ASML to acquire HMI to enhance Holistic Lithography product portfolio
Forward Looking Statements

This document contains statements relating to certain projections and business trends that are forward-looking, including statements with respect to the acquisition of HMI by ASML, the expected benefits of the acquisition of HMI by ASML, including enhancement of ASML’s existing product portfolio, improvement in ASML and HMI’s metrology technologies and support of EUV technologies, the benefits of the acquisition to ASML’s holistic lithography strategy, expected trends in holistic lithography, expected sales in holistic lithography, expected timing of EUV volume production, the timing of closing of the acquisition, the issuance of ASML shares pursuant to the transaction, the financing of the acquisition and the impact of the acquisition on ASML’s earnings per share. You can generally identify these statements by the use of words like "may", "will", "could", "should", "project", "believe", "anticipate", "expect", "plan", "estimate", "forecast", "potential", "intend", "continue" and variations of these words or comparable words. These statements are not historical facts, but rather are based on current expectations, estimates, assumptions and projections about the business and our future financial results and readers should not place undue reliance on them. Forward-looking statements do not guarantee future performance and involve risks and uncertainties. These risks and uncertainties include, without limitation, the inability to obtain HMI shareholder and regulatory approval of the transaction, the satisfaction of other conditions to the closing of the transaction, the possibility that the length of time necessary to consummate this transaction may be longer than anticipated, the achievement of the expected benefits of the transaction, risks associated with integrating the businesses of ASML and HMI, the possibility that the businesses of ASML and HMI may suffer as a result of uncertainty surrounding the proposed transaction, the expected developments in metrology technologies, the anticipated effect of this transaction on ASML’s earnings per share, the development of the holistic lithography market, and other risks indicated in the risk factors included in ASML’s Annual Report on Form 20-F and other filings with the US Securities and Exchange Commission. These forward-looking statements are made only as of the date of this document. ASML and HMI do not undertake any obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.
Strategic rationale: combination of HMI and ASML technology boosts control solutions and market opportunity

- ASML is a technology leader in lithography solutions. HMI is a technology leader in e-beam metrology. Both companies have established product roadmaps for advanced logic and memory customers.

- Combination of HMI e-beam metrology technology and ASML Holistic Lithography will create a new class of products for patterning control, improve time to market of critical technologies needed to support extension of Moore’s law.

- Addressable market opportunity for qualification, monitoring and control is EUR 2.3 billion in 2020.

- ASML and HMI will accelerate introduction of reticle defect detection to support coming EUV ramp, an opportunity of EUR 200 million in 2020.

- The transaction will be accretive to ASML earnings immediately (before the impact of purchase-price accounting).
ASML and HMI Business at a glance

ASML

**Year founded:** 1984  
**Locations:** headquarters in The Netherlands; 70 offices, 16 countries  
**Employees:** ~15,000  
**Sales 2015:** EUR 6.3 billion  
**Profitability:** EBIT margin = 25%

ASML invents, develops, manufactures and services lithography machines, metrology systems and software products that together allow chip manufacturers to follow Moore’s Law and produce ever smaller, cheaper, more powerful and energy-efficient semiconductors.

**Expertise: Holistic lithography**
- High end EUV and DUV scanners
- Metrology
- Computational lithography

HMI

**Year founded:** 1998  
**Locations:** Headquarters in Taiwan, locations in China, Korea, Taiwan, Japan and the U.S.  
**Employees:** ~700  
**Sales 2015:** TWD 6.7 billion (EUR 182 million)  
**Profitability:** EBIT margin = 37%

HMI invents, develops, manufactures and services electron beam (e-beam) metrology equipment for high resolution and voltage contrast imaging of advanced chip manufacturers devices, supporting process control and yield enhancement.

**Expertise: E-Beam metrology technology**
- Fast, high resolution imaging for <10 nm Logic defect detection
- Fast, voltage-contrast imaging for DRAM, 3D NAND
- EUV reticle defect detection
ASML Holistic Lithography seeks to maximize lithography process performance and control

1. Lithography scanner with advanced control capability (imaging, overlay and focus)

2. Process Window Control

3. Computational Lithography

Process Window Enhancement

Process Window Detection

Metrology
HMI e-beam technology supports leading edge metrology products for <10nm logic & memory applications

<table>
<thead>
<tr>
<th>Logic and Memory</th>
<th>Memory</th>
<th>EUV reticle defects</th>
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<tr>
<td>Pattern fidelity control</td>
<td>3D integrity control</td>
<td>E-beam captures EUV reticle defects on reticle and/or wafer</td>
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- **Logic and Memory Pattern fidelity control**
  - Detection of patterning fidelity error in Logic and Memory devices
- **Memory 3D integrity control**
  - Detection of 3D integrity errors on Memory devices
- **EUV reticle defects**
  - E-beam captures EUV reticle defects on reticle and/or wafer

*eScan® 500, eP™4 & SkyScan™ with Supernova D2DB technology
eScan® 420 & NanoScan™ Voltage Contrast & CDU
*eXplore™ with D2DB technology*
ASML holistic lithography now:
YieldStar metrology measures wafers after develop, data feeds computational lithography models for optimum scanner control.
ASML holistic lithography future - a new paradigm:
E-beam added: ASML model guides e-beam to improve coverage of critical features; e-beam data enhances ASML model and control of scanner.
Qualification, monitoring and control landscape today
HMI/ASML addressable market EUR 0.7 billion (excluding bright field inspection)

- Voltage contrast
- E-Beam metrology
  single beam

Measurement resolution/accuracy (nm)

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<tr>
<th>R&amp;D qualification</th>
<th>Manufacturing monitoring</th>
<th>Manufacturing control</th>
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<td>High resolution bright field inspection</td>
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Process control enabled by Holistic Lithography

Sampling (% of wafers)

- 0.001%
- 0.1-1%
- 1-10%
- 100%

Others
HMI e-beam metrology technology combined with ASML holistic lithography will boost customers control strategy in the future. HMI/ASML addressable market EUR 2.3 billion.
HMI e-beam will also support EUV production insertion.

HMI has pioneered e-beam EUV reticle metrology systems with a market opportunity of more than EUR 200 million in 2020.

Source: ASML, assuming 25% attach rate per EUV scanner.
Value proposition

• The combination of HMI e-beam metrology to ASML holistic triangle offers the opportunity for a new class of products to provide logic and memory customers with a comprehensive control strategy, to help semiconductor manufacturers achieve faster time to market and more good die per wafer.

• Driving the shift from monitoring wafers to controlling wafers – from only overlay today to pattern fidelity tomorrow – will improve process performance and support further extension of Moore’s law.

• Voltage contrast application provides memory customers with 3D integrity check.

• The patterning control opportunity represents a major growth opportunity in the next 5-10 years and the combination of HMI and ASML will allow us to play a major role in this market.

• E-beam EUV reticle metrology systems represent a market opportunity of more than EUR 200 million in 2020.
Transaction terms

**Consideration**

- HMI shareholders receive aggregate cash consideration of TWD 100 billion (equivalent to approximately EUR 2.75 billion)
  - Offer price of TWD 1,410 per HMI share
  - Represents 31% premium to 30-day average VWAP
- Hermes-Epitek Corporation and certain HMI officers reinvest approximately EUR 500 million in newly issued ASML shares (5.9 million shares at a subscription price of TWD 3,106 per share) which are subject to minimum holding period of 2 1/2 years

**Financing**

- Transaction financed with approximately EUR 1.5 billion of debt, approximately EUR 0.5 billion of ASML equity as noted above, and the remainder from available cash.
- ASML stays committed to its conservative financial policy including strong liquidity buffer

**Conditions and timing**

- Subject to HMI shareholder vote and other customary closing conditions
  - Committed support from 48% of HMI shares outstanding
  - Transaction expected to close Q4 2016