

FOR: BE SEMICONDUCTOR INDUSTRIES N.V.

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PRESS RELEASE

BE Semiconductor Industries Announces Transactions Under Current Share Repurchase Program

Duiven, the Netherlands, September 21, 2007, BE Semiconductor Industries N.V. ("the Company" or "Besi") (Euronext: BESI), a leading manufacturer of assembly equipment for the semiconductor industry, announced that it has repurchased a total of 666,340 shares during the period from September 17, 2007 up to and including September 21, 2007. The shares were repurchased at an average price of EUR 4.3494 for a total amount of EUR 2,898,182.

The above-mentioned transactions are part of the Share Repurchase Program announced in the press release of September 3, 2007 according to which Besi may repurchase up to a maximum of 1.5 million shares. Since the start of the Share Repurchase Program, Besi has repurchased a total of 736,241 shares at an average price of EUR 4.3555 for a total amount of EUR 3,206,689.

About BE Semiconductor Industries N.V.

BE Semiconductor Industries N.V. designs, develops, manufactures, markets and services die sorting, flip chip and multi-chip die bonding, packaging and plating equipment for the semiconductor industry's assembly operations. Its customers consist primarily of leading U.S., European, Asian, Korean and Japanese semiconductor manufacturers and subcontractors which utilize its products for both array connect and conventional leadframe manufacturing processes. For more information about Besi, please visit our website at www.besi.com.

Caution Concerning Forward Looking Statements

Statements in this press release regarding Besi's intention to repurchase Ordinary Shares from time to time under the stock repurchase program, the intended use of any repurchased shares and the source of funding are forward-looking statements. There are a number of important factors that could cause actual events to differ materially from those suggested or indicated by such forward-looking statements. These include, among others, the market price of Besi's stock prevailing from time to time, the nature of other investment opportunities presented to the Company from time to time, the Company's cash flows from operations, general economic conditions, and other factors identified in the Company's Annual Report filed with the AFM.

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