Investor presentation

24 April 2013
Safe Harbor Statements

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

✓ Strong offering in Front End equipment
  ✓ Deposition represents a US$ 7.5bn market, growing to US$ 10.8bn in 2016 (VLSI Research)
  ✓ Leading position in our target market 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

✓ Attractive value proposition
  ✓ Strong growth opportunities
  ✓ Consistent profitable Front End operations
  ✓ Front End Gross Margin in line with peers
  ✓ Strongly improved balance sheet
  ✓ 40% stake in ASMPT
  ✓ Dividend of Euro 0,50/share proposal to AGM May 2013
Semiconductor Market Through 2017
PC versus smartphones

Semiconductor Sales¹ ($B)

Source: Gartner (March 2013), ASM

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

Semiconductor Dollars Per Unit¹ ($)

Source: Gartner (March 2013), ASM
Global Semiconductor Equipment Market

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
- Deposition: $ 7.5 B

Source: VLSI Research Inc., January, 2013
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>✓ ASM one of only two top vendors</td>
</tr>
<tr>
<td></td>
<td>• Lowest Cost of Ownership</td>
<td>✓ ASM one of only two top vendors in PE-CVD Low-k</td>
</tr>
<tr>
<td>Epitaxy</td>
<td>• Thick Epi layers for power devices</td>
<td>§</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>§</td>
</tr>
</tbody>
</table>

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

- **Dragon® XP8**
  - PECVD
- **Eagle® XP8**
  - PEALD

High throughput, low CoO single wafer deposition tool

**Intrepid™ XP**
Epitaxy
Growing Wallet Share With Top Clients

ASMI Revenue %

Key Developments:

✓ Diversification of customer base from Logic to Memory and Foundries (recently driven by ALD/PEALD)

✓ Momentum Asia growing
ASMI 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
  ✓ 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 ASMPT facility
- Significantly streamlined R&D, Product Management and G&A functions
- New cost cutting measures recently undertaken leading towards further improved margins
- Further restructuring
- Further savings opportunities in local sourcing and supply chain
**ASMPT 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
ASM PT markets (cont’d)

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

ASMPT

- Back-end EQT
- Lead frame
- SMT EQT

2010: 83.2%
2011: 37.8%
2012: 48.0%
2011: 0.5%
## IC manufacturing - LED manufacturing - Surface Mount Technology

### Market

<table>
<thead>
<tr>
<th>IC manufacturing</th>
<th>LED manufacturing</th>
<th>SMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assembly tools</td>
<td>• Assembly tools</td>
<td>• Placement tools</td>
</tr>
<tr>
<td>• Packaging tools</td>
<td>• Packaging tools</td>
<td></td>
</tr>
<tr>
<td>• Inspection tools</td>
<td>• Testing tools</td>
<td></td>
</tr>
</tbody>
</table>

### Application

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

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ASM logo must not be moved or changed and should always be placed at this position.
➤ 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
ASMPT’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**
  - ASMPT 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
- ASMI will no longer consolidate ASMPT following the secondary placement of the 12% stake in ASMPT
Response to Challenging Times – ASMPT

 ✓ 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
Financial Overview
Key Highlights – Q1 2013

- Reported revenues down 25% q-o-q and 23% y-o-y
  - In FE sales declined with 14% q-o-q and 16% y-o-y
  - In BE sales declined with 29% q-o-q and 26% y-o-y
- Q1 Book-to-Bill ratio of 1.3 for Front-end
- Q1 Backlog of € 120m (1.5 X Q1 sales) for Front-end
- EBIT margin of -1% stable compared to Q4 2012 and down 8% compared to Q1 2012 strongly impacted by lower sales and mix changes
- Cash flow from operations of € 2m
- Net results of € 1.410m (including gain on sales of PT shares of € 1.408m) compared to € -22m in Q4 2012 and € 6m in Q1 2012
## Net Earnings Quarter - Group

<table>
<thead>
<tr>
<th></th>
<th>reported Q1 '13/</th>
<th>comparable Q1 '13/</th>
<th>reported Q4 '12</th>
<th>reported Q1 '12</th>
<th>Q1 '13/</th>
<th>Q1 '12</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million</td>
<td>Q4 '12</td>
<td>Q1 '12</td>
<td>Q4 '12</td>
<td>Q1 '12</td>
<td>Q4 '12</td>
<td>Q1 '12</td>
</tr>
<tr>
<td>Front End</td>
<td>80.0</td>
<td>80.0</td>
<td>93.1</td>
<td>94.8</td>
<td>-14%</td>
<td>-16%</td>
</tr>
<tr>
<td>Back End</td>
<td>160.3</td>
<td>206.7</td>
<td>226.8</td>
<td>216.2</td>
<td>-9%</td>
<td>-4%</td>
</tr>
<tr>
<td><strong>Net Sales</strong></td>
<td><strong>240.3</strong></td>
<td><strong>286.7</strong></td>
<td><strong>319.9</strong></td>
<td><strong>311.0</strong></td>
<td><strong>-10%</strong></td>
<td><strong>-8%</strong></td>
</tr>
<tr>
<td><strong>Gross Margin</strong></td>
<td><strong>68.6</strong></td>
<td><strong>83.1</strong></td>
<td><strong>87.8</strong></td>
<td><strong>96.6</strong></td>
<td><strong>-5%</strong></td>
<td><strong>-14%</strong></td>
</tr>
<tr>
<td>as % of sales</td>
<td>28.5%</td>
<td>29.0%</td>
<td>27.5%</td>
<td>31.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>(40.9)</td>
<td>(46.4)</td>
<td>(53.5)</td>
<td>(41.2)</td>
<td>-24%</td>
<td>-1%</td>
</tr>
<tr>
<td>Research and development</td>
<td>(30.5)</td>
<td>(33.9)</td>
<td>(37.5)</td>
<td>(33.5)</td>
<td>-19%</td>
<td>-9%</td>
</tr>
<tr>
<td><strong>Front End</strong></td>
<td>1.4</td>
<td>1.4</td>
<td>2.1</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Back End (100%)</strong></td>
<td>(4.3)</td>
<td>1.2</td>
<td>(5.3)</td>
<td>19.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EBIT (excl. special items)</strong></td>
<td><strong>(2.9)</strong></td>
<td><strong>2.6</strong></td>
<td><strong>(3.2)</strong></td>
<td><strong>21.9</strong></td>
<td><strong>181%</strong></td>
<td><strong>-88%</strong></td>
</tr>
<tr>
<td>as % of sales</td>
<td>-1.2%</td>
<td>0.9%</td>
<td>-1.0%</td>
<td>7.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special items:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restructuring expenses</td>
<td>(0.3)</td>
<td>(0.3)</td>
<td>(0.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early extinguishment of debt</td>
<td>-</td>
<td>-</td>
<td>(2.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realized gain on sale PT shares</td>
<td>323.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealized gain on sale PT shares</td>
<td>1,084.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Front End</strong></td>
<td>3.1</td>
<td>3.1</td>
<td>(19.5)</td>
<td>(2.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Back End (ASMI interest)</strong></td>
<td>(0.5)</td>
<td>0.2</td>
<td>(2.2)</td>
<td>8.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gain on sale PT shares</strong></td>
<td>1,407.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Result</strong></td>
<td><strong>1,410.1</strong></td>
<td><strong>3.3</strong></td>
<td><strong>(21.7)</strong></td>
<td><strong>6.3</strong></td>
<td><strong>115%</strong></td>
<td><strong>-48%</strong></td>
</tr>
</tbody>
</table>

For Q1 2013, the results of Back-end were consolidated until March 15, 2013. From that date on net results of ASMPT will be reported on the line "results from investments"
## Balance Sheet - Group

<table>
<thead>
<tr>
<th></th>
<th>Dec 2012</th>
<th>Mar 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Assets</strong></td>
<td>1,500</td>
<td>2,226</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>291</td>
<td>565</td>
</tr>
<tr>
<td>Other current assets</td>
<td>807</td>
<td>208</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>275</td>
<td>61</td>
</tr>
<tr>
<td>Goodwill, net</td>
<td>52</td>
<td>12</td>
</tr>
<tr>
<td>Associates</td>
<td>-</td>
<td>1,346</td>
</tr>
<tr>
<td>Other Assets</td>
<td>75</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>450</td>
<td>90</td>
</tr>
<tr>
<td>Short-term debt (incl current LT debt)</td>
<td>68</td>
<td>-</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>350</td>
<td>87</td>
</tr>
<tr>
<td>Long-term debt &amp; Convertible subordinated debt</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>Other long term liabilities</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Shareholders' Equity</strong></td>
<td>742</td>
<td>2,136</td>
</tr>
<tr>
<td>Non-controlling interest</td>
<td>308</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td><strong>1,500</strong></td>
<td><strong>2,226</strong></td>
</tr>
</tbody>
</table>
## Cash Flow - Group

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q4</th>
<th>Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
<td>2012</td>
<td>2012</td>
</tr>
<tr>
<td><strong>Net earnings (loss)</strong></td>
<td>1,407.6</td>
<td>(23.8)</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>13.3</td>
<td>15.0</td>
<td>13.1</td>
</tr>
<tr>
<td><strong>Working Capital</strong></td>
<td>(8.0)</td>
<td>41.8</td>
<td>19.9</td>
</tr>
<tr>
<td><strong>PPA, restructuring &amp; impairments</strong></td>
<td>(0.3)</td>
<td>(0.9)</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Associates</strong></td>
<td>(1,409.9)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>(1.0)</td>
<td>18.0</td>
<td>(7.2)</td>
</tr>
<tr>
<td><strong>Net cash from operating activities</strong></td>
<td><strong>1.7</strong></td>
<td><strong>50.1</strong></td>
<td><strong>40.2</strong></td>
</tr>
<tr>
<td><strong>Net cash from investing activities</strong></td>
<td><strong>293.0</strong></td>
<td><strong>(21.1)</strong></td>
<td><strong>(18.4)</strong></td>
</tr>
<tr>
<td><strong>Net cash from financing activities</strong></td>
<td><strong>(22.0)</strong></td>
<td><strong>(35.1)</strong></td>
<td><strong>(5.8)</strong></td>
</tr>
<tr>
<td><strong>Exchange rate effects</strong></td>
<td>1.5</td>
<td>(0.8)</td>
<td>(1.6)</td>
</tr>
<tr>
<td><strong>Net increase (decrease) in cash and cash equivalents</strong></td>
<td><strong>274.1</strong></td>
<td><strong>(6.8)</strong></td>
<td><strong>14.4</strong></td>
</tr>
</tbody>
</table>
Historical development - FE

- Net Sales in mln
  - € 140
  - € 120
  - € 100
  - € 80
  - € 60
  - € 40
  - € 20
  - € 0

- EBIT in mln
  - € 25
  - € 20
  - € 15
  - € 10
  - € 5
  - 0
  - -€ 5
  - -€ 10
  - -€ 15
  - -€ 20
  - -€ 25

- Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1
- 07 08 09 10 11 12 13

- Net Sales
- EBIT

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Monday, April 29, 2013
Backlog increased 31% to €120m
Book-to-Bill ratio decreased to 1.3 (Q4: 1.4)
Based upon the current backlog and our current visibility:

Following the healthy book to bill ratio's in Q4 2012 and Q1 2013 our Front-end operations are expected to show a strong double digit sales increase in Q2 compared to Q1. We also expect a double digit increase of our order intake in Q2 compared to Q1.
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
ASMPT: Full Range of Advanced Flip Chip Solutions

High Pin count – High End (TCB)
AD9312
CPU
GPU
± 2 µm

High Pin count – Mid Range (C4/TS)
AD9212/IS9012TS
Application Processor
SoC
± 10 µm Placement Accuracy

Low Pin count (C4)
AD8312FC
AD838FC
RF chips
Wireless chips
± 15 µm
ASMPT: 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