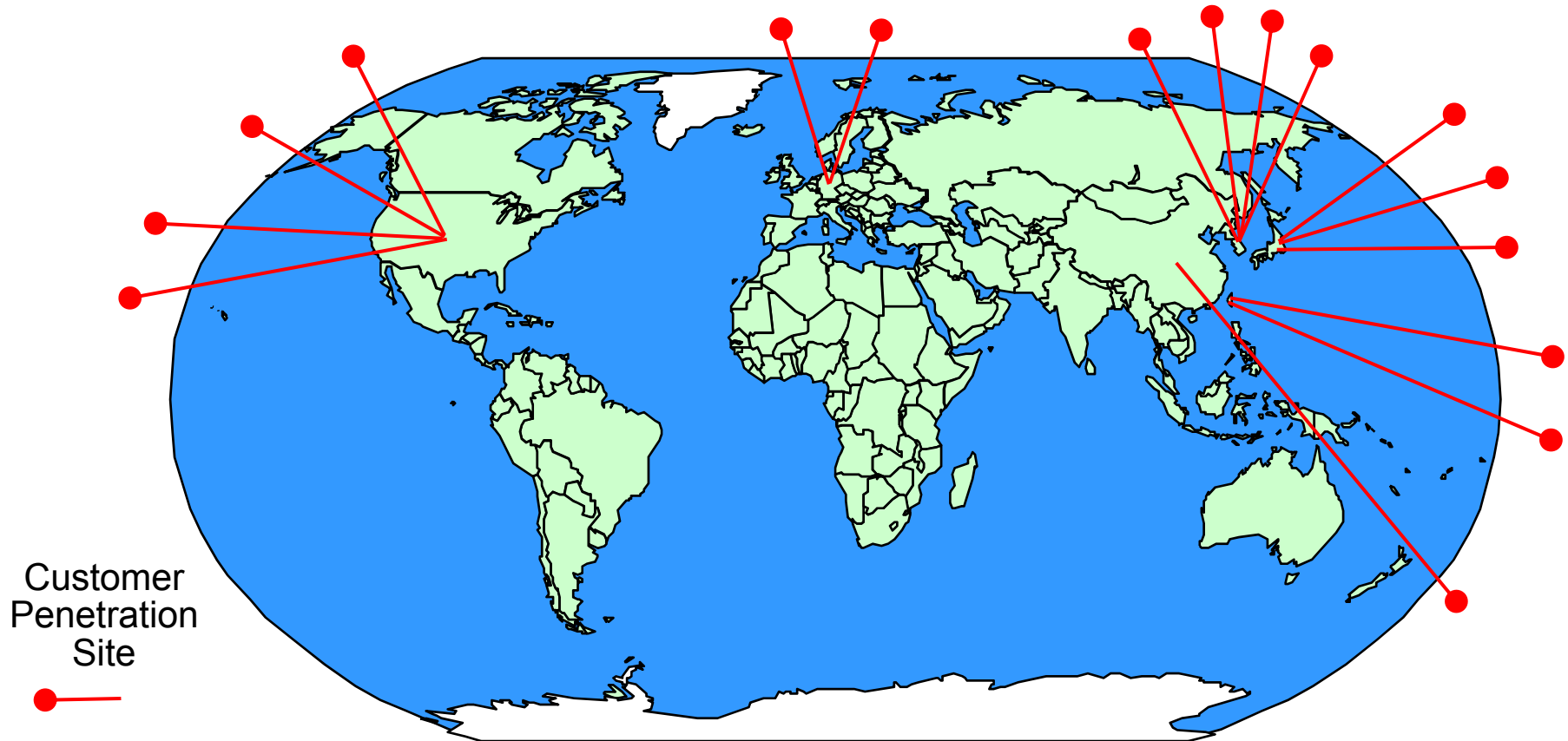
Gartner Sep 2011

- In 2011 strong growth of equipment for 32nm estimated, 22nm node started
- Share of 32 and 22nm targeted to grow in 2012-2015 which offers growth opportunities for ALD, PEALD

## Market Requirements: 45nm→32nm →22nm → beyond

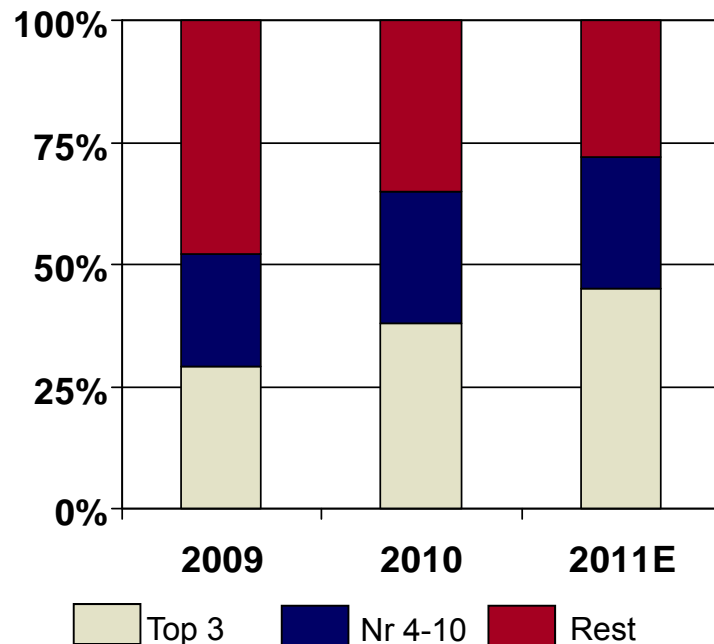
| Process  | Application  | ASM Relative Positioning   |
|--|--|--|
| <p><b>ALD and PEALD</b></p> <ul style="list-style-type: none"> <li>• ALD solution (Hafnium based oxide)</li> <li>• PEALD Low temp dielectrics</li> </ul>                                     | <ul style="list-style-type: none"> <li>• ALD key for High-k Gate technology</li> <li>• Enables further miniaturisation of chips</li> </ul>                       | <ul style="list-style-type: none"> <li>✓ #1 in the ALD market</li> <li>✓ Qualified by nearly all Logic manufacturers</li> <li>✓ Unique PEALD solution</li> </ul> |
| <p><b>Diffusion Furnace</b></p> <ul style="list-style-type: none"> <li>• Advanced batch processing, Batch ALD process available</li> <li>• Unique “dual reactor dual boat” design</li> </ul> | <ul style="list-style-type: none"> <li>• Smallest footprint per reactor</li> <li>• Lowest Cost of Ownership</li> </ul>   | <ul style="list-style-type: none"> <li>✓ Top IC manufacturers are customers</li> </ul>   |
| <p><b>Epitaxy</b></p> <ul style="list-style-type: none"> <li>• Epitaxial for NMOS/PMOS</li> </ul>  | <ul style="list-style-type: none"> <li>• Used in nanotechnology semiconductor fabrication</li> <li>• Affordable method of high quality crystal growth</li> </ul> | <ul style="list-style-type: none"> <li>✓ ASM one of only two top vendors</li> </ul>  |
| <p><b>PECVD</b></p> <ul style="list-style-type: none"> <li>• Extreme low-k films</li> </ul>  | <ul style="list-style-type: none"> <li>• Advanced intermetal dielectric film</li> </ul>  | <ul style="list-style-type: none"> <li>✓ ASM one of only three top vendors</li> </ul>  |

**Strong IP protected portfolio**



- 16 Key customer penetrations
- Applications like ALD high-k, ALD metal, PEALD SDDP, PEALD spacer
- Memory, Foundry and Logic segment

### Revenue as % Of Sales



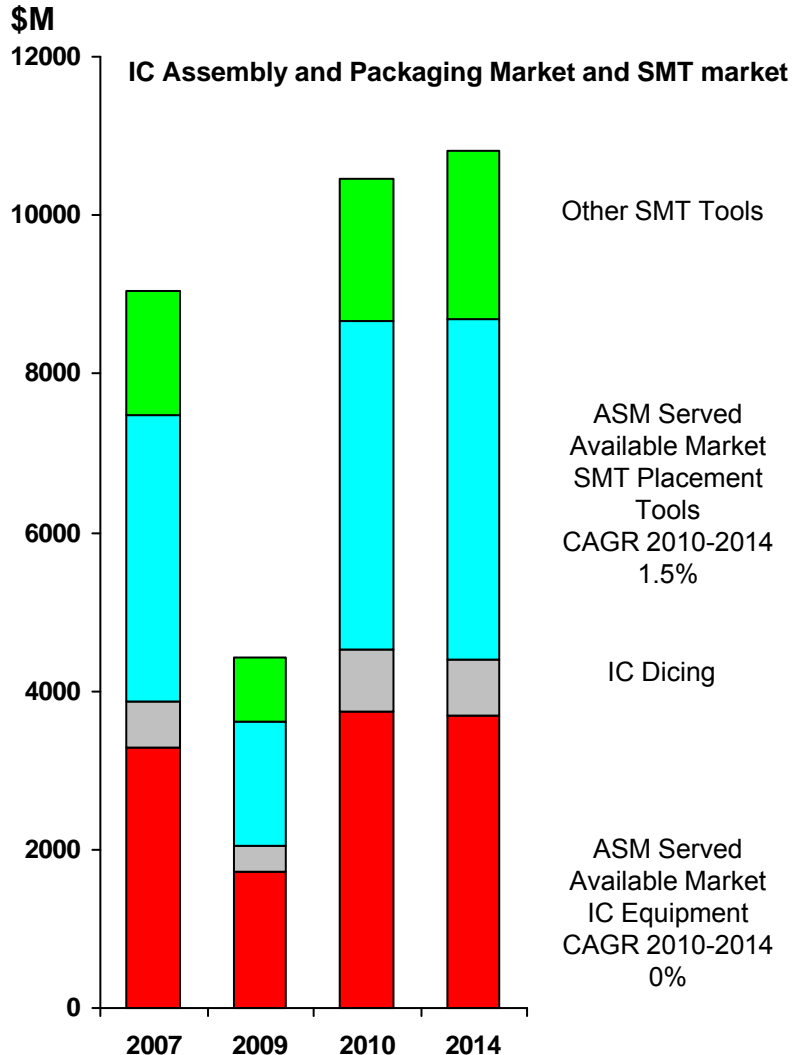
### Key Developments:

- ✓ Diversification of customer base from Logic to Memory and Foundries
- ✓ Weight of Asia growing
- ✓ No customer above 20% of revenues
- ✓ Wider adoption by larger number of customers

- ✓ **ASMI Front-end started ALD technology in 1999 and has a strong time advantage over competition.**
  - ✓ The ALD (and PEALD) technology is strongly patented
  - ✓ Further miniaturization will require more and more ALD/PEALD solutions.
- ✓ **ASMI is one of the two leading suppliers of Low-k films.**
  - ✓ ASMI is supplier to a few of the worlds leading IC manufacturers.
- ✓ **In the EPI market ASMI is one of only two global suppliers.**
  - ✓ Recent successes with applications for the analog/power market
- ✓ **ASM's Vertical Furnace is the only dual reactor, dual boat configuration available in the market providing lowest CoO and footprint per reactor.**
  - ✓ Top IC manufacturers are customers

- ✓ **Significantly reduced the operating break-even level**
  - ✓ PERFORM! reduced cost level by 40% versus the Q4 2008 runrate
- ✓ **Manufacturing consolidated to 1 location in Singapore**
  - ✓ Adjacent to Back End facility
- ✓ **Significantly streamlined R&D, Product Management and G&A functions**
- ✓ **Further savings opportunities in local sourcing and supply chain**

**Front End gross margin up from 28% in Q4 2008 to  $\pm$  40% presently**



## Key Growth Drivers:

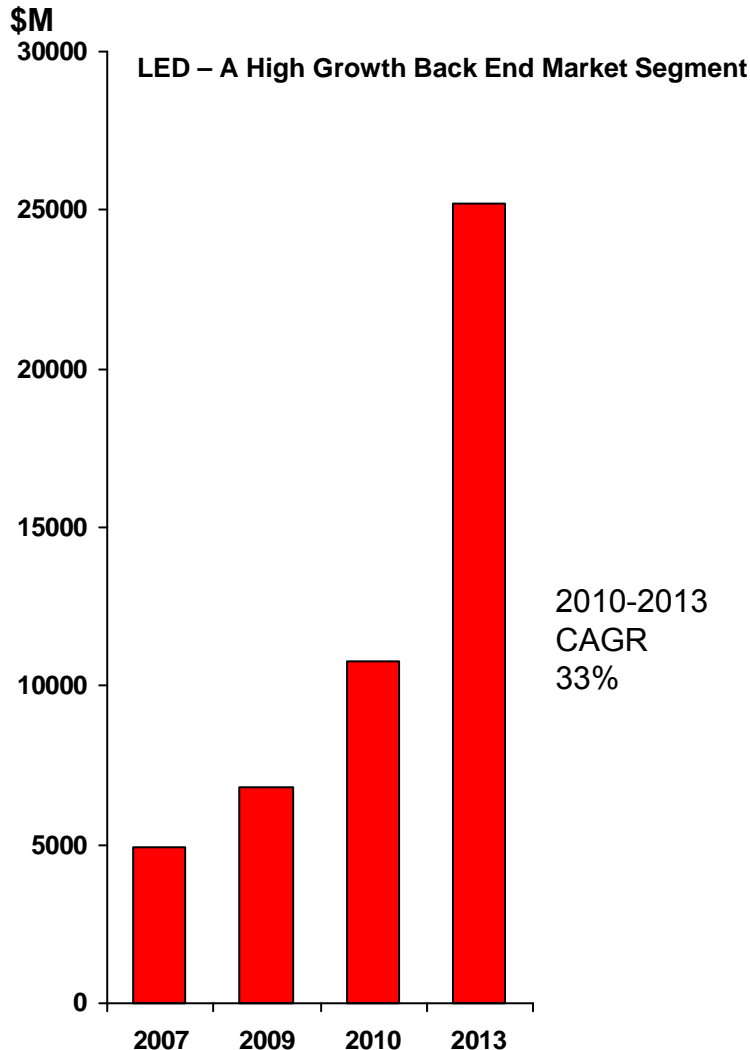
For IC equipment

- ✓ Increasing unit volume
- ✓ Increasing share of the Asia Pacific region benefiting regional ties of ASMPT

For SMT

- ✓ Improve market position in SE Asia
- ✓ Add Low-end tools to product portfolio

Source: IC equipment VLSI Research October 11, 2011  
SMT equipment Gartner 2011



## Key Growth Drivers:

- ✓ LEDs provide an energy efficient, high quality and longer life alternative to traditional light sources
- ✓ LEDs replacing fluorescent lamps in backlighting of TVs and FPDs
- ✓ Years of strong growth expected when LEDs penetrate the large general illumination market

Source: Morgan Stanley Equity Research. (April 2011)

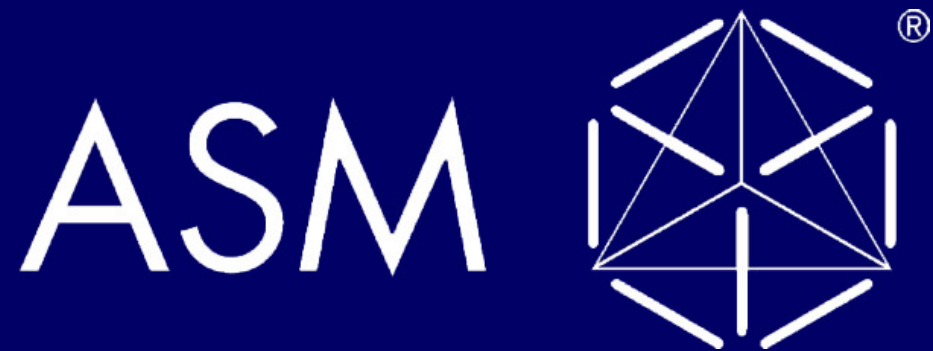
## IC manufacturing - LED manufacturing - Surface Mount Technology

| Market   | Application   | ASM Relative Positioning  |
|--|---|---|
| <p><b>IC manufacturing</b></p> <ul style="list-style-type: none"> <li>• Assembly tools</li> <li>• Packaging tools</li> <li>• Inspection tools</li> </ul> | <ul style="list-style-type: none"> <li>• Die bonding</li> <li>• Wire bonding</li> <li>• Moulding</li> <li>• Trim &amp; Form</li> <li>• Vision and Inspection</li> <li>• Sorting</li> </ul>                    | <ul style="list-style-type: none"> <li>✓ #1 in the market</li> <li>✓ Qualified by most IDM's and Subcontractors'</li> <li>✓ Strong local service and support organization</li> </ul>  |
| <p><b>LED manufacturing</b></p> <ul style="list-style-type: none"> <li>• Assembly tools</li> <li>• Packaging tools</li> <li>• Testing tools</li> </ul>   | <ul style="list-style-type: none"> <li>• Die bonding</li> <li>• Wire bonding</li> <li>• Moulding</li> <li>• Trim &amp; Form</li> <li>• Vision and Inspection</li> <li>• Sorting</li> <li>• Testing</li> </ul> | <ul style="list-style-type: none"> <li>✓ #1 in the bonding market</li> <li>✓ Complete manufacturing tools portfolio</li> <li>✓ Entered LED market already in 2006</li> <li>✓ Strong local service and support organization</li> </ul> |
| <p><b>SMT</b></p> <ul style="list-style-type: none"> <li>• Placement tools</li> </ul>  | <ul style="list-style-type: none"> <li>• Pick &amp; Place</li> </ul>  | <ul style="list-style-type: none"> <li>✓ ASM #3 vendor</li> <li>✓ Leading position in High-end tools</li> </ul>   |

# Back End's Competitive Advantages

- ✓ **Back-end industry continues to move to SE Asia.**
  - ✓ ASMPT the only large BE company fully located in SE Asia.
  
- ✓ **Cost is the most important topic in Back-end.**
  - ✓ ASMPT provides the lowest cost solutions to customers.
  
- ✓ **China is the fastest growing market in Back-end.**
  - ✓ ASMPT has the largest part of its activities (manufacturing, engineering, R&D) in China (including Hong Kong).
  
- ✓ **LED is a strongly growing market with highest future growth potential.**
  - ✓ ASMPT entered the LED market very early (2006) and is a leading equipment supplier in this segment
  
- ✓ **SMT provides further growth opportunities**
  - ✓ ASM AS is amongst the top three suppliers

- ✓ **ASMPT continued growing faster than market**
  - ✓ Continued its #1 position in the IC Assembly & Packaging market
  - ✓ Successfully entered LED market and has a leading position in LED Assembly & Packaging
  - ✓ Entered adjacent markets (Surface Mount Technology), advantages:
    - ✓ Enables ASMPT to bring in its low-cost manufacturing knowledge
    - ✓ Entrance to ASMPT low-cost supplier base in Asia for ASM AS
    - ✓ Enables ASM AS to enter ASMPT Asian marketing infrastructure



# Financial Overview

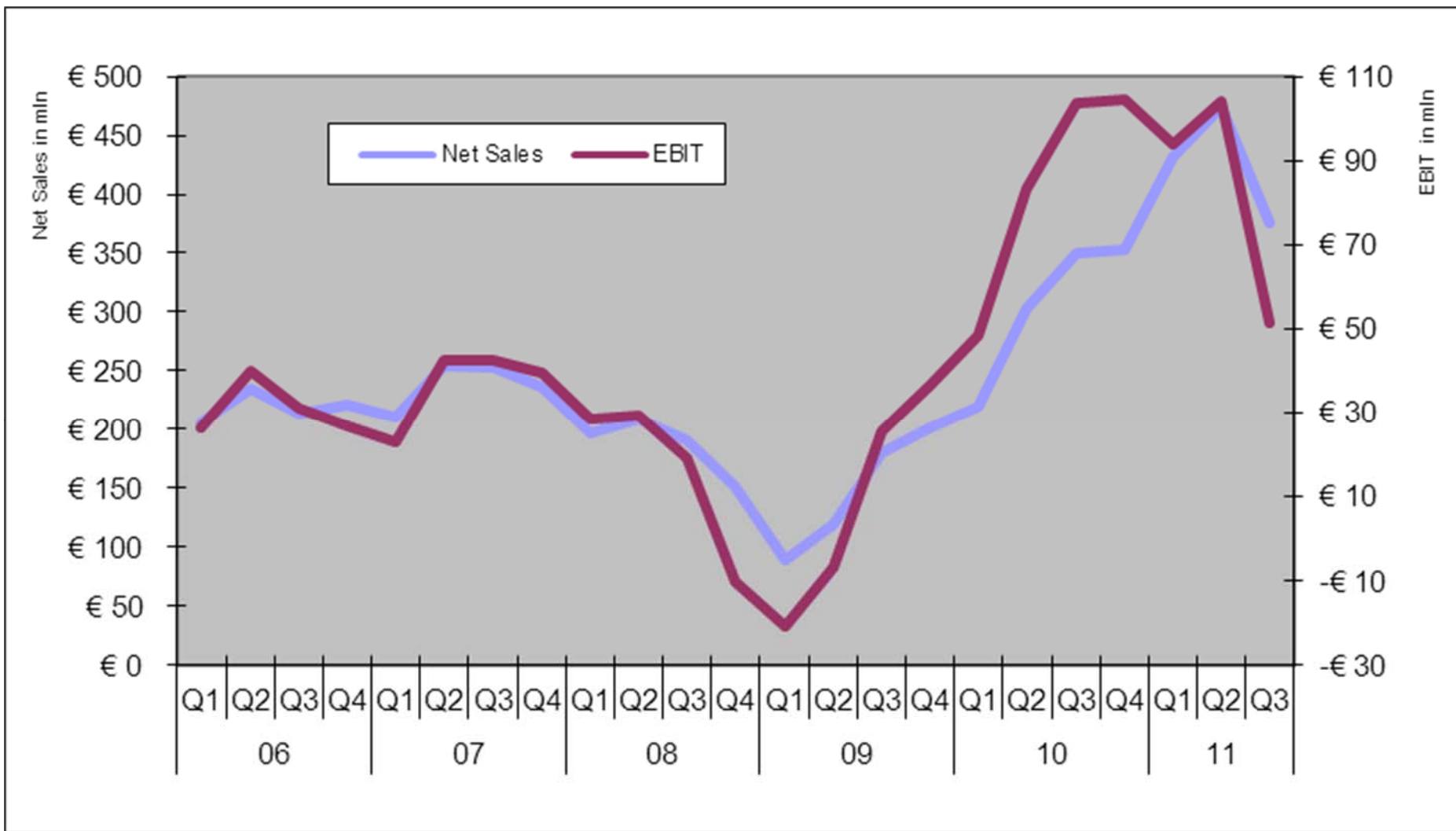
- **Revenues down 21% q-o-q and up 8% y-o-y**
  - In FE sales declined with 14% q-o-q and grew 41% y-o-y
  - In BE sales declined with 23% q-o-q and 1% y-o-y
  - Newly acquired SEAS business showed sales of € 121m
- **Q3 Book-to-Bill ratio of 0.8**
  - Front End 0.9, Back end 0.8
- **Q3 Back log €397m (1.1 X Q3 sales)**
- **EBIT margin of 14% down 8% compared to Q2 2011 and down 16% compared to Q3 2010 mainly impacted by mix changes**
- **Cash flow from operations of €64m**
- **Net earnings of €81m up €31m in Q3 2011 due to gain on bargain purchase of €51m**

| € million                           | Q3<br>2011   | Q2<br>2011   | Q3<br>2010   | Q3 '11/<br>Q2 '11 | Q3 '11/<br>Q3 '10 |
|-------------------------------------|--------------|--------------|--------------|-------------------|-------------------|
| Front End                           | 104.1        | 121.7        | 73.8         | -14%              | 41%               |
| Back End - existing                 | 150.7        | 236.6        | 275.4        | -36%              | -45%              |
| Back End - AS                       | 121.3        | 115.7        | -            |                   |                   |
| <b>Net Sales</b>                    | <b>376.1</b> | <b>474.1</b> | <b>349.2</b> | <b>-21%</b>       | <b>8%</b>         |
| <b>Gross Margin</b>                 | <b>130.7</b> | <b>179.8</b> | <b>161.8</b> | <b>-27%</b>       | <b>-19%</b>       |
| <i>as % of sales</i>                | 34.7%        | 37.9%        | 46.3%        |                   |                   |
| Selling, general and administrative | (44.8)       | (45.7)       | (37.3)       | -2%               | 20%               |
| Research and development            | (34.6)       | (30.0)       | (20.8)       | 15%               | 66%               |
| Front End                           | 13.5         | 20.8         | 7.3          | -35%              | 86%               |
| Back End (100%) - existing          | 16.8         | 69.0         | 96.5         | -76%              | -83%              |
| Back End (100%) - AS                | 21.0         | 14.2         | -            |                   |                   |
| <b>EBIT (excl. restructuring)</b>   | <b>51.3</b>  | <b>104.2</b> | <b>103.7</b> | <b>-51%</b>       | <b>-51%</b>       |
| <i>as % of sales</i>                | 13.6%        | 22.0%        | 29.7%        |                   |                   |
| Restructuring expenses              | -            | -            | (2.4)        | -                 | -100%             |
| Bargain purchase                    | 97.9         | -            | -            | -                 | -                 |
| Front End                           | 12.6         | 16.4         | (11.2)       | -23%              | -213%             |
| Back End (ASMI 52.36% interest)     | 68.4         | 33.9         | 45.5         | 102%              | 50%               |
| <b>Net Result</b>                   | <b>81.0</b>  | <b>50.3</b>  | <b>34.3</b>  | <b>61%</b>        | <b>136%</b>       |

| € million                                      | Sept 2010    | Dec 2010     | Mar 2011     | Jun 2011     | Sept 2011    |
|--|--------------|--------------|--------------|--------------|--------------|
| Cash and cash equivalents                      | 313          | 340          | 465          | 378          | 371          |
| Other current assets                           | 527          | 594          | 802          | 844          | 829          |
| Property, plant and equipment, net             | 164          | 198          | 210          | 224          | 250          |
| Goodwill, net                                  | 50           | 51           | 48           | 48           | 50           |
| Other Assets                                   | 40           | 31           | 32           | 36           | 47           |
| <b>Total Assets</b>                            | <b>1,093</b> | <b>1,214</b> | <b>1,558</b> | <b>1,530</b> | <b>1,546</b> |
| ST debt (incl current LT debt)                 | 15           | 81           | 27           | 37           | 35           |
| Other current liabilities                      | 318          | 343          | 640          | 594          | 458          |
| Long-term debt & Convertible subordinated debt | 183          | 135          | 134          | 135          | 135          |
| Other long term liabilities                    | 7            | 8            | 11           | 13           | 15           |
| Conversion option                              | 11           | -            | -            | -            | -            |
| <b>Total Liabilities</b>                       | <b>533</b>   | <b>567</b>   | <b>813</b>   | <b>778</b>   | <b>642</b>   |
| Total Shareholders' Equity                     | 369          | 411          | 490          | 520          | 625          |
| Non-controlling interest                       | 190          | 236          | 255          | 232          | 279          |
| <b>Total Liabilities and Equity</b>            | <b>1,093</b> | <b>1,214</b> | <b>1,558</b> | <b>1,530</b> | <b>1,546</b> |

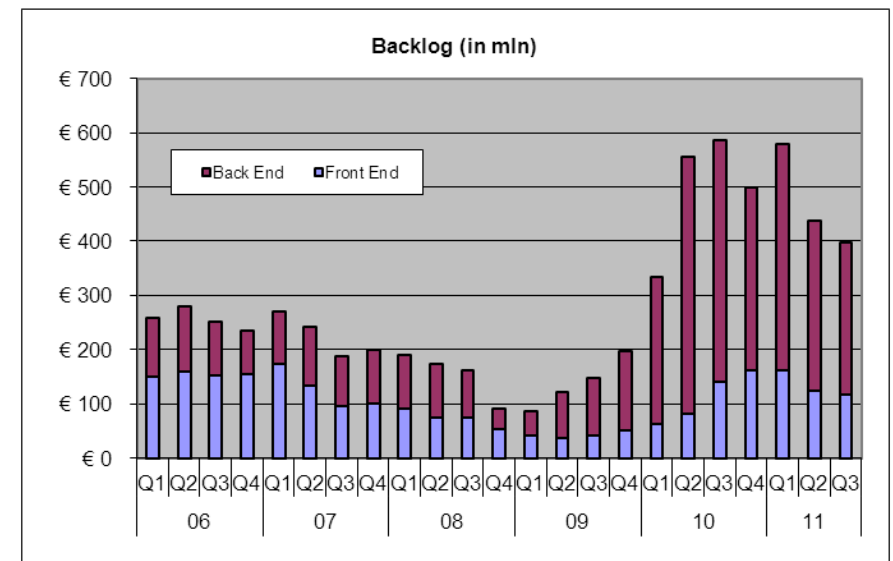
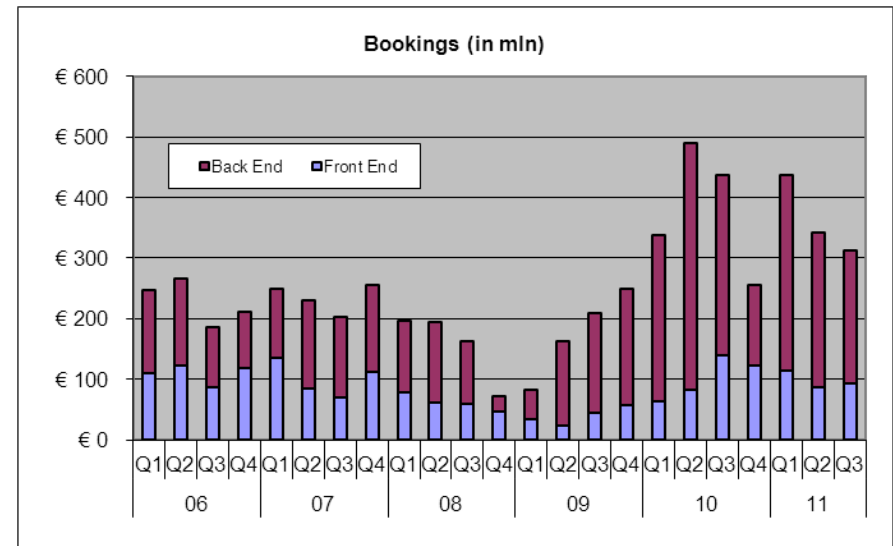
| € million   | Q3<br>2011    | Q2<br>2011    | Q3<br>2010    | Full Year<br>2010 |
|---|---------------|---------------|---------------|-------------------|
| Net earnings (loss)   | 143.2         | 81.1          | 75.3          | 242.5             |
| Depreciation  | 11.2          | 10.8          | 9.2           | 35.8              |
| Working Capital   | (4.6)         | (67.3)        | 4.3           | (78.1)            |
| PPA, restructuring & impairments                                | (97.9)        | 1.0           | 0.4           | 1.9               |
| Others  | 12.3          | 2.9           | 11.2          | 57.8              |
| <b>Net cash from operating activities</b>                       | <b>64.1</b>   | <b>28.5</b>   | <b>100.3</b>  | <b>259.9</b>      |
| <b>Net cash from investing activities</b>                       | <b>(21.7)</b> | <b>(26.0)</b> | <b>(32.4)</b> | <b>(100.6)</b>    |
| <b>Net cash from financing activities</b>                       | <b>(52.8)</b> | <b>(91.4)</b> | <b>(42.0)</b> | <b>(123.0)</b>    |
| Exchange rate effects   | 2.6           | 1.9           | (21.5)        | 10.1              |
| <b>Net increase (decrease) in cash<br/>and cash equivalents</b> | <b>(7.8)</b>  | <b>(87.0)</b> | <b>4.4</b>    | <b>46.4</b>       |

# Historical development - Group



**Book-to-Bill ratio decreased to 0.8 (Q2: 0.7).**

**Backlog decreased to €397m.**

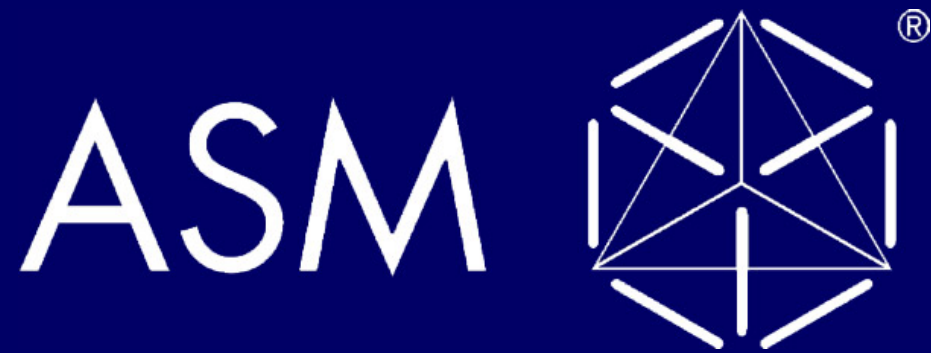


## **Based upon the current backlog and our current visibility:**

Customer cautiousness in Q3, that led to low order intake especially in Back-end, will not improve in Q4. Combined with present backlog levels, we expect this will lead to lower sales for both Front- and Back-end operations in the current quarter.

Visibility remains low for the semiconductor and semiconductor equipment industries, making it difficult for both customers and suppliers to formulate plans for 2012. We are working closely with our customers to synchronize our production levels with their requirements for the next twelve months, but it is too early in the planning process to comment beyond the current quarter.

- **Unique semiconductor equipment vendor providing both Front End and Back End equipment**
- **Front End growth driven by leading positions in fast growth ALD, PEALD, EPI market segments**
- **Significant improvement in Front End profitability after successful implementation of PERFORM!**
- **Decision at May 2011 Annual Shareholders Meeting to pay dividend 0.40 euro/share**
- **Back End continues to be the top player in its segment**
- **Significant growth opportunities in new areas like LED and adjacent areas like Surface Mount**



## Back-up slides



**Eagle® XP**  
 PECVD  
 ALD  
 PEALD  
*Common Platform*

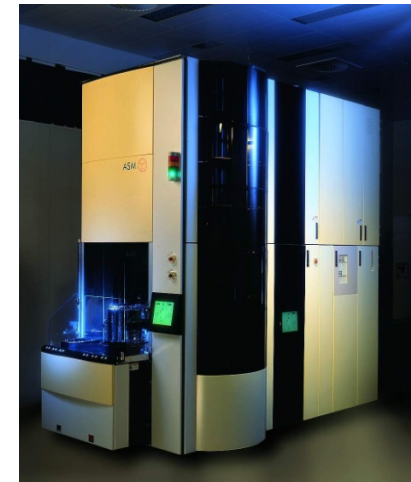


**Pulsar®**  
 ALD  
*High-k leader*

**Epsilon® 3200**  
 Epitaxy  
*Advanced strain layers*



**A412**  
 Vertical Furnace  
*Highest productivity*



## Sorting Solution



Advanced solution for package miniaturization

## Flip Chip Bonder



High speed, precise and flexible solution to Flip Chip applications

## Die Bonder



A new definition for high speed and high accuracy Die Attach

## Lead Frame



Advanced Technologies to fulfill customers' current and future needs

## Advanced Fine Pitch Solutions



World's best 30µm BPP

## Ball Bonder



World's first commercial dual head wire bonders & world's best 30µm BPP bonding capability

## Dispensing/Encapsulation



Transforming ART to SCIENCE

## Wedge Bonder



Total fine pitch, high speed and flexible Wedge Bonding solution

## Copper Bonding Solutions



Field proven!

## Encapsulation Solutions



You are protected!

## Post Encapsulation



Ideal Choice for Inline and Standalone Applications

## Test & Finish



Advanced Solutions to Maximize Flexibility on Test and Process Automation

## Factory Automation



One-stop solution to address your assembly and packaging needs

## Stacked Die Solutions



Our Layers of Challenges

## Lead Frame Solutions



One-stop packaging solution from lead frame design to assembly process optimization. With vast product portfolio, leading-edge technologies, operation-efficient factories, we value-add for you.

## LED Solutions



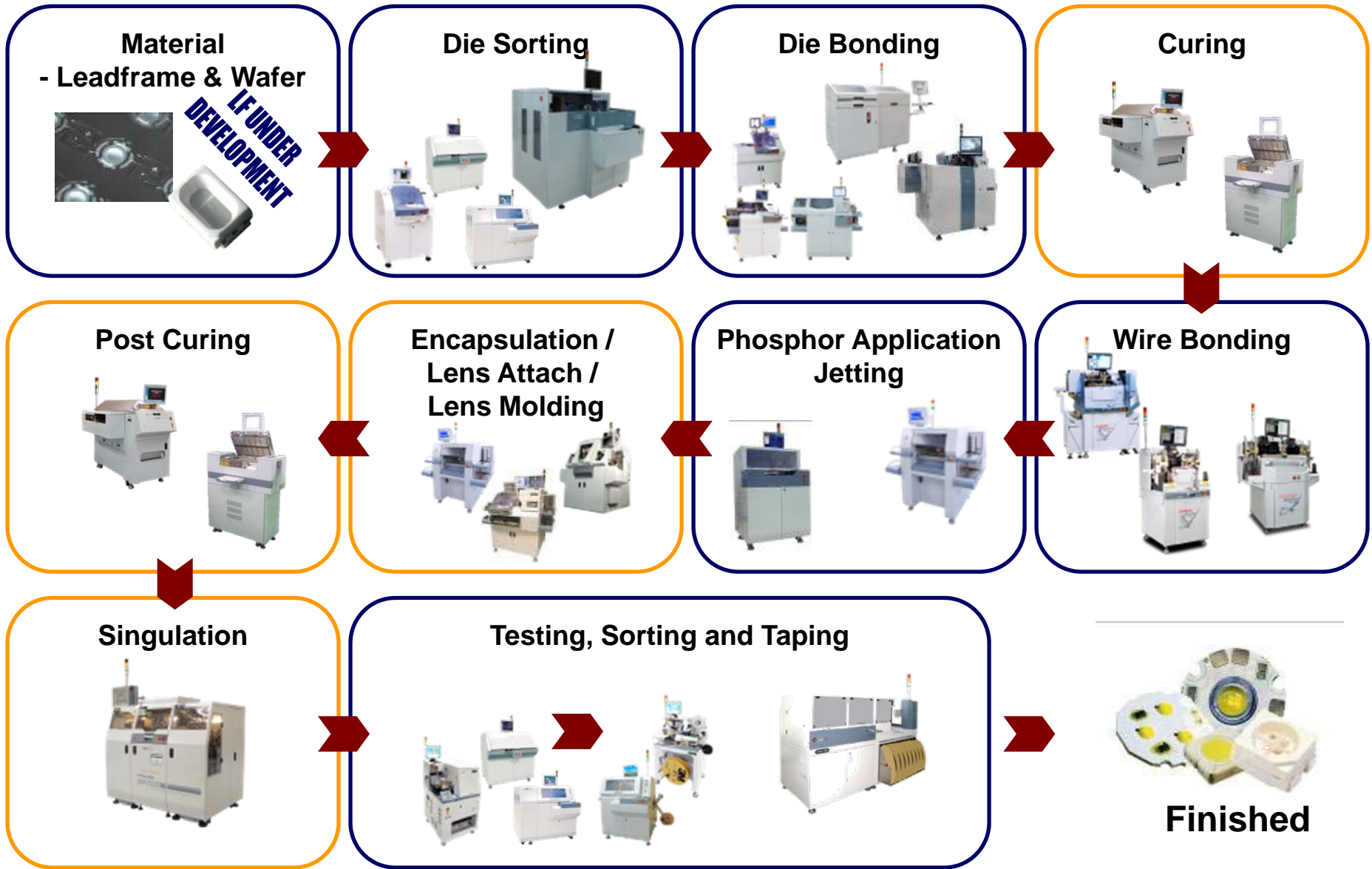
One-stop Solution for LED Packaging and Manufacturing

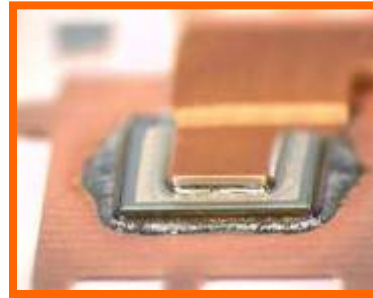
## Image Sensor Applications



Sole Leader in providing particle-controlled image sensor in-line assembly solutions

# Innovative Solutions for Fast Growing LED Packaging Market





**eClip**  
Automatic Clip Bonding System



**HA501**  
Automatic Heavy Aluminum  
Bonding System

## SIPLACE Electronics Assembly Systems



- SIPLACE SX Series
- SIPLACE DX Series
- SIPLACE X Series

- SIPLACE D Series
- SIPLACE CA

**SIPLACE provides unique capabilities to allow customized processes, utilize leading edge technologies, and establish build-to-order concepts!**