Press Releases

ZEISS and ASML Strengthen Partnership for Next Generation of EUV Lithography Due in Early 2020s

- ASML buys 24.9% of ZEISS subsidiary Carl Zeiss SMT for EUR 1 billion in cash
- Start of development of entirely new High NA optical system for the future generation of EUV
- ASML supports Carl Zeiss SMT’s R&D and capex for approximately EUR 760 million over the next 6 years

VELDHOVEN, the Netherlands/OBERKOCHEM, Germany – 3 November 2016 - Netherlands-based ASML Holding NV, one of the world’s leading chip industry equipment providers, and Germany-based Carl Zeiss SMT, a business group of Carl Zeiss AG (ZEISS), have agreed to strengthen their long-standing and successful partnership in the semiconductor lithography business. The main objective of this agreement is to facilitate the development of the future generation of Extreme Ultraviolet (EUV) lithography systems due in the first few years of the next decade. This technology will enable the semiconductor industry to produce much higher performance microchips at lower costs.

ZEISS and ASML jointly announce today, that they have agreed on a 24.9% minority stake of ASML in ZEISS’s subsidiary Carl Zeiss SMT, for which ASML will pay ZEISS EUR 1 billion in cash. The companies stated that no further exchange of shares is planned or agreed.

ASML is a key supplier of semiconductor patterning products and services used by the world’s top producers of microchips. With its high-performance optics Carl Zeiss SMT supplies an essential subsystem of ASML’s semiconductor lithography scanners and is ASML’s most important strategic partner. ASML and Carl Zeiss SMT have been in close partnership for more than 30 years. Both firms have grown strongly over the last decades benefiting from each other’s strengths.

A new cycle of investments required for the development of an entirely new optical system for the future generation of EUV, expected to be provided to the chip making industry in the first few years of the next decade, has triggered the partners to take a further step in the collaboration.

“In 2018 the first chips made on current technology EUV scanners are expected to roll off the production lines of our customers. A lot of work is still being done to ensure the introduction of EUV in volume manufacturing, in tight conjunction with our highly successful immersion scanners which we continue to improve. Yet ASML and ZEISS are looking beyond this important milestone. We see a long and successful future for EUV lithography in advanced chip manufacturing and with this agreement we set the right conditions for development of the next generation of EUV by ASML and Carl Zeiss SMT, so that our customers can reap the rewards of their EUV investments up to the end of the next decade,” said Peter Wennink, President and Chief Executive Officer of ASML.

“With this agreement we clear the road for advanced lithography to support the new concepts and designs for future generations of advanced chips. After the many years of fruitful partnership, we see this agreement as a further strong endorsement of our long term cooperation which allows us to further expand our joint leadership that we have already accomplished together”, says Michael Kaschke, President and CEO of ZEISS.

The next generation of EUV optics will offer a higher numerical aperture (NA), making it possible to further reduce critical dimensions in the lithography process. The current EUV systems have an optical system with NA of 0.33 whereas the new optics will have NA larger than 0.5, enabling several generations of geometric chip scaling.

In addition to the agreement of the minority interest, the two companies have also agreed that ASML will support Carl Zeiss SMT’s research and development (R&D) for approximately EUR 220 million as well as capital expenditures and other supply chain investments for approximately EUR 540 million over the next 6 years.

These investments will predominantly be allocated at Carl Zeiss SMT’s main location in Oberkochen, Germany, and will primarily be used for capacity and resource expansions, with
positive effects on long-term employment at this location. Carl Zeiss SMT will remain fully integrated into the structure of the ZEISS Group as one of the major and important business groups.

“High-NA is the logical next step for EUV, as it circumvents complex and expensive 0.33 NA EUV multiple patterning. High-NA EUV is a robust way for chips to scale all the way down to the sub-3 nanometer logic node in a single exposure with high productivity and reduced cost per feature. That is several generations from where we are today and underlines our commitment to propel Moore’s law,” said Martin van den Brink, President and Chief Technology Officer at ASML.

Carl Zeiss SMT will pay an annual dividend to its shareholders Carl Zeiss AG and ASML. ASML expects that the minority share transaction will be accretive to its earnings before adjustments related to purchase price accounting and differences in accounting standards. Furthermore, ASML’s contribution to Carl Zeiss SMT’s R&D and capital expenditures will be taken into account in the future pricing of SMT’s next generation EUV optics to ASML.

The transaction has been approved by both companies’ supervisory boards. ASML will fund the transaction from available cash, potentially supplemented by new debt. The transaction is subject to regulatory clearance and is expected to be closed in the second quarter of 2017.

Update ASML Share Buyback Program

In light of the investments by ASML announced today, ASML will prolong the pause of its share buyback program for the time being. As a result, the 2016-2017 program may not be completed for the full amount. Otherwise, the current program will remain in place, yet it may be further suspended, modified or discontinued at any time. As part of ASML’s financial policy to return excess cash to shareholders through dividends and regularly timed share buyback programs, ASML in January 2016 announced its intention to purchase up to EUR 1.5 billion of shares to be executed within the 2016-2017 time frame.

About Moore’s law

The phenomenal growth of the semiconductor industry has been driven by Moore’s Law, named after Intel co-founder Gordon Moore. In 1965, Moore observed that the number of components on a chip that could be manufactured at optimum cost had doubled every year. He predicted that this trend would continue. It was an empirical observation, not a law of nature. In the five decades that followed, the “law” has been rewritten several times, but the principle continues: chip makers cram more transistors on ICs with every new generation, making computing power and storage capacity cheaper year after year. Today’s consumers carry more computing power in their pockets than a multi-million-dollar supercomputer could deliver in the 1970s. Moore’s Law has inspired generations of engineers to push technology forward.

About ASML

ASML is one of the world’s leading manufacturers of chip-making equipment. Our vision is to enable affordable microelectronics that improve the quality of life. To achieve this, our mission is to invent, develop, manufacture and service advanced technology for high-tech lithography, metrology and software solutions for the semiconductor industry. ASML’s guiding principle is continuing Moore’s Law towards ever smaller, cheaper, more powerful and energy-efficient semiconductors. This results in increasingly powerful and capable electronics that enable the world to progress within a multitude of fields, including healthcare, technology, communications, energy, mobility, and entertainment. We are a multinational company with over 70 locations in 16 countries, headquartered in Veldhoven, the Netherlands. We employ more than 15,500 people on payroll and flexible contracts (expressed in full time equivalents). ASML is traded on Euronext Amsterdam and NASDAQ under the symbol ASML. More information about ASML, our products and technology, and career opportunities is available on www.ASML.com.

About ZEISS and Carl Zeiss SMT

ZEISS is an internationally leading technology enterprise operating in the optics and optoelectronics industries. The ZEISS Group develops and distributes semiconductor manufacturing equipment, measuring technology, microscopes, medical technology, eyeglass lenses, camera and cine lenses, binoculars and planetarium technology. With its solutions, the company constantly advances the world of optics and helps shape technological progress. ZEISS is divided up into the four segments Semiconductor Manufacturing Technology, Research & Quality Technology, Medical Technology,
and Vision Care/Consumer Optics. ZEISS is represented in over 40 countries and operates more
than 30 production sites, over 50 sales and service locations and about 25 research and development
facilities. In fiscal year 2015/16 the company generated revenue of over EUR 4.8 billion with around
25,000 employees. Founded in 1846 in Jena, the company is headquartered in Oberkochen,
Germany. Carl Zeiss AG is the strategic management holding company that manages the ZEISS
Group. The company is wholly owned by the Carl Zeiss Stiftung (Carl Zeiss Foundation).
Further information at www.zeiss.com

Regulated Information
This press release contains inside information within the meaning of Article 7(1) of the EU Market
Abuse Regulation.

Forward Looking Statements
This document contains statements relating to certain projections and business trends that are
forward-looking, including statements with respect to our outlook, including statements about the
partnership between ASML and Carl Zeiss SMT, the transactions between ASML and ZEISS
discussed herein, including the expected capex and R&D other investments by ASML, and expected
benefits of these transactions, statements with respect to the planned investments by ASML in Carl
Zeiss SMT including allocation and use of these investments and expected benefits., statements
about EUV including expected development of EUV and the expected timing of the next generation of
EUV systems, new investments required in optical systems to continue EUV development, expected
timing for the first chips to be produced by ASML’s customers using EUV, and expected volume
manufacturing using EUV and expected timing thereof and expected long and successful future of
EUV lithography and expected future investments in EUV, , that customers can reap the rewards
of these EUV investments up to the end of the next decade and that the agreement discussed
in this release will clear the road for advanced lithography to support new concepts and designs
for future generations of advanced ships, the expected NA and other features of next generation
EUV products, statements with respect to Moore’s law and the expectation that this transaction will
help fuel the development of Moore’s law, statements with respect to Carl Zeiss SMT, including
expected dividends and that the transaction will be accretive to earnings, statements with respect
to the relationship between ASML and Carl Zeiss SMT and expected benefits thereof , expected
closing of the transaction [and expected funding of the transaction by ASML], and other non-historic
statements. 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, economic conditions, product
demand and semiconductor equipment industry capacity, worldwide demand and manufacturing
capacity utilization for semiconductors (the principal product of our customer base), including the
impact of general economic conditions on consumer confidence and demand for our customers’
products, competitive products and pricing, the impact of any manufacturing efficiencies and capacity
constraints, performance of our systems, the continuing success of technology advances and the
related pace of new product development and customer acceptance of EUV, delays in EUV systems
production and development, our ability to enforce patents and protect intellectual property rights, the
risk of intellectual property litigation, availability of raw materials and critical manufacturing equipment,
trade environment, changes in exchange rates, the completion of the acquisition by ASML of the
24.9% stake in Carl Zeiss SMT and the performance of Carl Zeiss SMT including dividends paid in the
future by Carl Zeiss SMT, the amount of investments and capex required by Carl Zeiss SMT under
the arrangements described herein and the performance of the products produced by Carl Zeiss SMT
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. We do not undertake to update or revise the forward-looking
statements, whether as a result of new information, future events or otherwise.
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