

News Release

Mattson Technology Contact
Andy Moring
Mattson Technology, Inc.
tel 510-657-5900
fax 510-492-5963
andy.moring@mattson.com

Investor & Media Contact
Laura Guerrant-Oiye
Guerrant Associates
tel 808-882-1467
Iguerrant@guerrantir.com

MATTSON TECHNOLOGY, INC. REPORTS RESULTS FOR THE SECOND QUARTER 2010

FREMONT, Calif. — **July 21, 2010** — Mattson Technology, Inc. (Nasdaq: MTSN), a leading supplier of advanced process equipment used to manufacture semiconductors, today announced results for the second quarter ending June 27, 2010.

Recent Business Highlights:

- Revenues increased sequentially 27 percent over the first quarter of 2010
- 3 out of top 4 foundries recently placed orders for Mattson Technology's strip equipment
- Secured follow-on etch production orders for memory and shipped an etch system to a second packaging customer

Second Quarter 2010 Financial Results

Net sales for the second quarter were \$32.1 million, compared to \$25.2 million in the previous quarter, and \$8.1 million in the second quarter of 2009. Gross margin for the second quarter was \$9.9 million or 31 percent, compared to \$7.8 million or 31 percent for the previous quarter, and negative \$1.6 million in the second quarter of 2009.

Operating expenses for the second quarter were \$19.5 million, compared to \$18.8 million in the first quarter and \$18.2 million for the second quarter of 2009. The increase in operating expenses was primarily due to increased engineering materials and marketing expenses related to support of new products in customer locations.

Net loss for the second quarter was \$8.4 million, or \$0.17 loss per share, compared with a net loss of \$10.8 million, or \$0.22 loss per share, for the first quarter and net loss of \$19.9 million, or \$0.40 loss per share, for the second quarter of 2009.

Cash, cash equivalents, short-term investments and restricted cash at the end of the second quarter were \$42.5 million, compared to \$51.9 million at the end of the previous quarter.

David L. Dutton, president and chief executive officer, noted, "Mattson Technology continues to show momentum with our etch products by shipping current orders and booking subsequent orders with a major memory manufacturer. The upcoming third quarter will mark our third consecutive quarter of paradigmE® tool shipments to volume production. In addition, we have shipped an Alpine evaluation tool to a second packaging customer.

"Sales of our core RTP and strip products are reflective of the industry's transition from the technology phase of the cyclical upturn into a more capacity driven phase of the cycle. As evidence of this transition, we delivered and took orders for our core products at a broad section of top foundry and memory customers." Mr. Dutton concluded, "This upturn is driven by many new factories and existing factory expansions that are planned over the next six to eight quarters. These expansions, combined with our new product positions, should provide Mattson Technology the opportunity to generate revenue in excess of the last cycle."

Attached to this news release are preliminary unaudited condensed consolidated statements of operations and balance sheets.

Conference Call

On Wednesday, July 21, 2010, at 2:30 PM Pacific Time (5:30 PM Eastern Time), Mattson Technology will hold a conference call to review the following topics: 2010 second quarter financial results, current business conditions, the near-term business outlook and guidance for the third quarter of 2010. The conference call will be simultaneously webcast at www.mattson.com under the "Investors" section. In addition to the live webcast, a replay will be available to the public on the Mattson Technology website for one week following the live broadcast. To access the live conference call, please dial (970) 315-0417.

Mattson will also webcast a slide presentation in conjunction with the conference call, which can also be accessed at www.mattson.com under the "Investors" section.

"Safe Harbor" Statement Under the Private Securities Litigation Reform Act of 1995:

This news release contains forward-looking statements regarding the Company's future prospects and plans, including, but not limited to: potential future earnings, cash flow, cash position and other financial results, future customer demand and industry and economic conditions, Company strategies, and the market opportunity and acceptance of Company products. Forward-looking statements address matters that are subject to a number of risks and uncertainties that can cause actual results to differ materially. Such risks and uncertainties include, but are not limited to: end-user demand for semiconductors; customer demand for semiconductor manufacturing equipment; the timing of significant customer orders for the Company's products; customer acceptance of delivered products and the Company's ability to collect amounts due upon shipment and upon acceptance; the Company's ability to timely manufacture, deliver and support ordered products; the Company's ability to bring new products to market and to gain market share with such products; customer rate of adoption of new technologies; risks inherent in the development of complex technology; the timing and competitiveness of new product releases by the Company's competitors; the Company's ability to align its cost structure with market conditions; and other risks and uncertainties described in the Company's Forms 10-K, 10-Q and other filings with the Securities and Exchange Commission. Results for the current quarter are preliminary and subject to adjustment. The Company assumes no obligation to update the information provided in this news release.

About Mattson Technology, Inc.

Mattson Technology, Inc. designs, manufactures and markets semiconductor wafer processing equipment used in the fabrication of integrated circuits. We are a leading supplier of plasma and rapid thermal processing equipment to the global semiconductor industry, and operate in three primary product sectors: Dry Strip, Rapid Thermal Processing and Etch. Through manufacturing and design innovation, we have produced technologically advanced systems that provide productive and cost-effective solutions for customers fabricating current- and next-generation semiconductor devices. For more information, please contact Mattson Technology, Inc., 47131 Bayside Parkway, Fremont, CA, 94538. Telephone: (800) MATTSON/(510) 657-5900. Internet:www.mattson.com.

MATTSON TECHNOLOGY, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited, in thousands, except per share amounts)

	Three Months Ended				Six Months Ended			
	June 27, 2010		June 28, 2009		June 27, 2010		June 28, 2009	
Sales								
Products	\$	30,885	\$	7,532	\$	54,533	\$	12,231
Services		1,235		536		2,782		1,409
Net sales		32,120		8,068		57,315		13,640
Cost of sales	<u></u>							
Products		21,529		9,576		38,551		22,706
Services		665		101		1,076		458
Cost of sales		22,194		9,677		39,627		23,164
Gross margin		9,926		(1,609)		17,688		(9,524)
Operating expenses:								
Research, development and engineering		7,059		6,810		13,465		13,460
Selling, general and administrative		12,558		11,505		24,931		24,359
Restructuring charges		(93)		(100)		(77)		818
Total operating expenses		19,524		18,215		38,319		38,637
Loss from operations		(9,598)		(19,824)		(20,631)		(48,161)
Interest and other income, net		1,425		182		1,881		1,454
Loss before income taxes		(8,173)		(19,642)		(18,750)		(46,707)
Provision for income taxes		207		254		386		416
Net loss	\$	(8,380)	\$	(19,896)	\$	(19,136)	\$	(47,123)
Net loss per share:	<u></u>							
Basic and Diluted	\$	(0.17)	\$	(0.40)	\$	(0.38)	\$	(0.95)
Shares used in computing net loss per share:	<u></u>					_		
Basic and Diluted		50,052		49,772		50,018		49,749

MATTSON TECHNOLOGY, INC. CONDENSED CONSOLIDATED BALANCE SHEETS (in thousands)

	June 27, 2010 (unaudited)	December 31, 2009 (1)		
ASSETS				
Current assets:				
Cash, cash equivalents and short-term investments	\$ 40,516	\$ 58,435		
Restricted cash	2,017	2,000		
Accounts receivable, net	15,631	10,420		
Advance billings	2,841	905		
Inventories	25,541	25,804		
Prepaid expenses and other assets	4,654	5,848		
Total current assets	91,200	103,412		
Property and equipment, net	17,425	21,643		
Intangibles, net	1,125	1,250		
Other assets	5,932	6,768		
Total assets	\$ 115,682	\$ 133,073		
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$ 10,562	\$ 7,514		
Accrued liabilities	17,691	18,293		
Deferred revenue	4,556	2,150		
Total current liabilities	32,809	27,957		
Income taxes payable, non-current	4,495	4,458		
Other liabilities	5,047	5,952		
Total liabilities	42,351	38,367		
Stockholders' equity:				
Common stock	54	54		
Additional paid-in capital	633,223	631,785		
Accumulated other comprehensive income	18,337	22,014		
Treasury stock	(37,986)	(37,986)		
Accumulated deficit	(540,297)	(521,161)		
Total stockholders' equity	73,331	94,706		
Total liabilities and stockholders' equity	\$ 115,682	\$ 133,073		

(1) Derived from audited financial statements