

Almere, The Netherlands

September 22, 2017

ASM INTERNATIONAL N.V. ANNOUNCES DETAILS OF SHARE BUYBACK PROGRAM

ASM International N.V. (Euronext Amsterdam: ASM) ("ASMI") today announces that it will commence a share buyback program of ASMI's common shares up to €250 million.

This program follows on ASMI's announcement on April 24, 2017, that the proceeds of approximately €248 million of the partial secondary placement of shares of ASM Pacific Technology Ltd are intended to be used for a new share buyback program. The previous €100 million share buyback program that was announced on October 26, 2016, was completed on August 31, 2017.

This share buyback program will be executed by a third party. The program will commence on September 21, 2017, and will end as soon as the aggregate purchase price of the common shares acquired by ASMI has reached €250 million, but ultimately on November 25, 2018. ASMI strives to complete the program well before that date. The program will in any event take place within the mandate given by the shareholders during the Annual General Meeting of Shareholders of May 25, 2017.

ASMI has the intention to reduce its capital by withdrawing the repurchased shares after having received the approval from its shareholders. The repurchase program is part of ASMI's commitment to use excess cash for the benefit of its shareholders.

ASMI will update the market on the progress of the share buyback program on a weekly base. This information will also be published on the ASMI website (www.asm.com).

About ASM International

ASM International NV, headquartered in Almere, the Netherlands, its subsidiaries and participations design and manufacture equipment and materials used to produce semiconductor devices. ASM International, its subsidiaries and participations provide production solutions for wafer processing (Front-end segment) as well as for assembly & packaging and surface mount technology (Back-end segment) through facilities in the United States, Europe, Japan and Asia. ASM International's common stock trades on the Euronext Amsterdam Stock Exchange (symbol ASM). For more information, visit ASMI's website at www.asm.com.

Cautionary Note Regarding Forward-Looking Statements: All matters discussed in this press release, 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, corporate transactions, financing and liquidity matters, 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 reports and financial statements. The Company assumes no obligation nor intends to update or revise any forward-looking statements to reflect future developments or circumstances.

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