



News Release

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MATTSON TECHNOLOGY, INC. ANNOUNCES \$20 MILLION SHARE REPURCHASE PROGRAM

FREMONT, Calif. — April 25, 2007 — Mattson Technology, Inc. (Nasdaq: MTSN), a leading supplier of advanced process equipment used to manufacture semiconductors, today announced that its Board of Directors has authorized the repurchase of up to \$20 million of the Company's common stock from the public markets or in private purchases.

"This action reflects Mattson's strong cash flow and the Board's confidence in our robust cyclically flexible enterprise business model," stated David L. Dutton, chief executive officer of Mattson Technology. "This has allowed us to significantly increase revenues over the last six quarters while still generating cash. We are also excited by the opportunities we are actively developing to enter new markets with products that will offer outstanding results on the wafer as well as superior cost of ownership for our customers."

Mattson expects that the share repurchases will be effected pursuant to a plan in conformity with Rule 10b5-1. The size and timing of the repurchases will depend on Mattson's share price.

About Mattson Technology, Inc.

Mattson Technology, Inc. is the leading supplier of dry strip equipment and the second largest supplier of rapid thermal processing equipment in the global semiconductor industry. The company's strip and RTP equipment utilize innovative technology to deliver advanced processing performance and productivity gains to semiconductor manufacturers worldwide for the fabrication of current- and next-generation devices. For more information, please contact Mattson Technology, Inc., 47131 Bayside Parkway, Fremont, Calif. 94538. Telephone: (800) MATTSON/(510) 657-5900. Fax: (510) 492-5911. Internet: www.mattson.com.

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