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.
Investment Highlights

✓ One of the few companies offering both Front End and Back End equipment
  ✓ $12.8 B market in 2011 rising to $15.8 B in 2016 (deposition and IC assembly only, VLSI Research)
  ✓ Challenging market development in LED equipment and healthy SMT market development
  ✓ 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 0.50/share
Applications Driving Growth Through 2015

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

Source: Gartner (March 2011), ASM
ASM’s new technologies are well positioned to supply the equipment to manufacture semiconductors and LED in the high CAGR / high revenue segments.
ASM’s Addressable Markets
IC manufacturing

2011 ($43.5 Billion)

- Etch & Clean: $7.6 B
- Test: $3.9 B
- Other Wafer Process: $8.2 B
- Lithography: $11.0 B
- Assembly: $4.2 B
- Deposition: $10.8 B

2016 ($55.3 Billion)

- Assembly: $5.0 B
- Deposition: $8.6 B

Source: VLSI Research Inc., June, 2012
**Key Growth Drivers:**

- Spending result of need to advance towards 32/28nm and beyond and by capacity increases.
- Logic and Foundry spending expected to increase in 2012.
- 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 June, 2012
Wafer Fab Equipment Forecast by technology node

- Share of 28nm and 22nm of total Equipment spending increasing in 2012-2013

Market Forecast shows growth in advanced technology nodes

Gartner March, 2012
### Market Requirements: 32nm → 22nm → 14nm and beyond

<table>
<thead>
<tr>
<th>Process</th>
<th>Application</th>
<th>ASM Relative Positioning</th>
</tr>
</thead>
</table>
| ALD and PEALD    | • ALD key for High-k Metal Gate technology  
                   • 3D FinFET requires more conformal layers, strength of ALD  
                   • SDDP-application of PE-ALD                                                            | ✓ #1 in the served ALD market  
                   ✓ Qualified by nearly all Logic manufacturers  
                   ✓ Strengthening inroads into Memory with PEALD                                       |
| Diffusion Furnace| • Smallest footprint per reactor  
                   • Lowest Cost of Ownership                                                              | ✓ Leading IC manufacturers are customers                                                  |
| Epitaxy          | • Affordable method of high quality crystal growth  
                   • Thick Epi layers for power devices  
                   • Strained Epi films for CMOS                                                           | ✓ ASM one of only two top vendors                                                        |
| PECVD            | • Advanced intermetal dielectric film                                               | ✓ ASM one of only three top vendors in PE-CVD                                           |
|                  | • ALD solution (Hafnium oxide)                                                     |                                                                                        |
|                  | • PEALD Low temp dielectrics                                                      |                                                                                        |
|                  | • Advanced batch processing                                                       |                                                                                        |
|                  | • Unique “dual reactor dual boat” design                                           |                                                                                        |
|                  | • Epitaxial films for analog devices                                              |                                                                                        |
|                  | • Epitaxial films for NMOS/PMOS                                                   |                                                                                        |
|                  | • Extreme low-k films                                                             |                                                                                        |

Strong IP protected portfolio
16 Key customer penetrations
- Applications like ALD high-k, ALD metal, PEALD SDDP, PEALD spacer
- Memory, Foundry and Logic segment
ASM Products – Front-end
Growing Wallet Share With Top Clients

ASM Revenue %

Key Developments:

- Diversification of customer base from Logic to Memory and Foundries
- Momentum Asia growing
Front End’s Competitive Advantages

- 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 world’s leading IC manufacturers.

- **In the EPI market ASMI is one of only two global suppliers.**
  - Recent successes with applications for the analog/power market

- **ASMI’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

- **ASMI introduced in 2012 new platforms for higher productivity**
  - Intrepid™ XP, 4 Epi reactor cluster system
  - XP8, 8 PEALD or PECVD reactor platform
What Has Changed – Front End

- 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 32% in 2008 to 38% in 2011
ASM Back End Markets

Key Growth Drivers:

For IC equipment
- Increasing unit volume
- Increasing share of the Asia Pacific region benefiting regional ties of ASMPT

For LED equipment
- 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
Surface Mount Technology (SMT) market development

**Key Growth Drivers:**

For SMT

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

**Source:** ASM SIPLACE Market Intelligence
# ASM Products – Back End

## IC manufacturing - LED manufacturing - Surface Mount Technology

<table>
<thead>
<tr>
<th>Market</th>
<th>Application</th>
<th>ASM Relative Positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC manufacturing</td>
<td>• Die bonding&lt;br&gt;• Wire bonding&lt;br&gt;• Moulding&lt;br&gt;• Trim &amp; Form&lt;br&gt;• Vision and Inspection&lt;br&gt;• Sorting</td>
<td>✓ #1 in the market&lt;br&gt;✓ Qualified by most IDM's and Subcontractors’&lt;br&gt;✓ Strong local service and support organization</td>
</tr>
<tr>
<td>LED manufacturing</td>
<td>• Die bonding&lt;br&gt;• Wire bonding&lt;br&gt;• Moulding&lt;br&gt;• Trim &amp; Form&lt;br&gt;• Vision and Inspection&lt;br&gt;• Sorting&lt;br&gt;• Testing</td>
<td>✓ #1 in the bonding market&lt;br&gt;✓ Complete manufacturing tools portfolio&lt;br&gt;✓ Entered LED market already in 2006&lt;br&gt;✓ Strong local service and support organization</td>
</tr>
<tr>
<td>SMT</td>
<td>• Pick &amp; Place</td>
<td>✓ ASM #3 vendor&lt;br&gt;✓ Leading position in High-end tools</td>
</tr>
</tbody>
</table>

- **IC manufacturing**
  - Assembly tools
  - Packaging tools
  - Inspection tools

- **LED manufacturing**
  - Assembly tools
  - Packaging tools
  - Testing tools

- **SMT**
  - Placement tools
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
Key Highlights – Q3 2012

- Revenues up 8% q-o-q and up 9% y-o-y
  - In FE sales increased with 11% q-o-q and declined 8% y-o-y
  - In BE sales increased with 7% q-o-q and 15% y-o-y
- Q3 Book-to-Bill ratio of 0.7
  - Front End 0.7, Back End 0.7
- Q3 Backlog € 295m (0.7 X Q3 sales)
- EBIT margin of 8% down 2% compared to Q2 2012 and down 6% compared to Q3 2011 strongly impacted by mix changes and lower loading
- Cash outflow from operations of € 20m
- Net earnings of € 5m down € 13m mainly due to forex effects
<table>
<thead>
<tr>
<th></th>
<th>Q3</th>
<th>Q2</th>
<th>Q3</th>
<th>Q3 '12/</th>
<th>Q3 '12/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2012</td>
<td>2011</td>
<td>Q2 '12</td>
<td>Q3 '11</td>
</tr>
<tr>
<td>Front End</td>
<td>96.1</td>
<td>86.5</td>
<td>104.1</td>
<td>11%</td>
<td>-8%</td>
</tr>
<tr>
<td>Back End</td>
<td>313.2</td>
<td>291.4</td>
<td>272.1</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Net Sales</strong></td>
<td><strong>409.3</strong></td>
<td><strong>377.9</strong></td>
<td><strong>376.1</strong></td>
<td><strong>8%</strong></td>
<td><strong>9%</strong></td>
</tr>
<tr>
<td><strong>Gross Margin</strong></td>
<td>125.4</td>
<td>130.6</td>
<td>130.7</td>
<td>-4%</td>
<td>-4%</td>
</tr>
<tr>
<td>as % of sales</td>
<td>30.6%</td>
<td>34.6%</td>
<td>34.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>(53.6)</td>
<td>(53.8)</td>
<td>(44.8)</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>Research and development</td>
<td>(40.0)</td>
<td>(38.2)</td>
<td>(34.6)</td>
<td>5%</td>
<td>16%</td>
</tr>
<tr>
<td>Front End</td>
<td>(1.6)</td>
<td>(1.9)</td>
<td>13.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back End (100%)</td>
<td>33.6</td>
<td>40.5</td>
<td>37.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EBIT (excl. restructuring &amp; impairment)</strong></td>
<td><strong>31.9</strong></td>
<td><strong>38.5</strong></td>
<td><strong>51.3</strong></td>
<td><strong>-17%</strong></td>
<td><strong>-38%</strong></td>
</tr>
<tr>
<td>as % of sales</td>
<td>7.8%</td>
<td>10.2%</td>
<td>13.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front End</td>
<td>(8.4)</td>
<td>1.3</td>
<td>12.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back End (ASMI 52.17% interest)</td>
<td>13.3</td>
<td>16.5</td>
<td>68.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Result</strong></td>
<td><strong>4.9</strong></td>
<td><strong>17.7</strong></td>
<td><strong>81.0</strong></td>
<td><strong>-72%</strong></td>
<td><strong>-94%</strong></td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------</td>
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<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>351</td>
<td>390</td>
<td>405</td>
<td>334</td>
<td>297</td>
</tr>
<tr>
<td>Other current assets</td>
<td>829</td>
<td>806</td>
<td>773</td>
<td>917</td>
<td>901</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>250</td>
<td>260</td>
<td>259</td>
<td>279</td>
<td>275</td>
</tr>
<tr>
<td>Goodwill, net</td>
<td>50</td>
<td>52</td>
<td>51</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Other Assets</td>
<td>67</td>
<td>74</td>
<td>74</td>
<td>84</td>
<td>89</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>1,546</strong></td>
<td><strong>1,582</strong></td>
<td><strong>1,561</strong></td>
<td><strong>1,668</strong></td>
<td><strong>1,615</strong></td>
</tr>
<tr>
<td>ST debt (incl current LT debt)</td>
<td>35</td>
<td>45</td>
<td>40</td>
<td>72</td>
<td>86</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>458</td>
<td>413</td>
<td>407</td>
<td>447</td>
<td>390</td>
</tr>
<tr>
<td>Long-term debt &amp; Convertible subordinated debt</td>
<td>135</td>
<td>150</td>
<td>150</td>
<td>152</td>
<td>144</td>
</tr>
<tr>
<td>Other long term liabilities</td>
<td>15</td>
<td>16</td>
<td>13</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>642</strong></td>
<td><strong>625</strong></td>
<td><strong>610</strong></td>
<td><strong>690</strong></td>
<td><strong>637</strong></td>
</tr>
<tr>
<td>Total Shareholders' Equity</td>
<td>625</td>
<td>660</td>
<td>653</td>
<td>665</td>
<td>667</td>
</tr>
<tr>
<td>Non-controlling interest</td>
<td>279</td>
<td>298</td>
<td>298</td>
<td>313</td>
<td>311</td>
</tr>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td><strong>1,546</strong></td>
<td><strong>1,582</strong></td>
<td><strong>1,561</strong></td>
<td><strong>1,668</strong></td>
<td><strong>1,615</strong></td>
</tr>
<tr>
<td></td>
<td>Q3 2012</td>
<td>Q2 2012</td>
<td>Q3 2011</td>
<td>Full Year 2011</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td><strong>Net earnings (loss)</strong></td>
<td>17.2</td>
<td>32.8</td>
<td>143.2</td>
<td>316.2</td>
<td></td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>15.1</td>
<td>13.7</td>
<td>11.2</td>
<td>49.5</td>
<td></td>
</tr>
<tr>
<td><strong>Working Capital</strong></td>
<td>(59.7)</td>
<td>(62.2)</td>
<td>(4.8)</td>
<td>(37.7)</td>
<td></td>
</tr>
<tr>
<td><strong>PPA, restructuring &amp; impairments</strong></td>
<td>-</td>
<td>0.2</td>
<td>(97.9)</td>
<td>(101.2)</td>
<td></td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>7.6</td>
<td>(11.7)</td>
<td>12.5</td>
<td>(10.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Net cash from operating activities</strong></td>
<td>(19.8)</td>
<td>(27.2)</td>
<td>64.1</td>
<td>216.6</td>
<td></td>
</tr>
<tr>
<td><strong>Net cash from investing activities</strong></td>
<td>(14.5)</td>
<td>(17.8)</td>
<td>(21.7)</td>
<td>(70.0)</td>
<td></td>
</tr>
<tr>
<td><strong>Net cash from financing activities</strong></td>
<td>(5.2)</td>
<td>(27.4)</td>
<td>(52.8)</td>
<td>(78.5)</td>
<td></td>
</tr>
<tr>
<td><strong>Exchange rate effects</strong></td>
<td>3.2</td>
<td>1.5</td>
<td>2.6</td>
<td>(18.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Net increase (decrease) in cash and cash equivalents</strong></td>
<td>(36.4)</td>
<td>(70.9)</td>
<td>(7.8)</td>
<td>50.0</td>
<td></td>
</tr>
</tbody>
</table>
Book-to-Bill ratio decreased to 0.7 (Q2: 1.1)

Backlog decreased to €295m
Based upon the current backlog and our current visibility:

Based on the current order book we expect for the fourth quarter a double digit sales decrease for both Front-end and Back-end. For our Back-end operations we do only see a recovery earliest in the course of the first quarter of 2013. We expect our Front-end operations to show a strong order intake in Q4.
Back-up slides
Selected Front End Products

Eagle® XP
PECVD
ALD
PEALD
Common Platform

Pulsar®
ALD
High-k leader

Epsilon® 3200
Epitaxy
Advanced strain layers

A412
Vertical Furnace
Highest productivity
ASM Products and Solutions
Back End

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 bonder & 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

Material - Leadframe & Wafer

Die Sorting

Die Bonding

Curing

Post Curing

Encapsulatio / Lens Attach / Lens Molding

Phosphor Application Jetting

Wire Bonding

Singulation

Testing, Sorting and Taping

Finished

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Serving the Markets Requiring Power Applications

eClip
Automatic Clip Bonding System

HA501
Automatic Heavy Aluminum Bonding System
SIPLACE provides unique capabilities to allow customized processes, utilize leading edge technologies, and establish build-to-order concepts!