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
  ✓ $11.7 B market in 2012 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
  ✓ Enabling technology for 3D transistor formation (FinFet)
  ✓ 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
  ✓ Consistent profitable Front End operations
  ✓ Front End Gross Margin in line with peers
  ✓ Strongly improved balance sheet
  ✓ 52% stake in ASMPT
  ✓ Dividend of Euro 0.50/share proposal to AGM May 2013
Semiconductor Market Through 2017

Semiconductor Sales¹ ($B)

- Ultramobile PC
- Notebook PC
- Desk-based PC
- Utility/Basic Media Tablet
- Premium Media Tablet
- Premium Smartphone
- Utility/Basic Smartphone
- Traditional Mobile Phone

Semiconductor Dollars Per Unit¹ ($)

- PC
- Media Tablet
- Smartphone
- Traditional Phone

¹ - excludes SSD / ODD / RDD / Ethernet / graphics cards

Source: Gartner (March 2013), ASM
ASM’s Addressable Markets
IC manufacturing

2012 ($38.1 Billion)

- Etch & Clean: $6.8 B
- Test: $3.7 B
- Other Wafer Process: $7.5 B
- Lithography: $8.4 B
- Assembly: $4.2 B

2016 ($55.3 Billion)

- Assembly: $5.0 B
- Deposition: $10.8 B

Source: VLSI Research Inc., January, 2013
ASM Front End Markets

$M ASM addressable IC Deposition market by Sub-Segment

Key Growth Drivers:

- Spending result of need to advance towards 20/14nm and beyond and by capacity increases
- Logic and Foundry spending to remain healthy in 2013
- 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 January, 2013
Key market Drivers
Wafer Fab Equipment Forecast by node

- Share of 22nm and 14nm estimated to grow from 2013 with expected increased demand for ALD, PEALD
## Market Requirements: 32nm → 22nm → 14nm and beyond

<table>
<thead>
<tr>
<th>Process</th>
<th>Application</th>
<th>ASM Relative Positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALD and PEALD</td>
<td>• ALD key for High-k Metal Gate technology</td>
<td>✓ #1 in the served ALD market</td>
</tr>
<tr>
<td></td>
<td>• 3D FinFET requires more conformal layers, strength of ALD</td>
<td>✓ Qualified by nearly all Logic manufacturers</td>
</tr>
<tr>
<td></td>
<td>• SDDP-application of PE-ALD</td>
<td>✓ Strengthening inroads into Memory with PEALD</td>
</tr>
<tr>
<td>Diffusion Furnace</td>
<td>• Advanced batch processing</td>
<td>✓ Leading IC manufacturers are customers</td>
</tr>
<tr>
<td></td>
<td>• Smallest footprint per reactor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lowest Cost of Ownership</td>
<td></td>
</tr>
<tr>
<td>Epitaxy</td>
<td>• Thick Epi layers for power devices</td>
<td>✓ ASM one of only two top vendors</td>
</tr>
<tr>
<td></td>
<td>• Strained Epi films for CMOS</td>
<td></td>
</tr>
<tr>
<td>PECVD</td>
<td>• Advanced intermetal dielectric film</td>
<td>✓ ASM one of only two top vendors in PE-CVD Low-k</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Strengths

- Strong IP protected portfolio
Two new high productivity platforms have been introduced in 2012:

- **Intrepid™ XP**
  - High productivity XP cluster with 4 Epi reactors
  - **Dragon® XP8**
    - PECVD
  - **Eagle® XP8**
    - PEALD

- **High throughput, low CoO single wafer deposition tool**
ASM Revenue %

Key Developments:

- Diversification of customer base from Logic to Memory and Foundries (recently driven by ALD/PEALD)
- Momentum Asia growing
✓ ASMI Front-end started ALD technology in 1999 and has a strong time advantage over competition.
  ✓ The ALD (and PEALD) technology is strongly patented
  ✓ ALD is now mainstream and there is no strong competition until now
  ✓ Further miniaturization will require more and more ALD/PEALD applications.

✓ ASMI is one of the two leading suppliers of Low-k films.
  ✓ ASMI is supplier to a few of the worlds leading IC manufacturers
  ✓ XP8, 8 PEALD or PECVD reactor platform for higher productivity

✓ In the EPI market ASMI is one of only two global suppliers.
  ✓ Recent successes with applications for the analog/power market
  ✓ Intrepid™ XP, 4 Epi reactor cluster system for higher productivity

✓ 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
What Has Changed – Front End

✓ Manufacturing consolidated into 1 location in Singapore since 2010

✓ Adjacent to Back End facility

✓ Significantly streamlined R&D, Product Management and G&A functions

✓ New cost cutting measures recently undertaken leading towards further improved margins

✓ Further restructuring on its way

✓ Further savings opportunities in local sourcing and supply chain
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

Source: IC equipment VLSI Research January, 2013
Source: Morgan Stanley Equity Research. (2013)
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, February 2013
Turnover distribution by products
ASM Back End Markets

- **Back-end EQT**
  - 2010: 83.2%
  - 2011: 50.5%
  - 2012: 36.2%

- **Lead frame**
  - 2010: 16.8%
  - 2011: 37.8%

- **SMT EQT**
  - 2010: 11.7%
  - 2012: 48.0%

© 2009 ASM
Proprietary Information

Monday, March 11, 2013
## 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</td>
<td>✓ #1 in the market</td>
</tr>
<tr>
<td>• Assembly tools</td>
<td>• Wire bonding</td>
<td>✓ Qualified by most IDM’s and Subcontractors’</td>
</tr>
<tr>
<td>• Packaging tools</td>
<td>• Moulding</td>
<td>✓ Strong local service and support organization</td>
</tr>
<tr>
<td>• Inspection tools</td>
<td>• Trim &amp; Form</td>
<td></td>
</tr>
<tr>
<td>LED manufacturing</td>
<td>• Vision and Inspection</td>
<td></td>
</tr>
<tr>
<td>• Assembly tools</td>
<td>• Sorting</td>
<td></td>
</tr>
<tr>
<td>• Packaging tools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Testing tools</td>
<td>• Testing</td>
<td></td>
</tr>
</tbody>
</table>

| SMT                             | Pick & Place                 | ✓ ASM #3 vendor                                                |
|• Placement tools                |                               | ✓ Leading position in High-end tools                          |

**Market**
- IC manufacturing
- LED manufacturing
- SMT

**Application**
- Die bonding
- Wire bonding
- Moulding
- Trim & Form
- Vision and Inspection
- Sorting
- Testing
- Pick & Place
Chip Assembly Solution for Advanced Packages
Back End

- Expanding SMT equipment into non-traditional placement market
- Ideal for WLFO (Wafer Level Fan Out), SiP (System-in-package), LED, Embedded PCB and flip chips
- Enables the combination of flip-chip and SMT operations in a single pass
- Supports large panel areas
- Very high production speed and throughput
Back End’s Competitive Advantages

✓ Back-end industry continues to move to SE Asia/China
  ✓ ASMPT the only large BE company fully located in SE Asia has the largest part of its operations in China/Hong Kong

✓ Cost is the most important topic in Back-end.
  ✓ ASMPT provides the lowest cost solutions to customers.

✓ Increasing focus R&D and new product development
  ✓ ASMPT has a strong pipeline of new products in for instance flip chip, TCB, copper wire bonding and ultra high density packages.

✓ LED is a strongly growing market with highest future growth potential.
  ✓ ASMPT has the dominant market share in LED assembly equipment

✓ SMT provides further growth opportunities
  ✓ ASM AS is amongst the top three suppliers
ASMPT has broadened its portfolio and expanded into new markets

- Continued its #1 position in the Assembly & Packaging market, in IC’s, LED’s and CMOS image sensors
- Profitable leadframe business
- SMT improved its market position and profitability in 2012:
  - Cross selling opportunities, SMT penetrating the Asian market
  - In-source SMT parts & modules using ASMPT low-cost manufacturing base and supply chain
Response to Challenging Times – Back End

✓ Tightly control cost and expenses to cope with the short term challenges

✓ Drive for structural cost reduction
  ✓ Bring down overhead cost
  ✓ Raise productivity through innovation and automation
  ✓ Supplement internal manufacturing with outsourcing
  ✓ Strike a better balance between fixed and variable manufacturing cost

✓ Efficient management of working capital
  ✓ Efficient materials planning
  ✓ Consignment program with suppliers
  ✓ Efficient payments terms control and collection

✓ Expedite the cost reduction program for all major products

✓ Get ready for a potential fast and step production ramp in Q2
Financial Overview
Key Highlights – Q4 2012

- Revenues down 22% q-o-q and 9% y-o-y
  - In FE sales declined with 3% q-o-q and 18% y-o-y
  - In BE sales declined with 15% q-o-q and grew 12% y-o-y
- Q4 Book-to-Bill ratio of 1.0
  - Front End 1.4, Back End 0.8
- Q4 Back log € 289m (0.9 X Q4 sales)
- EBIT margin of -1% down 9% compared to Q3 2012 and down 9% compared to Q4 2011 strongly impacted by mix changes
- Cash flow from operations of € 50m
- Net results of € -22m compared to € 5m in Q3 2012 and € 15m in Q4 2011
## Net Earnings Quarter - Group

<table>
<thead>
<tr>
<th></th>
<th>Q4</th>
<th>Q3</th>
<th>Q4</th>
<th>Q4 '12/</th>
<th>Q4 '12/</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million</td>
<td>2012</td>
<td>2012</td>
<td>2011</td>
<td>Q3 '12</td>
<td>Q4 '11</td>
</tr>
<tr>
<td>Front End</td>
<td>93.1</td>
<td>96.1</td>
<td>114.2</td>
<td>-3%</td>
<td>-18%</td>
</tr>
<tr>
<td>Back End</td>
<td>266.8</td>
<td>313.2</td>
<td>237.8</td>
<td>-15%</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Net Sales</strong></td>
<td>319.9</td>
<td>409.3</td>
<td>352.0</td>
<td>-22%</td>
<td>-9%</td>
</tr>
<tr>
<td><strong>Gross Margin</strong></td>
<td>87.8</td>
<td>125.4</td>
<td>106.2</td>
<td>-30%</td>
<td>-17%</td>
</tr>
<tr>
<td><em>as % of sales</em></td>
<td>27.5%</td>
<td>30.6%</td>
<td>30.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling, general and administrative expenses</td>
<td>(53.5)</td>
<td>(53.6)</td>
<td>(43.6)</td>
<td>0%</td>
<td>23%</td>
</tr>
<tr>
<td>Research and development expenses</td>
<td>(37.5)</td>
<td>(40.0)</td>
<td>(35.3)</td>
<td>-6%</td>
<td>6%</td>
</tr>
<tr>
<td>Front End EBIT</td>
<td>2.1</td>
<td>(1.6)</td>
<td>9.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back End (100%) EBIT</td>
<td>(5.3)</td>
<td>33.6</td>
<td>17.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EBIT (excl. special items)</strong></td>
<td><strong>(4.1)</strong></td>
<td><strong>32.0</strong></td>
<td><strong>27.2</strong></td>
<td><strong>-113%</strong></td>
<td><strong>-115%</strong></td>
</tr>
<tr>
<td><em>as % of sales</em></td>
<td>-1.3%</td>
<td>7.8%</td>
<td>7.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special items:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restructuring expenses</td>
<td>(0.9)</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bargain purchase</td>
<td>-</td>
<td>-</td>
<td>(0.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impairment charge</td>
<td>-</td>
<td>-</td>
<td>(8.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front End EBIT</td>
<td>(19.5)</td>
<td>(8.4)</td>
<td>8.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back End (ASMI 51.96% interest) EBIT</td>
<td>(2.2)</td>
<td>13.3</td>
<td>6.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Result</strong></td>
<td><strong>(21.7)</strong></td>
<td><strong>4.9</strong></td>
<td><strong>15.4</strong></td>
<td><strong>-543%</strong></td>
<td><strong>-241%</strong></td>
</tr>
</tbody>
</table>
### Net Earnings Year - Group

<table>
<thead>
<tr>
<th></th>
<th>Full Year 2012</th>
<th>Full Year 2011</th>
<th>2012/2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>€ million</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front End</td>
<td>370.4</td>
<td>456.1</td>
<td>-19%</td>
</tr>
<tr>
<td>Back End</td>
<td>1,047.7</td>
<td>1,178.3</td>
<td>-11%</td>
</tr>
<tr>
<td><strong>Net Sales</strong></td>
<td>1,418.1</td>
<td>1,634.3</td>
<td>-13%</td>
</tr>
<tr>
<td><strong>Gross Margin</strong></td>
<td>440.4</td>
<td>582.2</td>
<td>-24%</td>
</tr>
<tr>
<td>as % of sales</td>
<td>31.1%</td>
<td>35.6%</td>
<td></td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>(202.1)</td>
<td>(176.5)</td>
<td>15%</td>
</tr>
<tr>
<td>Research and development</td>
<td>(149.2)</td>
<td>(129.4)</td>
<td>15%</td>
</tr>
<tr>
<td>Front End</td>
<td>1.4</td>
<td>62.6</td>
<td></td>
</tr>
<tr>
<td>Back End (100%)</td>
<td>87.7</td>
<td>213.5</td>
<td></td>
</tr>
<tr>
<td><strong>EBIT (excl. special items)</strong></td>
<td><strong>89.1</strong></td>
<td><strong>276.1</strong></td>
<td><strong>-68%</strong></td>
</tr>
<tr>
<td>as % of sales</td>
<td>6.3%</td>
<td>16.9%</td>
<td></td>
</tr>
<tr>
<td>Special items:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restructuring expenses</td>
<td>-97.8</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Bargain purchase</td>
<td>-</td>
<td>97.8</td>
<td></td>
</tr>
<tr>
<td>Impairment charge</td>
<td>-</td>
<td>(8.0)</td>
<td></td>
</tr>
<tr>
<td>Front End</td>
<td>(29.1)</td>
<td>44.5</td>
<td></td>
</tr>
<tr>
<td>Back End (ASMI 51.96% interest)</td>
<td>36.3</td>
<td>142.2</td>
<td></td>
</tr>
<tr>
<td><strong>Net Result</strong></td>
<td><strong>7.2</strong></td>
<td><strong>186.7</strong></td>
<td><strong>-96%</strong></td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>390</td>
<td>405</td>
<td>334</td>
</tr>
<tr>
<td>Other current assets</td>
<td>806</td>
<td>773</td>
<td>917</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>260</td>
<td>259</td>
<td>279</td>
</tr>
<tr>
<td>Goodwill, net</td>
<td>52</td>
<td>51</td>
<td>54</td>
</tr>
<tr>
<td>Other Assets</td>
<td>74</td>
<td>74</td>
<td>84</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>1,582</strong></td>
<td><strong>1,561</strong></td>
<td><strong>1,668</strong></td>
</tr>
<tr>
<td>ST debt (incl current LT debt)</td>
<td>45</td>
<td>40</td>
<td>72</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>418</td>
<td>409</td>
<td>449</td>
</tr>
<tr>
<td>Long-term debt &amp; Convertible subordinated debt</td>
<td>150</td>
<td>150</td>
<td>152</td>
</tr>
<tr>
<td>Other long term liabilities</td>
<td>11</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>625</strong></td>
<td><strong>610</strong></td>
<td><strong>690</strong></td>
</tr>
<tr>
<td>Total Shareholders' Equity</td>
<td>660</td>
<td>653</td>
<td>665</td>
</tr>
<tr>
<td>Non-controlling interest</td>
<td>298</td>
<td>298</td>
<td>313</td>
</tr>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td><strong>1,582</strong></td>
<td><strong>1,561</strong></td>
<td><strong>1,668</strong></td>
</tr>
</tbody>
</table>
## Cash Flow - Group

<table>
<thead>
<tr>
<th></th>
<th>Q4 2012</th>
<th>Q3 2012</th>
<th>Q4 2011</th>
<th>Full Year 2012</th>
<th>Full Year 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net earnings (loss)</strong></td>
<td>(23.8)</td>
<td>17.2</td>
<td>21.7</td>
<td>40.4</td>
<td>316.2</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>15.0</td>
<td>15.1</td>
<td>12.8</td>
<td>56.9</td>
<td>47.0</td>
</tr>
<tr>
<td><strong>Working Capital</strong></td>
<td>41.7</td>
<td>(59.7)</td>
<td>19.8</td>
<td>(60.9)</td>
<td>(61.4)</td>
</tr>
<tr>
<td><strong>PPA, restructuring &amp; impairments</strong></td>
<td>(0.9)</td>
<td>-</td>
<td>8.0</td>
<td>(0.8)</td>
<td>(89.8)</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>18.1</td>
<td>7.6</td>
<td>(22.3)</td>
<td>6.9</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Net cash from operating activities</strong></td>
<td>50.1</td>
<td>(19.8)</td>
<td>40.0</td>
<td>42.5</td>
<td>216.6</td>
</tr>
<tr>
<td><strong>Net cash from investing activities</strong></td>
<td>(21.1)</td>
<td>(14.5)</td>
<td>(23.3)</td>
<td>(71.9)</td>
<td>(93.4)</td>
</tr>
<tr>
<td><strong>Net cash from financing activities</strong></td>
<td>(35.1)</td>
<td>(5.2)</td>
<td>22.1</td>
<td>(73.5)</td>
<td>(45.4)</td>
</tr>
<tr>
<td><strong>Exchange rate effects</strong></td>
<td>(0.8)</td>
<td>3.2</td>
<td>0.8</td>
<td>3.1</td>
<td>(7.8)</td>
</tr>
<tr>
<td><strong>Net increase (decrease) in cash and cash equivalents</strong></td>
<td>(6.8)</td>
<td>(36.4)</td>
<td>39.6</td>
<td>(100.0)</td>
<td>70.0</td>
</tr>
</tbody>
</table>
Historical development - Group
Bookings & Backlog - Group

Book-to-Bill ratio increased to 1.0 (Q3: 0.7)

Backlog decreased to €289m
Based upon the current backlog and our current visibility:

Sales in the Front-end are expected to show a double digit decline in Q1, as compared to Q4 2012. However, we expect our Front-end operation to show an order intake in Q1, strongly above the expected sales level for Q1. Based on the backlog at the end of Q4 and the expected order intake in Q1 and Q2, we foresee a double-digit sales increase for Front-end in Q2. Q1 sales in the Back-end are expected to be at approximately the same level as in Q4, order intake is expected to show an increase in Q1 over 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
Full Range of Advanced Flip Chip Solutions

High Pin count - High End (TCB)

- AD9312
- CPU
- GPU
- ± 2 µm

High Pin count - Mid Range (C4/T5)

- AD9212/IS9012T5
- Application Processor
- SoC
- ± 10 µm Placement Accuracy

Low Pin count (C4)

- AD8312FC
- RF chips
- Wireless chips
- ± 15 µm
Innovative Solutions for Fast Growing LED Packaging Market

- Material - Leadframe & Wafer
- Die Sorting
- Die Bonding
- Curing
- Post Curing
- Encapsulation / Lens Attach / Lens Molding
- Phosphor Application Jetting
- Wire Bonding
- Singulation
- Testing, Sorting and Taping
- Finished
SIPLACE provides unique capabilities to allow customized processes, utilize leading edge technologies, and establish build-to-order concepts!