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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM 10-K**

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☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2006

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 000-24838

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**MATTSON TECHNOLOGY, INC.**

*(Exact name of registrant as specified in its charter)*

**Delaware**  
*(State or other jurisdiction  
of incorporation or organization)*

**77-0208119**  
*(I.R.S. Employer  
Identification Number)*

**47131 Bayside Parkway, Fremont, California 94538**  
*(Address of principal executive offices, zip code)*

**(510) 657-5900**  
*(Registrant's telephone number, including area code)*

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**Securities registered pursuant to Section 12(b) of the Act: None**

**Securities registered pursuant to Section 12(g) of the Act:**

**Common stock, \$0.001 par value per share**

*(Title of Class)*

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
YES ☐ NO ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.  
YES ☐ NO ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file reports), and (2) has been subject to such filing requirements for the past 90 days.  
YES ☐ NO ☒

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  
YES ☐ NO ☒

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of July 2, 2006 was \$511,854,120 based on the closing price for the registrant's common stock reported by the Nasdaq Stock Market on that date. Shares of voting stock held by each director and executive officer have been excluded in that such persons may be deemed to be affiliates on that date. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares of registrant's common stock outstanding as of February 23, 2007: 52,661,175.

Documents incorporated by reference: Portions of the Proxy Statement for registrant's 2007 Annual Meeting of Stockholders, which will be filed on or before May 1, 2007, are incorporated herein by reference into Part III.

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**MATTSON TECHNOLOGY, INC.**

**FORM 10-K**

**FOR THE YEAR ENDED DECEMBER 31, 2006**

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## FORWARD-LOOKING STATEMENTS

*This Annual Report on Form 10-K contains forward-looking statements made pursuant to the provisions of Section 21E of the Securities Exchange Act of 1934. These forward-looking statements are based on management's current expectations and beliefs, including estimates and projections about our industry. Forward-looking statements may be identified by use of terms such as "anticipates," "expects," "intends," "plans," "seeks," "estimates," "believes" and similar expressions, although some forward-looking statements are expressed differently. Statements concerning our financial position, business strategy and plans or objectives for future operations are forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict and may cause actual results to differ materially from the forward-looking statements and from management's current expectations. Such risks and uncertainties include those set forth in Item 1A. "Risk Factors" in this Annual Report on Form 10-K. The forward-looking statements in this report speak only as of the time they are made and do not necessarily reflect our outlook at any other point in time. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or for any other reason. However, readers should carefully review the risk factors set forth in other reports or documents we file from time to time with the Securities and Exchange Commission.*

## PART I

### Item 1. *Business*

#### *Company Overview*

Mattson Technology, Inc. (Mattson, the Company) is a leading supplier of semiconductor wafer processing equipment used in the fabrication of integrated circuits (ICs or chips). According to estimates published in 2006 by independent research firm Gartner Dataquest, Mattson was the worldwide market share leader of dry strip equipment and the second worldwide market share leader of rapid thermal processing (RTP) equipment for the wafer fab equipment industry in 2005. Our manufacturing equipment utilizes innovative technology to deliver advanced processing capabilities and high productivity for the front-end-of-line (FEOL) and back-end-of-line (BEOL) fabrication of current and next-generation ICs. Our tools, technologies and expertise are enablers in the semiconductor industry's transition to larger 300 millimeter (mm) wafers, sub-90 nanometer (nm) design rules and the use of new materials, such as copper, low capacitance (low-k) dielectrics and barrier metals.

Our customer base is diversified geographically and includes foundries, memory and logic device manufacturers. We have a global sales and support organization focused on developing strong, long-term customer relationships to build customer loyalty. We have design and manufacturing centers in the United States, Canada and Germany. Our customer support organization is headquartered in Fremont, California, with sales and support teams located in China, France, Germany, Israel, Japan, Korea, Singapore, Taiwan and the United States.

Mattson Technology, Inc. was incorporated in California in 1988 and reincorporated in Delaware in 1997. Our principal executive office is located at 47131 Bayside Parkway, Fremont, CA 94538. Our telephone number is (510) 657-5900. Additional information about Mattson is available on our Website at <http://www.mattson.com>. The information on our Website is not incorporated herein by reference.

#### *Industry Background*

The manufacture of ICs is a highly complex process with numerous individual processing steps, many of which are performed multiple times before manufacturing is complete and the IC is fully functional. To build an IC, transistors are first created on the surface of the silicon wafer, known as FEOL fabrication, and then the transistors are microscopically wired together by means of the interconnect metal layers, known as BEOL processing. The steps require the wafer to be subjected to a tightly controlled series of chemical, thermal and photolithographic processes, resulting in the formation of millions, and in some cases billions, of transistors per IC and thousands of ICs on a single wafer.

Several technological trends impact IC manufacturing. One important trend is increasing IC density. Moore's Law, an observation made in 1965 that states the number of transistors on a chip doubles approximately every 24 months, has served as a goal for the entire industry and fueled the worldwide technology revolution. To adhere to Moore's Law, semiconductor manufacturers face continuing competitive pressures to manufacture increasingly complex ICs, improve yields per wafer and reduce manufacturing costs.

Semiconductor manufacturers have historically sought to increase the number of transistors per wafer by “shrinking” device structures through reducing device geometries or nodes. Today’s advanced devices are being produced at or below the 90 nm technology node. Leading semiconductor manufacturers are ramping volume production at 65 nm and are beginning pilot line activities at the 45 nm node.

The trend toward increasing device complexity and shrinking geometries requires the use of new materials and ever-more demanding processes. The industry is transitioning from using silicon/glass and aluminum as the building blocks of ICs to using newer materials, such as copper, hafnium, nickel and tungsten. Use of these new materials requires increasingly stringent processes and new transistor structures to increase chip densities and improve chip speed. These new challenging process requirements will drive the need for more research and development to provide more innovative solutions to enable the use of these new films.

To produce more chips on a wafer and reduce overall manufacturing cost per chip, semiconductor manufacturers have migrated to larger wafers. Many semiconductor manufacturers have already transitioned to production on 300 mm (12 inch) wafers because of the manufacturing cost advantages of these larger wafers compared to 200 mm (8 inch). 300 mm wafers yield greater than 2.2 times the number of chips per wafer as compared to 200 mm wafers, providing significant economies of scale in wafer manufacturing. Most advanced devices at 90 nm and below are produced on 300 mm wafers. The trend of increasing wafer sizes is expected to continue, but because switching to production on larger wafers generally requires significant infrastructure changes in equipment and factory automation systems, the transition will occur less frequently, typically every 10 years.

These developments increase manufacturing complexity and create the need for manufacturing equipment with ever more precise process control capability. The increased difficulty of achieving transistor performance at advanced nodes has made high yields important in selecting process equipment. Semiconductor manufacturers demand systems that can achieve consistent, reliable and repeatable process results within critical tolerance limits while still achieving desired throughput rates.

### ***Consumer Electronics Driving Industry Growth***

In 2006, consumer electronics, such as cell phones, personal computers (PCs), digital TVs and digital music players, were principal drivers of chip demand. Over the past several years, consumer products have emerged as the primary force behind semiconductor industry growth, now driving over half of all semiconductor sales. Semiconductors used in consumer electronic devices include microcontrollers, microprocessors, digital signal processors (DSPs) and analog devices.

The recent growth in the memory market is being driven by consumers’ demand for electronic devices that provide more functionality and mobility on a digital device. The introduction of Microsoft’s Vista (the latest release of the company’s Windows operating system) is driving the increase in IC content per PC, which drove DRAM growth in the second half of 2006 and is expected to continue to drive growth through 2007. The demand for digital cameras and portable flash media players, especially the Apple iPod, was a significant driver of sales of NAND flash memory in 2006.

The growth in the logic market is being driven by the demand for devices with more functionality and diversified applications.

These factors, along with demand for other consumer products, such as digital TVs, game consoles and automotive electronics will continue to be major growth drivers for global semiconductor sales in the years ahead. Semiconductor equipment industry growth will be driven by these trends, as new-generation systems will be required to deliver smaller and faster ICs.

### **Mattson Strategy**

Our business objective is to continuously grow Mattson while delivering strong financial performance. We are committed to continuing this successful trend and grow Mattson by:

- driving share gains in each of our existing market segments; and
- leveraging our current technology capabilities to expand into new market segments.

Strategies to achieve our long-term growth goals include:

### ***Technology Leadership***

Today's semiconductor manufacturers demand processes that deliver results with an unprecedented level of precision. We work closely with our customers, supply chain vendors and technology partners to deliver on these demands. An important element of Mattson's growth strategy is our commitment to technology leadership in the markets we serve, and the production-proven performance of our strip and RTP systems has earned us leading positions in both of these markets. We plan to extend our market and technology leadership by developing robust processing solutions that provide semiconductor manufacturers superior technology, productivity and total cost of ownership advantages. Investments in research and development have enabled us to make process improvements and product innovations that are ready to deliver two technology nodes ahead of current device requirements, resulting in powerful and expanding product and patent portfolios. We believe that our advanced technologies will enable us to increase our competitive advantage, expand our share in existing markets and penetrate new segments, further reinforcing our leadership.

### ***Customer Loyalty***

Our success is based on helping our customers succeed. We develop and deliver products that increase productivity and reduce manufacturing costs to help our customers get their next-generation chips to market faster, thereby maximizing their returns on investment. Our global sales and service organization works with our customers to align our business with their technology and production needs. We are a vendor of choice at leading semiconductor manufacturers around the world; a testament to our success in maintaining strong relationships and building customer loyalty and satisfaction. We expect to expand our portfolio of world-class customers as a result of our performance in delivering products and services that solve semiconductor manufacturers' most critical manufacturing and technology challenges.

### ***Operational Excellence***

Because the semiconductor industry is a global business, it is critical for semiconductor equipment suppliers to have operations in each region available 24 hours a day/7 days a week/52 weeks a year. We have developed a globally integrated operations organization that responds quickly to deliver to customers anywhere in the world. Through the successful implementation of our cyclically flexible enterprise (CFE) business model, we have built a leaner, more flexible organization designed to deliver profitability and efficiency throughout all industry cycles. We have established partnerships with our supply chain, and the outsourcing of non-core functions allows us to concentrate resources on what is most critical for our customers: developing and delivering advanced products that meet their exacting IC technology demands today and in the future. We will continue to implement measures and programs designed to minimize cost and increase manufacturing efficiencies to take our level of operational excellence to new heights.

## **Markets, Applications and Products**

### ***Dry Strip***

A strip system removes photoresist (PR) or other residues from a wafer following each step of film deposition or diffusion processing in preparation for the next processing step. Methods for stripping off these residues include wet and dry technologies. The more advanced dry stripping systems, such as our Suprema™ and Aspen strip tools, create gaseous chemistries, or plasmas, to which the wafer is exposed to remove mask films and residues.

As the complexity and number of thin-film layers required for each wafer has increased, the demand for advanced strip equipment has grown. This has led to a need for semiconductor manufacturers to increase their strip capacity and to place greater emphasis on low-damage results and residue-free stripping. The fabrication of ICs with feature sizes of sub-100 nm, and the use of copper and low-k dielectric films, create new challenges for advanced stripping equipment. The resist or residues must be removed from the interconnect layer without degrading the low-k materials, oxidizing any exposed copper or damaging the surface of the wafer.

Our Aspen III ICP<sup>HT</sup> system is built on our production-proven Aspen platform (we have over 1,300 Aspen platform-based systems installed at chipmaker fabs worldwide) and features our patented inductively coupled plasma (ICP) technology. The system utilizes an enhanced radio frequency (RF) matching network and a higher-capacity heating source to provide

increased throughput, process performance and reliability. The ICP<sup>HT</sup> is in high-volume production at customer sites around the world.

The Aspen III eHighlands is our advanced low-k resist strip system that enables semiconductor manufacturers to work with a single tool for the following applications in damascene/copper integration:

- Low-k /ultra low-k ashing;
- PR/bottom anti-reflective coating (BARC) etch-back; and
- Three-in-one processes (low-k strip, barrier layer etch and copper treatment).

The system also provides excellent performance for other advanced dry strip applications, including metal gate strip required for the 45 nm technology node and beyond. In 2006, two major Japanese and Korean semiconductor manufacturers selected the eHighlands as a result of the system's ability to provide high yields at low cost of ownership unmatched by conventional stand-alone strip systems.

In 2006, we introduced Suprema, which utilizes a new and innovative wafer handling architecture to deliver superior productivity and reliability with exceptionally low cost of ownership for manufacturing at the 90 nm node and below. During the year, we ramped production shipments of our latest-generation 300 mm strip system, gaining new customers for this tool in all three market segments: foundry, logic and memory.

### ***Rapid Thermal Processing***

In RTP, semiconductor wafers are rapidly heated under controlled atmospheric conditions to process temperatures of up to 1350 °C, held at the desired peak temperature for a defined time and then rapidly cooled. Thermal processing can alter and lock in material properties at the wafer surface as well as in the bulk silicon. Typical processes are:

- Rapid thermal oxidation: to grow an oxide layer on the wafer surface;
- Rapid thermal annealing: to achieve defined electrical properties in the devices or in the bulk of the wafer; and
- Rapid thermal silicidation: to optimize the electrical conductive structures on the wafer.

Historically, diffusion furnaces have been used to heat-treat large batches of wafers. As device features continue to shrink, temperature uniformity and exposure control have become more critical and require process capabilities beyond those diffusion furnaces can provide. Single-wafer RTP inherently enables more precise thermal control, uniformity across the diameter of the wafer and repeatability of results from wafer to wafer.

Our RTP products feature dual-sided, lamp-based heating technology that provides enhanced control, process uniformity and repeatability for both 200 and 300 mm production. Our product lines include the 2900 for 200 mm applications, the Helios RTP system for 300 mm applications and the Atmos rapid thermal oxidation (RTO) system for 300 mm advanced oxidation applications.

The Helios features a state-of-the-art model-based temperature measurement and control system that provides the uniformity, repeatability and reliability required for achieving superior device performance for the most demanding 300 mm applications, including nickel silicide (NiSi) formation. This dual-chamber RTP system is in volume production at 90 nm, and customers have qualified it for 65 nm processes. In 2006, the Helios increased its market acceptance worldwide, gaining new customers in China, Japan and Korea based on the system's excellent productivity and cost-of-ownership advantages. We will continue working with our customers to demonstrate the Helios' capabilities on processes for advanced 45 nm and below technology applications.

In 2006, we introduced the Atmos, marking our entry into the growing market for single-wafer oxidation applications. We shipped this new thermal oxidation system to two major memory semiconductor manufacturers for advanced sub-65 nm applications.

Our flash-assisted RTP system, which features a patented arc lamp technology capable of reducing thermal cycle time by a factor of over a hundred, is designed to enable our customers to meet advanced gate anneal and activation process requirements through the 32 nm technology node. In 2006, we successfully completed process qualification and began 45 nm device evaluation at a European research center.

### ***Etch (Isotropic and Low Aspect Ratio Reactive Ion)***

Etching processes, which are repeated numerous times during the IC manufacturing cycle, selectively remove patterned material from the surface of a wafer to create the device structures. As IC feature sizes continue to shrink, dry, or plasma, etching has become one of the most frequently used processes in semiconductor manufacturing because of plasma etching's ability to create the fine line widths required for smaller geometries.

Plasma-based etching can be divided into sub categories: isotropic and anisotropic etching. An isotropic, or multi-directional, etch system utilizes mostly neutral and low energy ions to perform a variety of etch processes on semiconductor wafers at and beyond the 65 nm node. Anisotropic etching, which occupies the majority of the total available plasma etch market, utilizes energetic ions to directionally etch the materials. This application space is also expected to extend well beyond the 65 nm node.

Our Aspen III LiteEtch systems use our patented ICP source technology for isotropic etching applications on 200 and 300 mm wafers. The LiteEtch system leverages the very high throughput of our wafer transfer platform and the superior performance of the patented ICP with Faraday shield to provide superior process on-wafer performance.

Our anisotropic etch system, Nexion™, is currently in qualification on several low-aspect ratio reactive ion etch (LARRIE) applications at a major memory manufacturer. This system draws on our expertise in anisotropic etching using a Faraday-shielded ICP system with bias capability and a platform with very high throughput to provide low cost-of-ownership, as well as excellent process on-wafer performance to our customers.

### ***Plasma-Enhanced Chemical Vapor Deposition***

Chemical vapor deposition (CVD) processes are used to deposit insulating and conducting films on wafers. These films are the basic materials used to form the resistors, capacitors and transistors of an integrated circuit. These materials are also used to form the wiring and insulation between electrical components.

As feature sizes continue to decrease, CVD processing equipment must meet increasingly stringent requirements. Particles or defect densities must be minimized and controlled to achieve the desired yields. Film properties, such as stress, must also be improved and more tightly controlled. Compatibility with metallization steps, such as aluminum and copper deposition, is critical. Finally, as process complexity increases with the use of low-k and dual-damascene processing solutions, the number of plasma-enhanced (PE) CVD steps increases significantly, and system productivity becomes even more important.

We are focused on PECVD applications at the front-end of the fabrication line, and we offer a PECVD process to deposit insulating films. Our products are based on our production-proven Aspen platform and robotic technology that provides performance and productivity advantages to our customers. PECVD allows the system to process wafers at a relatively low temperature, reducing the risk of device parameter drift during FEOL processing and damage to metallization layers during BEOL processing. We have narrowed our CVD efforts to a limited number of key customers.

### **Customer Support**

One of our primary goals is to build strong and productive partnerships with our customers. We recognize that their success is our success. Our customer support organization leads customer satisfaction programs meant to build and strengthen these long-term relationships. Our customer support organization is headquartered in Fremont, California, with additional resources located in China, France, Germany, Israel, Japan, Korea, Singapore, Taiwan and the United States. Our global support infrastructure is composed of an extensive network of experienced field service teams with diverse technical backgrounds and process, mechanical and electronics training. After-sales support is an essential part of our customer satisfaction program, and our international customer support teams provide the following services: system installation, on-site repair, telephone support, relocation services and selected post-sales process development applications.

We offer competitive, comprehensive warranties on all of our products. We maintain spare parts depots in most regions and provide regional field and process support. As part of our global support services, we also offer a broad selection of technical training courses; from maintenance and service training to basic and advanced applications and operation.

We are committed to the continuous improvement of our customer support services. Year over year, we have enhanced our customer service and support programs. We are actively engaged in joint development programs at major customer sites to collaborate on product and process development and increase the level of customer support.

We work closely with Semiconductor Equipment Materials International (or SEMI, a global member association for companies participating in the microelectronics and display industries) to ensure that our programs comply with its major support directives.

In 2006, we strengthened our operational processes and controls to allow us to increase our support while controlling overall costs. We continued to expand the role and improved the performance of our CFE partners, enabling faster response to our customers.

## **Sales and Marketing**

Our marketing and sales efforts are focused on building long-term relationships with our customers. We sell our systems primarily through our direct sales force and distribution agreements in certain regions and countries. Our sales personnel work closely with our customers to develop solutions to meet their processing needs. In addition to the direct sales force resident in our Fremont, California headquarters, we have sales and support offices in China, France, Germany, Japan, Korea, Singapore, Taiwan and the United States.

In 2006, we maintained our distribution relationships with MICL Ltd. in Israel, PTS SARL in southern Europe and SemiQuip Inc. in the United States.

In addition to maintaining our wholly-owned subsidiary in Japan, we continued our relationship with Canon Sales Company for the distribution of our RTP systems in Japan. In late 2006, we expanded our distribution relationship with Canon to include sales and support activities in Japan for our strip systems, formerly maintained by NOAH Corporation. This has added immediate resources to support our strong growth in Japan.

Our international sales accounted for 89% of our net sales in 2006, 84% of our net sales in 2005 and 87% of our net sales in 2004. We anticipate that international sales will continue to account for a significant portion of our future net sales. Asia has been a particularly important region for our business. Our sales to customers located in China, Japan, Korea, Taiwan and other Asian countries accounted for 82% of our net sales in 2006, 72% of our net sales in 2005, and 78% of our net sales in 2004. Our foreign sales are subject to certain governmental restrictions, including the Export Administration Act and the regulations promulgated under this Act. For a discussion of the risks associated with our international sales, see Item 1A. *Risk Factors* to this Annual Report on Form 10-K, under the caption “We are highly dependent on international sales, and face significant international business risks.”

## **Backlog**

We schedule production of our systems based on both backlog and regular sales forecasts. We include in backlog only those systems for which we have accepted purchase orders and assigned shipment dates within the next 12 months. Orders may be subject to cancellation or delay by the customer with limited or no penalty. Our backlog was approximately \$48.9 million as of December 31, 2006, \$48.3 million as of December 31, 2005 and \$73.4 million as of December 31, 2004. Because of possible future changes in delivery schedules and cancellations of orders, our backlog at any particular date is not necessarily representative of actual sales to be expected for any succeeding period, and our actual sales for the year may not meet or exceed the backlog represented. During periods of industry downturn, we have experienced cancellations, delays and push-outs of orders that were previously booked and included in backlog.

## **Customers**

Our customer base is diversified, both geographically and by chip segments. Customers for our products include 16 of the world's top 20 semiconductor manufacturers. The composition of our largest customers has varied from year to year. The following table shows our net sales from customers representing more than ten percent of total sales in each of the last three years and net sales from our top ten customers as a group for each of those years:

	Year Ended December 31,		
	2006	2005	2004
Customer A	15%	-	-
Customer B	12%	-	-
Customer C	-	12%	-
Customer D	-	11%	16%
Customer E	-	-	12%
Top ten customers as a group	70%	68%	70%

For a discussion of risks associated with changes in our customer base, see Item 1A. *Risk Factors* to this Annual Report on Form 10-K, under the caption “We are dependent on a highly concentrated customer base, and any cancellation, reduction or delay of purchases by or failure to collect receivables from these customers could harm our business. Additionally, we may not achieve anticipated revenue levels if we are not selected as ‘vendor of choice’ for new or expanded fabrication facilities.”

### Research, Development and Engineering

The semiconductor equipment industry is characterized by rapid technological change and product innovation. We develop process and process integration solutions with results at the wafer surface for our customers. The products that we develop and market are the means to allow our customers to address their advanced process requirements. Only by continuously striving to develop new intellectual property for processes and hardware to support new processes can we maintain and advance our competitive position in the markets we serve. Accordingly, we devote a significant portion of our resources to research, development and engineering (RD&E) programs. We seek to maintain close relationships with our global customers and to remain responsive to their product and processing needs.

Our key RD&E activities during 2006 involved the ongoing process improvements of our strip and RTP systems, as well as the development of a new 300 mm RTO system and a new 300 mm low-aspect reactive ion etch tool.

Our Suprema is the first of a planned series of tools which incorporate an innovative, high-productivity platform that we expect will set new standards for cost of ownership in the industry. This platform is designed to improve particle performance for 65 nm technology and beyond. The Suprema incorporates our latest photoresist process module: the ICP<sub>HT</sub>.

Other development efforts have led to further improvements in process uniformity for strip applications. We also made significant progress in improving the performance of the processes in our process application suite for strip products for both 65 nm and 45 nm advanced applications. In 2006, we also began development of our next-generation strip and etch products.

We have extended the capability of our latest-generation RTP tools for 45 nm technology requirements and improved our tool reliability and productivity to help reduce our customers’ cost of ownership.

In late 2006, we introduced our newest thermal tool, the Atmos RTP system, for addressing advanced oxidation requirements for the 45 nm node and beyond.

Both the Helios and the Atmos RTP systems feature a model-based temperature control system that enables advanced silicide formation and provides tighter peak-width control for conventional ultra-shallow junction (USJ) anneal requirements. We continued to work with our customers to demonstrate the process capabilities of the Helios for advanced 45 nm technology applications.

Our Flash RTP system features a flash lamp technology designed to address annealing for advanced USJ applications down to the 32 nm technology node. In 2006, this next-generation millisecond flash annealing system was qualified by a European research center for 45 nm production, and the product continues to demonstrate excellent results at our beta partner site in the United States.

Our RD&E efforts have been aided by the continuous expansion of our in-house computer modeling and simulation capabilities. The expanded use of modeling has significantly reduced the time and cost for tool simulation and design.

In 2007, we intend to continue to make substantial investments in strategic development and engineering programs to meet our customers' technical and production requirements. Over the next year, we plan to focus our RD&E efforts on improving existing system capabilities, developing new advanced strip and RTP technologies for smaller feature sizes, low-k dielectric materials and 300 mm applications, as well as the development of new product capabilities.

We maintain applications development and engineering laboratories in Fremont, California; Vancouver, Canada and Dornstadt, Germany to address new tool and process development activities and customer-specific requirements. By basing products on existing and accepted product lines in the strip and RTP markets, we believe that we can focus our development activities on producing new products more quickly and at relatively low cost.

Our research, development and engineering expenses were \$28.3 million for the year ended December 31, 2006, \$26.6 million for the year ended December 31, 2005 and \$23.1 million for the year ended December 31, 2004, representing 10.0% of net sales in 2006, 12.7% of net sales in 2005 and 9.4% of net sales in 2004.

## **Competition**

The global semiconductor equipment industry is intensely competitive and is characterized by rapid technological change and demanding customer service requirements. Our ability to compete depends upon our ability to continually improve products, processes and services, and our ability to develop new products that meet constantly evolving customer requirements.

A substantial capital investment is required by semiconductor manufacturers to install and integrate new processing equipment into a semiconductor production line. As a result, once a semiconductor manufacturer has selected a particular supplier's products, the manufacturer often relies, for a significant period of time, upon that equipment for the specific production line application, and frequently will attempt to consolidate its other capital equipment requirements with the same supplier. Accordingly, it is difficult to sell to a customer for a significant period of time in the event that the customer has selected a competitor's product, and it may be difficult to displace an existing relationship that a potential customer has with a competitor in order to increase sales of products to that customer.

Each of our product lines competes in markets defined by the particular IC fabrication process it performs. In each of these markets, we have multiple competitors. At present, however, no single competitor competes with us in all of the process areas in which we serve. Competitors in a given technology tend to have different degrees of market presence in the various regional geographic markets. Competition is based on many factors; primarily technological innovation; productivity; total cost of ownership of the systems, including yield, price, product performance and throughput capability; quality; contamination control; reliability and customer support. We believe that our competitive position in each of our markets is based on the ability of our products and services to address customer requirements related to these competitive factors.

Our principal competitors in the dry strip market include Axcelis Technologies, Novellus Systems and PSK. Principal competitors for our RTP systems are Applied Materials, DaiNippon Screen (DNS) and UltraTech Technologies. In the thermal oxidation market, we compete against mini-batch furnace suppliers, including Kokusai Electric and Tokyo Electron Ltd (TEL). Principal competitors for our PECVD systems include Applied Materials, ASM International and Novellus Systems. Principal competitors for our etch systems include Applied Materials, Lam Research Corporation and TEL.

## **Manufacturing**

We have direct manufacturing capability in Fremont, California and Dornstadt, Germany. Our direct manufacturing operations consist of procurement, assembly, test, quality assurance and manufacturing engineering. We also utilize an outsourcing strategy for the manufacture of components, major subassemblies and complete systems. In 2006, we continued to increase the proportion of manufacturing work performed by outsourcing partners. This outsourcing strategy is a key element of our CFE business model. Our outsourcing partners have manufacturing facilities in China, Germany, Singapore, Taiwan and Vietnam.

We also implemented a merge-in-transit program, a distribution model where several shipments originating at different manufacturing locations are consolidated into one customer delivery. The program is helping to reduce order-to-delivery cycle-time and improve the distribution channel efficiency of Mattson's products.

## **Intellectual Property**

We rely on a combination of patent, copyright, trademark and trade secret laws, non-disclosure agreements and other intellectual property protection methods to protect our proprietary technology. We hold a number of United States patents and corresponding foreign patents and have a number of patent applications pending covering various aspects of our products and processes. We have also licensed a small number of patents and, where appropriate, we will continue this practice in the future. Where appropriate, we intend to file additional patent applications on inventions resulting from our ongoing research, development and engineering activities to strengthen our intellectual property rights.

As is customary in our industry, from time to time we receive or make inquiries regarding possible infringement of patents or other intellectual property rights. Although there are no pending claims against us regarding infringement of any existing patents or other intellectual property rights or any unresolved notices that we are infringing intellectual property rights of others, such infringement claims could be asserted against us or our suppliers by third parties in the future. Any claims, with or without merit, could be time-consuming, result in costly litigation, result in loss or cancellation of customer orders, cause product shipment delays, subject us to significant liabilities to third parties, require us to enter into royalty or licensing agreements or prevent us from manufacturing and selling our products. If our products were found to infringe a third party's proprietary rights, we could be required to enter into royalty or licensing agreements in order to continue to sell our products. Royalty or licensing agreements, if required, may not be available on terms acceptable to us, if at all, which could seriously harm our business. Our involvement in any patent or other intellectual property dispute or action to protect trade secrets and know-how could have a material adverse effect on our business.

## **Employees**

As of December 31, 2006, we had 614 employees. During 2006, the number of employees increased by three percent while our net sales increased by thirty-five percent. The success of our future operations will depend in large part on our ability to recruit and retain qualified employees, particularly those highly skilled design, process and test engineers involved in the manufacture of existing systems and the development of new systems and processes. Historically, during times of economic expansion, competition for such personnel has been intense, particularly in the San Francisco Bay Area where our headquarters are located. At times, we have experienced difficulty in attracting new personnel, and if needed we may not be successful in retaining or recruiting sufficient key personnel in the future. None of our employees outside of Germany is represented by a labor union, and we have never experienced a work stoppage, slowdown or strike. In Germany, our employees are represented by workers' councils. We consider our relationships with our employees to be good.

## **Environmental Matters**

We are subject to Federal, state, local and international environmental laws and regulations. These laws, rules and regulations govern the use, storage, discharge and disposal of hazardous chemicals during manufacturing, research and development and sales demonstrations. Neither compliance with Federal, state and local provisions regulating discharge of materials into the environment, nor remedial agreements or other actions relating to the environment, has had, or is expected to have, a material effect on our capital expenditures, financial condition, results of operations or competitive position. However, if we fail to comply with applicable regulations, we could be subject to substantial liability for clean up efforts, personal injuries, fines or suspension or cessation of our operations.

## **Available Information**

We make available free of charge, through our Website, <http://www.mattson.com>, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with the Securities and Exchange Commission (SEC). Our publicly filed information is also available on the SEC's website, <http://www.sec.gov>. The information on our website is not incorporated herein by reference.

## Item 1A. Risk Factors

### RISK FACTORS THAT MAY AFFECT FUTURE RESULTS AND MARKET PRICE OF STOCK

**The semiconductor equipment industry is highly cyclical and periodically has severe and prolonged downturns, which causes our operating results to fluctuate significantly. We are exposed to the risks associated with industry overcapacity, including reduced capital expenditures, decreased demand for our products and increased price competition.**

The semiconductor industry is highly cyclical and has historically experienced periodic downturns, whether as the result of general economic changes or capacity growth temporarily exceeding growth in demand for semiconductor devices. Our business depends in significant part upon capital expenditures by manufacturers of semiconductor devices, including manufacturers that open new or expand existing facilities. Periods of overcapacity and reductions in capital expenditures by our customers cause decreases in demand for our products. If existing fabrication facilities are not expanded and new facilities are not built, demand for our systems may not develop or increase, and we may be unable to generate significant new orders for our systems. If we are unable to develop new orders for our systems, we will not achieve anticipated net sales levels. During periods of declining demand for semiconductor manufacturing equipment, our customers typically reduce purchases, delay delivery of ordered products and/or cancel orders, resulting in reduced revenues and backlog, delays in revenue recognition and excess inventory. Increased price competition may result, causing pressure on our gross margin and net income.

In future downturns, if we are unable to effectively align our cost structure with prevailing market conditions, we could experience losses, may be required to undertake additional cost-cutting measures and may be unable to continue to invest in research, development and engineering at the levels we believe are necessary to maintain our competitive position in our core businesses. Our failure to make these investments could seriously harm our long-term business prospects.

**We are dependent on a highly concentrated customer base, and any cancellation, reduction or delay of purchases by or failure to collect receivables from these customers could harm our business. Additionally, we may not achieve anticipated revenue levels if we are not selected as “vendor of choice” for new or expanded fabrication facilities.**

Currently, we derive most of our revenues from the sale of systems to a relatively small number of customers, which makes our relationship with each customer critical to our business. Because semiconductor manufacturers must make a substantial investment to install and integrate capital equipment into a semiconductor fabrication facility, these manufacturers will tend to choose semiconductor equipment manufacturers based on established relationships, product compatibility and proven financial performance.

Once a semiconductor manufacturer selects a particular vendor’s capital equipment, the manufacturer generally relies upon equipment from this “vendor of choice” (VOC) for the specific production line application. In addition, the semiconductor manufacturer frequently will attempt to consolidate its other capital equipment requirements with the same vendors. Accordingly, we may face narrow windows of opportunity to be selected as the VOC by significant new customers. It may be difficult for us to sell to a particular customer for a significant period of time once that customer selects a competitor’s product, and we may not be successful in obtaining broader acceptance of our systems and technology. If we are unable to achieve broader market acceptance of our systems and technology, we may be unable to maintain and grow our business and our operating results and financial condition will be adversely affected.

The current list prices on our systems range from \$0.7 million to more than \$4.0 million. Consequently, any order cancellations, delays in scheduled shipments, delays in customer acceptances or delays in collection of accounts receivable could materially adversely affect our operating results and cause our results to fall below our expectations and the expectations of market analysts or investors.

Our list of major customers changes substantially from year to year, and we cannot predict whether a major customer in one year will make significant purchases from us in future years. Additionally, our customers’ capital budget considerations and our lengthy sales cycle make the timing of customer orders uneven and difficult to predict. Accordingly, it is difficult for us to accurately forecast our revenues and operating results from year to year.

Although we maintain a backlog of customer orders with expected shipment dates within the next 12 months, customers may request cancellations or delivery delays. As a result, our backlog may not be a reliable indication of future

revenues. If shipments of orders in backlog are cancelled or delayed, revenues could fall below our expectations and the expectations of market analysts and investors.

Additionally, a large percentage of our sales are concentrated to customers in the memory market, so a downturn in memory spending could impact us more than it would impact competitors who are stronger in the logic and foundry markets.

**We may not be able to continue to successfully compete in the highly competitive semiconductor equipment industry.**

The semiconductor equipment industry is both highly competitive and subject to rapid technological change. Significant competitive factors include the following:

- system performance;
- cost of ownership;
- size of the installed base;
- breadth of product line;
- delivery speed; and
- customer support.

Competitive pressure has been increasing in several areas. In particular, there is increased price competition, and customers are waiting to make purchase commitments based on their end-user demand, which are then placed with requests for rapid delivery dates and increased product support.

Some of our major competitors are larger than we are, have greater capital resources and may have a competitive advantage over us by virtue of having:

- broader product lines;
- longer operating history;
- greater experience with high-volume manufacturing;
- substantially larger customer bases;
- the ability to reduce price through product bundling; and
- substantially greater customer support, financial, technical and marketing resources.

Growth in the semiconductor equipment industry is increasingly concentrated in the largest companies, resulting in increasing industry consolidation. Semiconductor companies are consolidating their vendor base and prefer to purchase from vendors with a strong, worldwide support infrastructure. For us to meet our long-term growth objectives, we must grow significantly in the short to medium-term. If we do not grow to a sufficient size, our prospects for future growth would be diminished.

In addition, to expand our sales we must often displace the systems of our competitors or sell new systems to customers of our competitors. Our competitors may develop new or enhanced competitive products that will offer price or performance features that are superior to our systems. Our competitors may also be able to respond more quickly to new or emerging technologies and changes in customer requirements or to devote greater resources to the development, promotion, sale and on-site customer support of their product lines. We may not be able to maintain or expand our sales if competition increases and we are unable to respond effectively.

**Significant fluctuations in our operating results are difficult to predict due to our lengthy sales cycle, and our results may fall short of anticipated levels, which could cause our stock price to decline.**

Sales of our systems depend upon the decision of a prospective customer to increase or replace manufacturing capacity, typically involving a significant capital commitment. Accordingly, the decision to purchase our systems requires time-consuming internal procedures associated with the evaluation, testing, implementation and introduction of new technologies into our customers' manufacturing facilities. Even after the customer determines that our systems meet their qualification criteria, we may experience delays finalizing system sales while the customer obtains approval for the purchase, constructs new facilities or expands its existing facilities. Consequently, the time between our first contact with a customer regarding a specific potential purchase and the customer's placing its first order may last from nine to twelve months or longer. We may incur significant sales and marketing expenses during this evaluation period. In addition, the length of this period makes it difficult to accurately

forecast future sales. If sales forecasted from a specific customer are not realized, we may experience an unplanned shortfall in revenues, and our quarterly and annual revenue and operating results may fluctuate significantly from period to period.

Our quarterly and annual revenue and operating results have varied significantly in the past and are likely to vary significantly in the future, which makes it difficult for us to predict our future operating results. We incurred net losses of approximately \$336.7 million for the year ended December 31, 2001, \$69.7 million for the year ended December 31, 2002 and \$35.5 million for the year ended December 31, 2003. Although we were profitable for 2004, 2005 and 2006, we may not achieve profitability in future years. We will need to continue to generate significant sales to achieve and maintain profitability, and we may not be able to do so. A substantial percentage of our operating expenses are fixed in the short term and we may be unable to adjust spending to compensate for an unexpected shortfall in revenues. As a result, any delay in generating or recognizing revenues could cause our operating results to be below the expectations of market analysts or investors, which could cause the price of our common stock to decline.

**We must continually anticipate technology trends, improve our existing products and develop new products in order to be competitive. The development of new or enhanced products involves significant risk and cost and delays. Technical and manufacturing difficulties incurred in the introduction of new products could be costly and adversely affect our customer relationships.**

The markets in which we and our customers compete are characterized by rapidly changing technology, evolving industry standards and continuous improvements in products and services. Consequently, our success depends upon our ability to anticipate future technology trends and customer needs, to develop new systems and processes that meet customer requirements and industry standards and that compete effectively on the basis of price and performance.

Our development of new products involves significant risk, since the products are very complex and the development cycle is long and expensive. The success of any new systems we develop and introduce is dependent on a number of factors, including our ability to correctly predict customer requirements for new processes, to assess and select the potential technologies for research and development and to timely complete new system designs that are acceptable to the market. We may make substantial investments in new technologies before we can know whether they are technically or commercially feasible or advantageous, and without any assurance that revenue from future products or product enhancements will be sufficient to recover the associated development costs. Not all development activities result in commercially viable products. We may not be able to improve our existing systems or develop new technologies or systems in a timely manner. We may exceed the budgeted cost of reaching our research, development and engineering objectives, and planned product development schedules may require extension. Any delays or additional development costs could have a material adverse effect on our business and results of operations.

Our products are complex, and we may experience technical or manufacturing inefficiencies, delays or difficulties in the prototype introduction of new systems and enhancements, or in achieving volume production of new systems or enhancements that meet customer requirements. Our inability to overcome such difficulties, to meet the technical specifications of any new systems or enhancements or to manufacture and ship these systems or enhancements in volume and in a timely manner would materially adversely affect our business and results of operations, as well as our customer relationships.

We may from time to time incur unanticipated costs to ensure the functionality and reliability of our products early in their life cycles, and such costs can be substantial. If we encounter reliability or quality problems with our new products or enhancements, we could face a number of difficulties, including reduced orders, higher manufacturing costs, delays in collection of accounts receivable and additional service and warranty expenses, all of which could materially adversely affect our business and results of operations. The cost associated with our warranty is significant, and in the event our projections and estimates of this cost are inaccurate, our financial performance could be seriously harmed. In addition, if we experience product failures at an unexpectedly high level, our reputation in the marketplace could be damaged, and our business would suffer.

**We are subject to significant risks related to our global manufacturing operations.**

***We are increasingly outsourcing manufacturing and logistics activities to third-party service providers, which decreases our control over the performance of these functions.***

We have outsourced certain manufacturing and spare parts logistics functions to third-party service providers, and may outsource more of those functions in the future. While we expect to achieve operational flexibility and cost savings as a result of this, outsourcing has a number of risks and reduces our control over the performance of the outsourced functions. Significant performance problems by these third-party service providers could result in cost overruns, delayed deliveries, shortages, quality issues or other problems that could result in significant customer dissatisfaction and could materially and adversely affect our business, financial condition and results of operations.

If for any reason one or more of these third-party service providers becomes unable or unwilling to continue to provide services of acceptable quality, at acceptable costs and in a timely manner, our ability to deliver our products or spare parts to our customers could be severely impaired. We would quickly need to identify and qualify substitute service providers or increase our internal capacity, which could be expensive and time-consuming, and could result in unforeseen operations problems and late deliveries to our customers. Substitute service providers might not be available, or, if available, might be unwilling or unable to offer services on acceptable terms.

If customer demand for our products increases, we may be unable to secure sufficient additional capacity from our current service providers on commercially reasonable terms, if at all. Our requirements are expected to represent a small portion of the total capacities of our third-party service providers, and they may preferentially allocate capacity to other customers, even during periods of high demand for our products. In addition, such manufacturers could suffer financial difficulties or disruptions in their operations due to causes beyond our control.

***We depend upon a limited number of suppliers for some components and subassemblies, and supply shortages or the loss of these suppliers could result in increased cost or delays in manufacture and sale of our products.***

We rely to a substantial extent on outside vendors to provide many of the components and subassemblies of our systems. We obtain some of these components and subassemblies from a sole source or a limited group of suppliers. We generally acquire these components on a purchase order basis and not under long-term supply contracts. Because of our anticipated reliance on outside vendors generally, and on a sole or a limited group of suppliers in particular, we may be unable to obtain an adequate supply of required components. Although we currently experience minimal delays in receiving goods from our suppliers, when demand for semiconductor equipment is strong, our suppliers may have difficulty providing components on a timely basis.

In addition, during periods of shortages of components, we may have reduced control over pricing and timely delivery of components. We often quote prices to our customers and accept customer orders for our products prior to purchasing components and subassemblies from our suppliers. If our suppliers increase the cost of components or subassemblies, we may not have alternative sources of supply and may no longer be able to increase the cost of the system being evaluated by our customers to cover all or part of the increased cost of components.

The manufacture of some of these components is an extremely complex process and requires long lead times. If we are unable to obtain adequate and timely deliveries of our required components, we may have to seek alternative sources of supply or manufacture such components internally. This could delay our ability to manufacture or timely ship our systems, causing us to lose sales, incur additional costs, delay new product introductions and harm our reputation. Historically, we have not experienced any significant delays in manufacturing due to an inability to obtain components, and we are not currently aware of any specific problems regarding the availability of components that might significantly delay the manufacturing of our systems in the future. However, any inability to obtain adequate deliveries, or any other circumstance that would require us to seek alternative sources of supply or to manufacture such components internally, could delay our ability to ship our systems and could have a material adverse effect on us.

***Our results of operations may suffer if we do not effectively manage our inventory.***

We need to manage our inventory of component parts, work-in-process and finished goods effectively to meet customer delivery demands at an acceptable risk and cost. Customers are increasingly requiring very short lead times for delivery, which

may require us to purchase and carry additional inventory. For both the inventories that support manufacture of our products and our spare parts inventories, if the customer demand we anticipate does not materialize in a timely manner, we will incur increased carrying costs and some inventory could become un-saleable or obsolete, resulting in write-offs which would adversely affect the results of our operations.

***We manufacture many of our products at two primary manufacturing facilities and are thus subject to risk of disruption.***

Although we outsource the manufacturing for certain of our products to third parties, we continue to produce our latest generation products at our two principal manufacturing plants in Fremont, California and Dornstadt, Germany. We have limited ability to interchangeably produce our products at either facility, and in the event of a disruption of operations at one facility, our other facility would not be able to make up the capacity loss. Our operations are subject to disruption for a variety of reasons, including, but not limited to, natural disasters, work stoppages, operational facility constraints and terrorism. Such disruption could cause delays in shipments of products to our customers, result in cancellation of orders or loss of customers and seriously harm our business.

**We previously had material weaknesses in our internal control over financial reporting**

During the audit of the 2005 financial statements, we identified the following material weaknesses in our internal control over financial reporting:

- lack of sufficient personnel and resources to properly perform the quarterly and year-end financial statement closing processes, including the monitoring of the previously selected accounting policy for the amounts received from a patent infringement settlement, and the review of certain account reconciliations and analyses; and
- lack of effective controls over the computation and review of reserves for slow-moving and excess and obsolete inventory.

In 2006, we undertook a number of initiatives to address these material weaknesses, and management has determined that as of December 31, 2006, the material weaknesses identified in 2005 had been remediated. In the future, however, we may identify other material weaknesses or significant deficiencies in our internal control over financial reporting that we have not discovered to date. Furthermore, if additional material weaknesses are identified in the future, the initiatives required to remedy those material weaknesses could result in additional costs for increased personnel, which could adversely affect our operating results.

**We are highly dependent on international sales, and face significant international business risks.**

International sales accounted for 89% of our net sales in 2006, 84% of our net sales in 2005 and 87% of our net sales in 2004. We anticipate international sales will continue to account for a significant portion of our future net sales. Asia has been a particularly important region for our business, and we anticipate that it will continue to be important going forward. Our sales to customers located in China, Japan, Korea, Taiwan and other Asian countries accounted for 82% of our net sales in 2006, 72% of our net sales in 2005 and 78% of our net sales in 2004. Because of our continuing dependence upon international sales, we are subject to a number of risks associated with international business activities, including:

- unexpected changes in law or regulations resulting in more burdensome governmental controls, tariffs, taxes, restrictions, embargoes or export license requirements;
- exchange rate volatility;
- the need to comply with a wide variety of foreign and U.S. export laws;
- political and economic instability;
- government sponsored competition;
- differing labor regulations;
- reduced protection for intellectual property;
- difficulties in accounts receivable collections;
- increased costs for product shipments and potential difficulties from shipment delays;
- difficulties in managing distributors or representatives; and
- difficulties in staffing and managing foreign subsidiary operations.

In the U.S. and Asia (excluding Japan), our sales to date have been denominated primarily in U.S. dollars, while our sales in Japan have been primarily denominated in Japanese yen. Our sales to date in Europe have been denominated in various currencies, primarily U.S. dollars and the Euro. Our sales in foreign currencies are subject to risks of currency fluctuation. For U.S. dollar sales in foreign countries, our products may become less price-competitive when the local currency is declining in value compared to the dollar. This could cause us to lose sales or force us to lower our prices, which would reduce our gross margins.

In addition, the expenses of our German manufacturing operation are primarily incurred in Euros. If the Euro were to appreciate in relation to the U.S. dollar, our operating expenses would increase.

**Changes in tax rates or tax liabilities could affect results.**

We are subject to taxation in the United States and various other countries. Significant judgment is required to determine and estimate worldwide tax liabilities. Our future annual and quarterly tax rates could be affected by numerous factors, including changes in the applicable tax laws, composition of earnings in countries with differing tax rates or our valuation and utilization of deferred tax assets and liabilities. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different from the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our results of operations.

**Because of competition for qualified personnel, we may not be able to recruit or retain necessary personnel, which could impede development or sales of our products.**

Our growth will depend on our ability to attract and retain qualified, experienced employees. There is substantial competition for experienced engineering, technical, financial, sales and marketing personnel in our industry. In particular, we must attract and retain highly skilled design and process engineers. Historically, competition for such personnel has been intense in all of our locations, but particularly in the San Francisco Bay Area where our headquarters is located. If we are unable to retain existing key personnel, or attract and retain additional qualified personnel, we may from time to time experience inadequate levels of staffing to develop and market our products and perform services for our customers. As a result, our growth could be limited, we could fail to meet our delivery commitments or we could experience deterioration in service levels or decreases in customer satisfaction.

**If we are unable to protect our intellectual property, we may lose a valuable asset and experience reduced market share. Efforts to protect our intellectual property may be costly to resolve, require additional costly litigation and could divert management attention.**

We rely on a combination of patents, copyrights, trademark and trade secret laws, non-disclosure agreements, and other intellectual property protection methods to protect our proprietary technology. Despite our efforts to protect our intellectual property, we may from time to time be subject to claims of infringement of other parties' patents or other proprietary rights. If this occurs, we may not be able to prevent the use of such technology. Our means of protecting our proprietary rights may not be adequate and our patents may not be sufficiently broad to protect our technology. Any patents owned by us could be challenged, invalidated or circumvented and any rights granted under any patent may not provide adequate protection to us.

Furthermore, we may not have sufficient resources to protect our rights. Our competitors may independently develop similar technology, or design around patents that may be issued to us. In addition, the laws of some foreign countries may not protect our proprietary rights to as great an extent as do the laws of the United States and it may be more difficult to monitor the use of our products in such foreign countries. As a result of these threats to our proprietary technology, we may have to resort to costly litigation to enforce our intellectual property rights.

In addition, we on occasion receive notification from customers who believe that we owe them indemnification or have other obligations related to infringement claims made against the customers by third parties. Our involvement in any patent dispute or other intellectual property dispute or action to protect trade secrets, even if the claims are without merit, could be very expensive to defend and could divert the attention of our management. Adverse determinations in any litigation could subject us to significant liabilities to third parties, require us to seek costly licenses from third parties and prevent us from manufacturing

and selling our products. Royalty or license agreements, if required, may not be available on terms acceptable to us or at all. Any of these situations could have a material adverse effect on our business and operating results in one or more countries.

**From time to time we may enhance, modify or upgrade our enterprise resource planning and other key software applications, which could cause unexpected problems to occur and could cause disruption to the management of our business.**

From time to time, we may enhance, modify or upgrade our enterprise resource planning (ERP) system used for our worldwide operations, as well as other key software applications used in our operations. Our ERP system is integral to our ability to accurately and efficiently maintain our books and records, record our transactions, provide critical information to our management and prepare our financial statements.

Enhancements may eventually become more costly, difficult and time-consuming to purchase and implement than we currently anticipate. We may encounter unexpected difficulties or costs or other challenges, any of which may disrupt our business or cause delays in the reporting of our financial results. Our existing systems, procedures or controls may not be adequate to support our operations and require us to change our internal business practices. Corrections and improvements may be required as we enhance, modify or upgrade our systems, procedures and controls, and could cause us to incur additional costs and require additional management attention, placing burdens on our internal resources. If we fail to manage these changes effectively, it could adversely affect our ability to manage our business and our operating results.

**Our failure to comply with environmental or safety regulations could result in substantial liability.**

We are subject to a variety of Federal, state, local and foreign laws, rules, and regulations relating to environmental protection and workplace safety. These laws, rules and regulations govern the use, storage, discharge and disposal of hazardous chemicals during manufacturing, research and development and sales demonstrations, as well as governmental standards for workplace safety. If we fail to comply with present or future regulations, especially in our Fremont, California and Dornstadt, Germany manufacturing facilities, we could be subject to substantial liability for clean up efforts, personal injury, fines or suspension or cessation of our operations. We may be subject to liability if our acquired companies have past violations. Restrictions on our ability to expand or continue to operate our present locations could be imposed upon us, we could be required to acquire costly remediation equipment or incur other significant expenses.

**The price of our common stock has fluctuated in the past and may continue to fluctuate significantly in the future, which may lead to losses by investors or to securities litigation.**

The market price of our common stock has been highly volatile in the past, and our stock price may decline in the future. For example, for the year ended December 31, 2006, the price range for our common stock was \$7.10 to \$13.27 per share.

In addition, in recent years the stock market in general, and the market for shares of high technology stocks in particular, have experienced extreme price fluctuations. These fluctuations have frequently been unrelated to the operating performance of the affected companies. Such fluctuations could adversely affect the market price of our common stock. In the past, securities class action litigation has often been instituted against a company following periods of volatility in its stock price. This type of litigation, if filed against us, could result in substantial costs and divert our management's attention and resources.

**Any future business acquisitions may disrupt our business, dilute stockholder value or distract management attention.**

As part of our ongoing business strategy, we may consider acquisitions of, or significant investments in, businesses that offer products, services and technologies complementary to our own. Such acquisitions could materially adversely affect our operating results and/or the price of our common stock. Acquisitions also entail numerous risks, including:

- difficulty of assimilating the operations, products and personnel of the acquired businesses and possible impairments caused by this;
- potential disruption of our ongoing business;
- unanticipated costs associated with the acquisition;
- inability of management to manage the financial and strategic position of acquired or developed products, services and technologies;

- inability to maintain uniform standards, controls, policies and procedures; and
- impairment of relationships with employees and customers that may occur as a result of integration of the acquired business.

To the extent that shares of our stock or other rights to purchase stock are issued in connection with any future acquisitions, dilution to our existing stockholders will result, and our earnings per share may suffer. Any future acquisitions may not generate additional revenue or provide any benefit to our business, and we may not achieve a satisfactory return on our investment in any acquired businesses.

### **Item 1B. *Unresolved Staff Comments***

None.

### **Item 2. *Properties***

Our principal properties as of December 31, 2006 are set forth below:

<b>Location</b>	<b>Type</b>	<b>Principal Use</b>	<b>Square Footage</b>	<b>Ownership</b>
Fremont, CA	Office, plant and warehouse	Headquarters, marketing, manufacturing, distribution, research and engineering	105,000	Leased
Exton, PA	Office, plant and warehouse	Subleased and available for sublease	140,000 <sup>(1)</sup>	Leased
Dornstadt, Germany	Office, plant and warehouse	Manufacturing, research and engineering	102,000	Leased

(1) The two properties in Exton, PA are not needed for our operations. At December 31, 2006, one property with 80,000 square feet was subleased to another party and one property with 60,000 square feet was available for sublease.

In addition to the above properties, we lease an aggregate of approximately 47,000 square feet of office space for sales and customer support offices. In Canada, we lease approximately 20,000 square feet of office, plant and warehouse space for office, manufacturing and research facilities. In total, we lease office space for headquarters, manufacturing, operations, research and engineering, distribution, marketing, sales and customer support in eighteen locations throughout the world: four in the United States, four in China, three in Germany, three in Taiwan and one in each of Canada, Japan, Korea and Singapore. We consider these current facilities suitable and adequate to meet our requirements.

### **Item 3. *Legal Proceedings***

In the ordinary course of business, we are subject to claims and litigation, including claims that we infringe third party patents, trademarks and other intellectual property rights. Although we believe it is unlikely that any current claims or actions will have a material adverse impact on our operating results or our financial position, given the uncertainty of litigation, we cannot be certain of this. Moreover, the defense of claims or actions against us, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

Our involvement in any patent dispute, other intellectual property dispute or action to protect trade secrets and know-how could result in a material adverse effect on our business. Adverse determinations in current litigation or any other litigation in which we may become involved could subject us to significant liabilities to third parties, require us to grant licenses to or seek licenses from third parties and prevent us from manufacturing and selling our products. Any of these situations could have a material adverse effect on our business.

#### **Item 4. Submission of Matters to a Vote of Security Holders**

No matters were submitted to a vote of security holders during the fourth quarter.

#### **Executive Officers of the Registrant**

The following table and notes set forth information about our three executive officers:

<b>Name</b>	<b>Age</b>	<b>Title</b>
David L. Dutton	46	Chief Executive Officer and Director
Robert B. MacKnight	57	Chief Operating Officer and President
William I. Turner	51	Chief Financial Officer, Executive Vice President-Finance and Secretary

#### ***David L. Dutton — Chief Executive Officer and Director***

David Dutton has served as Mattson's Chief Executive Officer since June 2005. Prior to that, Mr. Dutton served as Mattson's Chief Executive Officer and President since October 2001. From 1998 to 2000, Mr. Dutton served as Executive Vice President and Chief Operating Officer of Mattson. Mr. Dutton previously served as President of the Plasma Products Division. Mr. Dutton joined Mattson in 1994 as General Manager of the Strip/Plasma Etch division. Mr. Dutton started his career in the semiconductor industry in 1984 and held engineering management positions for wafer processing and development at Intel Corporation and Maxim Integrated Products, Inc. Mr. Dutton serves on the Board of Directors for the Bay Area Council.

#### ***Robert B. MacKnight — Chief Operating Officer and President***

Robert MacKnight has served as Mattson's President and Chief Operating Officer since June 2005. Prior to that, Mr. MacKnight served as Chief Operating Officer since December 2002 and as President of the Thermal/Films/Etch division and Executive Vice President since December 2001. Mr. MacKnight joined Mattson in September 2001 as Executive Vice President of Corporate Development and General Manager of the RTP Product Business Unit. From 1998 to 2001, Mr. MacKnight served at Microbar, Inc., a manufacturer of chemical systems for the semiconductor industry, where he last served as President and Chief Operating Officer. From 1996 to 1998, Mr. MacKnight was Vice President and General Manager of After Market Operations for Cymer, Inc., a supplier of equipment used in semiconductor manufacturing.

#### ***William I. Turner — Chief Financial Officer, Executive Vice President, Finance and Secretary***

William Turner has served as Mattson's Chief Financial Officer since January 2007. Prior to that, Mr. Turner served as Senior Vice President, Finance since August 2006, and as Chairman of the Audit Committee of Mattson's Board of Directors from November 2002 to July 2006. From 1983 to 1997, Mr. Turner was employed by KLA-Tencor Corporation, where he served as Corporate Controller from 1989 to 1996 and as Vice-President, Finance from 1996 to 1997.

## PART II

### Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

#### Market for Registrant's Common Equity

Our common stock has been traded on the Nasdaq Global Select Market® (Formerly Nasdaq National Market) since our initial public offering on September 28, 1994. Our stock is quoted under the symbol "MTSN." The following table sets forth the low and high closing prices as reported by the Nasdaq Global Select Market for the periods indicated.

	<u>Low</u>	<u>High</u>
<b>2006 Quarter</b>		
First . . . . .	\$ 10.16	\$ 13.27
Second . . . . .	7.84	12.37
Third . . . . .	7.10	9.74
Fourth . . . . .	8.17	10.12
<b>2005 Quarter</b>		
First . . . . .	\$ 7.72	\$ 10.68
Second . . . . .	5.77	8.27
Third . . . . .	7.16	9.50
Fourth . . . . .	7.19	10.22

On February 23, 2007, the last reported sales price of our common stock on the Nasdaq Global Select Market was \$9.21 per share. According to the records of our transfer agent, we had 213 stockholders of record of our common stock at February 23, 2007. Because brokers and other institutions hold many of our shares on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these recordholders.

#### Dividends

We have never paid cash dividends on our common stock and have no present plans to pay cash dividends. We are also restricted by the terms of our credit facility with our bank from paying future dividends. We intend to retain all future earnings for use in our business.

#### Equity Compensation Plan Information

The following table summarizes our equity compensation plans as of December 31, 2006:

	Number of securities to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>
Equity compensation plans approved by security holders	6,036,000	\$ 9.27	4,997,000
Equity compensation plans not approved by security holders	-	-	-
	<u>6,036,000</u>	<u>\$ 9.27</u>	<u>4,997,000</u>

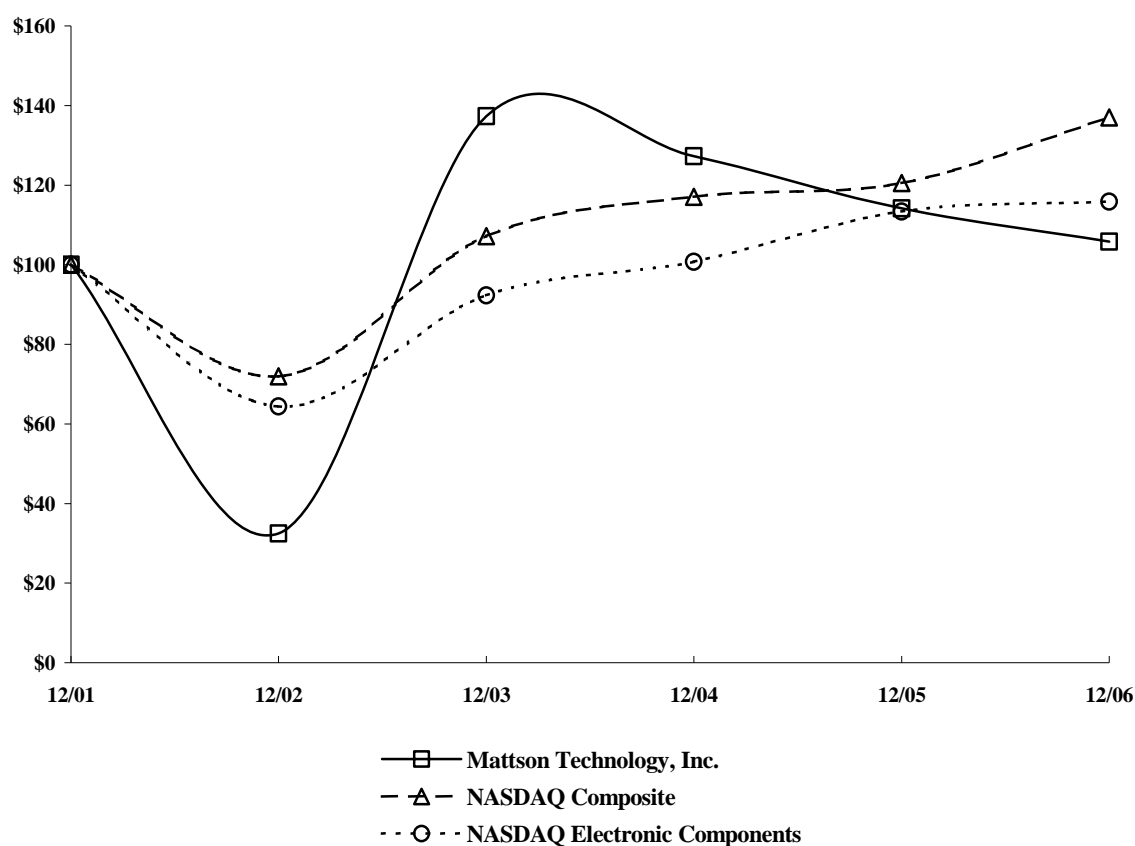
## Public Offering

On February 17, 2004, we sold approximately 4.3 million newly issued shares of common stock in an underwritten public offering priced at \$11.50 per share. This resulted in net proceeds to us of approximately \$46.4 million.

## Comparison of Stockholder Return

The following graph compares the cumulative five-year total return provided shareholders on Mattson Technology, Inc.'s common stock relative to the cumulative total returns of the NASDAQ Composite index and the NASDAQ Electronic Components index.

**Comparison of Five-Year Cumulative Total Return**  
**From December 31, 2001 through December 31, 2006 (1)**  
 Among Mattson Technology, Inc., The NASDAQ Composite Index  
 and The NASDAQ Electronic Components Index



	December 31,					
	2001	2002	2003	2004	2005	2006
Mattson Technology, Inc.	\$ 100.00	\$ 32.46	\$ 137.34	\$ 127.24	\$ 114.19	\$ 105.79
NASDAQ Composite	\$ 100.00	\$ 71.97	\$ 107.18	\$ 117.07	\$ 120.50	\$ 137.02
NASDAQ Electronic Components	\$ 100.00	\$ 64.40	\$ 92.31	\$ 100.78	\$ 113.36	\$ 115.84

(1) Assumes that \$100.00 was invested in Mattson common stock and in each index at market closing prices on December 31, 2001, and that all dividends were reinvested. No cash dividends have been declared on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

**Item 6. Selected Financial Data**

The following historical financial data should be read in conjunction with our consolidated financial statements and notes thereto. We derived the selected consolidated income (loss) statement data for the years ended December 31, 2006, 2005 and 2004 and the selected consolidated balance sheet data as of December 31, 2006 and 2005 from our audited consolidated financial statements appearing in this report.

**CONSOLIDATED INCOME (LOSS) STATEMENT DATA:**

	Year Ended December 31,				
	2006	2005	2004	2003	2002
	(thousands, except per share amounts)				
Net sales	\$ 281,781	\$ 209,379	\$ 246,485	\$ 166,915	\$ 228,927
Cost of sales <sup>(1)</sup>	\$ 172,720	\$ 124,126	\$ 141,774	\$ 112,532	\$ 163,063
Gross profit	\$ 109,061	\$ 85,253	\$ 104,711	\$ 54,383	\$ 65,864
Income (loss) from operations	\$ 15,490	\$ 5,376	\$ 22,208	\$ (35,949)	\$ (65,912)
Net income (loss)	\$ 17,114	\$ 11,299	\$ 30,993	\$ (35,474)	\$ (69,670)
Net income (loss) per share:					
Basic	\$ 0.33	\$ 0.22	\$ 0.63	\$ (0.79)	\$ (1.65)
Diluted	\$ 0.32	\$ 0.21	\$ 0.61	\$ (0.79)	\$ (1.65)
Shares used in computing net income (loss) per share:					
Basic	52,457	51,557	49,539	44,997	42,239
Diluted	53,468	52,784	51,073	44,997	42,239

**CONSOLIDATED BALANCE SHEET DATA:**

	December 31,				
	2006	2005	2004	2003	2002
	(thousands)				
Cash and cash equivalents	\$ 91,416	\$ 116,593	\$ 89,653	\$ 56,915	\$ 71,979
Working capital	\$ 181,403	\$ 152,324	\$ 142,674	\$ 74,608	\$ 87,692
Total assets	\$ 316,752	\$ 275,567	\$ 294,911	\$ 208,601	\$ 332,296
Total stockholders' equity	\$ 238,930	\$ 210,189	\$ 203,336	\$ 101,186	\$ 130,706

- (1) Cost of sales included inventory valuation charges of \$14.3 million for 2002, primarily related to inventories for RTP and Omni products that were acquired from the acquisition of the semiconductor division of STEAG Electronic Systems and CFM Technologies.

In 2006, we incurred charges relating to the impairment of long-lived assets of \$2.6 million and a reduction of \$1.5 million of tax benefits related to the utilization of certain acquired tax assets, largely consisting of net operating loss carryforwards, which were used to reduce goodwill rather than benefit income taxes in accordance with the requirements of Statement of Financial Accounting Standard (SFAS) No. 109, *Accounting for Income Taxes*. In 2006 and 2005, we recorded gains related to the disposition of our wet surface preparation products business (the Wet business) of \$0.6 million and \$2.9 million, respectively. In October 2004, we completed the acquisition of Vortek Industries Ltd. (Vortek). This acquisition has been accounted for under the purchase method of accounting, and the results of operations of Vortek are included in our selected financial data from that date. In 2003, we divested the Wet business, and recorded a loss on disposition of \$10.3 million. In 2002, we incurred charges relating to impairment of long-lived assets of \$11.6 million, inventory valuation charges of \$14.3 million and other restructuring costs of \$5.7 million. These items affect the comparability of our financial data for the periods shown in the preceding table. These transactions are further discussed in Item 7, "Management's Discussion and Analysis of Financial Conditions and Results of Operations", and in the accompanying consolidated financial statements.

## **Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with "Selected Financial Data," our consolidated financial statements and related notes included elsewhere in this document. In addition to historical information, the discussion below contains certain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated by these forward-looking statements due to various factors, including, but not limited to, those set forth under Item 1A. "Risk Factors" in this Annual Report on Form 10-K and elsewhere in this document.*

### **Overview**

We are a leading supplier of semiconductor wafer processing equipment used in the fabrication of integrated circuits (ICs). Our manufacturing equipment is used for transistor level, or front-end-of-line manufacturing, and also in specialized applications for processing the interconnect layer, or back-end-of-line processing. Our manufacturing equipment utilizes innovative technology to deliver advanced processing capabilities and high productivity for the fabrication of current and next-generation ICs. Our tools, technologies and expertise are enablers in the semiconductor industry's transition to larger 300 mm wafers, sub-90 nm design rules and the use of new materials, such as copper, low capacitance (low-k) dielectrics and barrier metals.

Our business depends upon capital expenditures by manufacturers of semiconductor devices. The level of capital expenditures by these manufacturers depends upon the current and anticipated market demand for such devices. Because the demand for semiconductor devices is highly cyclical, the demand for wafer processing equipment is also highly cyclical.

In 2006, we achieved record revenues, which increased by 34.6% to \$281.8 million from \$209.4 million in 2005. Gross margin increased year over year by \$23.8 million as a result of the increased revenue, but gross margin percentage declined slightly, primarily due to reduced royalty revenue. Operating expenses declined as a percentage of revenue by 4.9% due to increased sales and continued efforts to control operating costs. Income before taxes was \$21.2 million, or 7.5% of net sales in 2006, compared to \$7.5 million, or 3.6% of sales in 2005. We also increased our research development and engineering (RD&E) activity in 2006 to expand our product portfolio to accommodate sub-65 nanometer design rules, driving an increase in RD&E expenses of \$1.7 million, or 6.3%.

Part of our strategy is to outsource selected non-critical functions in manufacturing, spare parts logistics, subsystem design and other areas to third parties specializing in these areas. This allows us to concentrate our resources on our core technologies in strip and RTP and leverage our expertise into new markets, reduce our fixed costs and achieve greater flexibility to expand and contract capacity as market conditions require. In 2006, our lean, flexible organization demonstrated that we could maintain profitability through a full industry cycle. Although we have implemented cost cutting and operational flexibility measures, we are largely dependent upon increases in sales and decreases in cost of sales in order to improve our profitability.

We had \$138.9 million of cash, cash equivalents and short-term investments and no long-term debt at December 31, 2006. With our continued strong operating results and our current cash position, we believe we are in a healthy position in terms of liquidity and capital resources.

Going forward, the success of our business will be dependent on numerous factors, including, but not limited to, the market demand for semiconductors and semiconductor wafer processing equipment, and our ability to (a) significantly grow the Company, either organically or through acquisitions, in order to enhance our competitiveness and profitability, (b) develop and bring to market new products that address our customers' needs, (c) grow customer loyalty through collaboration with and support of our customers, (d) maintain a cost structure that will enable us to operate effectively and profitably throughout changing industry cycles and (e) generate the gross margins necessary to enable us to make the necessary investments in our business.

## Results of Operations

### Years Ended December 31, 2006 and 2005

The following table sets forth our consolidated results of operations for the years ended December 31, 2006 and 2005, and the year-over-year increase (decrease) in our results, expressed in both amounts (in thousands) and as a percentage of net sales, except where indicated:

	Year Ended December 31,				Increase (Decrease)	
	2006		2005			
Net sales	\$ 281,781	100.0 %	\$ 209,379	100.0 %	\$ 72,402	34.6 %
Cost of sales	172,720	61.3	124,126	59.3	48,594	39.1
Gross profit	109,061	38.7	85,253	40.7	23,808	27.9
Operating expenses:						
Research, development and engineering	28,314	10.1	26,625	12.7	1,689	6.3
Selling, general and administrative	62,523	22.2	54,086	25.8	8,437	15.6
Amortization of intangibles	688	0.2	2,100	1.0	(1,412)	(67.2)
Gain on disposition of Wet business	(572)	(0.2)	(2,934)	(1.4)	(2,362)	(80.5)
Impairment of intangibles	2,618	0.9	-	-	2,618	n/m <sup>(1)</sup>
Total operating expenses	93,571	33.2	79,877	38.1	13,694	17.1
Income from operations	15,490	5.5	5,376	2.6	10,114	188.1
Interest income	5,448	1.9	2,855	1.4	2,593	90.8
Interest expense	(197)	(0.1)	(195)	(0.1)	2	1.0
Other income (expense), net	467	0.2	(537)	(0.3)	1,004	n/m <sup>(1)</sup>
Income before income taxes	21,208	7.5	7,499	3.6	13,709	182.8
Provision (benefit) for income taxes	4,094	1.4	(3,800)	(1.8)	7,894	n/m <sup>(1)</sup>
Net income	\$ 17,114	6.1 %	\$ 11,299	5.4 %	\$ 5,815	51.5 %

(1) not meaningful

**Sales.** The increase in net sales in 2006 compared with 2005 was primarily due to a \$65.9 million increase in system sales, or 39.1%, and a \$9.8 million increase in service and spare parts sales, or 32.6%. Sales in 2006 represent strong growth in capital spending by semiconductor manufacturers due to increasing demand for consumer electronics. In 2006, we received business from leading semiconductor manufacturers in all regions we serve — China, Europe, Japan, Korea, Singapore, Taiwan and the United States. Korea was our fastest growing equipment market in 2006, with a 113% sales increase from 2005. Our net sales for 2006 included \$7.5 million of royalty revenue from Dainippon Screen Co. (DNS), compared with \$10.8 million for 2005.

International sales, predominantly to customers based in Europe and Asia, including China, Japan, Korea, Singapore and Taiwan, accounted for 89% of net sales in 2006, compared to 84% for 2005. We anticipate that international sales will continue to account for a significant portion of our net sales.

**Gross Profit and Gross Profit Margin.** The increase in gross profit for 2006 compared with 2005 was primarily due to our overall increase in sales. Our gross profit for 2006 included \$7.5 million of royalty revenue received from DNS, compared with \$10.8 million for 2005. The royalty revenue carries no associated cost of sales.

Gross profit margin decreased by 2.0 percentage points in 2006 compared to 2005, primarily due to lower gross profit margin of 3.8 percentage points due to net deferral of systems revenue in accordance with our revenue recognition policy, lower gross profit margin from DNS of 2.5 percentage points and lower gross profit margin from service and spare parts sales of 0.3 percentage points, which was partially offset by higher gross profit margin related to systems sales of 4.6 percentage points.

Due to intense competition, we continue to face pricing pressure that can affect our gross profit margin. Our gross profit margin has varied over the years and will continue to be affected by many factors, including competitive pressures, product mix, economies of scale, material costs and other costs, overhead absorption levels and SEC Staff Accounting Bulletin (SAB) No. 104 requirements.

**Research, Development and Engineering.** RD&E expenses consist primarily of salary and benefits for our RD&E staff as well as contractors' fees and other costs associated with the enhancements of existing products and development of new products. The increase in RD&E expenses in 2006 compared with 2005 was primarily due to increased activity in 2006 to expand our portfolio of products capable of addressing stringent sub-65 nm requirements.

**Selling, General and Administrative.** Sales and marketing expenses consist primarily of the costs of personnel involved in the sales and marketing process, outside service costs, sales commissions, advertising and promotional materials, sales facilities expense, trade shows and seminars. General and administrative expenses consist primarily of personnel costs for finance, administration, operations and general management, headquarters and general office facilities costs, as well as legal and accounting expenses. In 2006, we continued to streamline our internal operations and adjust our resources through outsourcing in an effort to create a more flexible organization that can operate profitably through changing industry cycles.

The increase in selling, general and administrative (SG&A) expenses in 2006 compared with 2005 was primarily the result of a \$3.9 million increase in outside service expenses, which related to higher levels of business activity and to the additional audit, legal and other professional expenses efforts needed to complete our 2005 Form 10-K and restate certain financial statements, a charge of \$2.1 million for stock-based compensation in 2006 due to the adoption of SFAS No. 123(R), other increased salary and benefits expenses of \$0.6 million primarily due to increased benefits costs, increased travel expenses of \$1.5 million due to higher levels of business activity, and increased support costs for evaluation equipment of \$1.2 million, partially offset by a \$2.3 million decrease in depreciation expenses. SG&A expenses were also \$1.5 million higher in 2006 due to a charge of \$0.6 million in 2006 for allowance for doubtful accounts, compared to a corresponding benefit of \$0.9 million in 2005. As a percentage of net sales, our SG&A expenses decreased in 2006 compared to 2005 because of the increase in net sales in 2006.

**Amortization of Intangibles.** Amortization expenses in 2006 were due to our acquisition of Vortek in October 2004. We estimate our annual amortization expense to be \$0.5 million for the years 2007 through 2011.

**Gain on Disposition of Wet Business.** In 2006, we concluded all activities related to the disposition of the Wet business, and released a remaining accrual of \$0.6 million, which was previously established as an estimate of a portion of the projected costs to fulfill our obligations under the sale of the Wet business.

**Impairment of Intangibles.** In 2006, we recorded an impairment charge of \$2.6 million to write down the book value of certain intangible assets, as required by SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. The write down represented the remaining book value of the "Radiant" technology acquired from Vortek in October of 2004. See Note 18 to the accompanying consolidated financial statements.

**Interest and Other Income (Expense), Net.** Interest income increased in 2006 compared with 2005 due to higher investment balances in 2006 and higher average interest rates. Interest expense for 2006 and 2005 remained minimal. The \$1.0 million increase in other income (expense), net in 2006 compared with 2005 was primarily due to a \$1.9 million increase in 2006 due to \$0.6 million in gains on forward foreign exchange contracts settled in 2006 compared to \$1.3 million in losses on forward foreign exchange contracts settled in 2005, partially offset by a \$0.7 million reduction due to foreign currency translation losses.

**Provision for Income Taxes.** The provision for income taxes in 2006 primarily consisted of a \$2.3 million provision for Federal and state income taxes, a \$1.3 million provision for taxes in Germany, and a provision of \$0.5 million for other foreign taxes. We reduced our current tax liability by \$1.5 million through the utilization of certain acquired tax assets, largely consisting of net operating loss carryforwards resulting from the acquisition of STEAG in 2001. The Federal and state tax provision for 2006, however, does not reflect a benefit for the utilization of these net operating losses, as it was used to reduce the goodwill originally recorded in the acquisition. The tax benefit in 2005 primarily consisted of a \$3.0 million benefit due to a reduction in our deferred tax asset valuation allowance and a \$0.6 million benefit from the release of certain foreign tax reserves.

**Stock-based Compensation.** Effective January 1, 2006, we adopted the provisions of SFAS No. 123(R), *Share-Based Payment*. SFAS No. 123(R) establishes accounting for stock-based awards exchanged for employee services. Accordingly, stock-based compensation cost is measured at grant date, based on the fair value of the award which is computed using the Black-Scholes option valuation model, and is recognized as expense over the requisite service period for the employee. We previously applied Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations, and provided the required pro forma disclosures of SFAS No. 123, *Accounting for*

**Stock-Based Compensation.** We elected to adopt the modified prospective application method as provided by SFAS No. 123(R). Accordingly, in 2006 we recorded stock-based compensation cost totaling the amount that would have been recognized had the fair value method been applied since the effective date of SFAS No. 123. We did not restate previously reported amounts.

During the year ended December 31, 2006, we recorded \$2.0 million of stock-based compensation related to stock options. As of December 31, 2006, there was \$6.5 million of unrecorded deferred stock-based compensation after estimated forfeitures related to stock options, which will be recognized over an estimated weighted-average amortization period of 2.9 years. During the year ended December 31, 2006, we recorded \$0.1 million of stock-based compensation related to our employee stock purchase plan and \$0.4 million of compensation cost related to restricted stock units. Compensation cost for restricted stock units is determined based on the grant date fair value of the shares of common stock, and is recognized on a straight-line basis over the requisite service period. As of December 31, 2006, there was \$1.2 million of unrecorded deferred stock-based compensation, after estimated forfeitures, related to non-vested restricted stock units granted under the 2005 Equity Incentive Plan. We expect to recognize that cost over an estimated weighted-average amortization period of 3.0 years.

#### ***Years Ended December 31, 2005 and 2004***

The following table sets forth our consolidated results of operations for the years ended December 31, 2005 and 2004, and the year-over-year increase (decrease) in our results, expressed in both amounts (in thousands) and as a percentage of net sales, except where indicated:

	<b>Year Ended December 31,</b>				<b>Increase (Decrease)</b>	
	<b>2005</b>		<b>2004</b>			
Net sales	\$ 209,379	100.0 %	\$ 246,485	100.0 %	\$ (37,106)	(15.1) %
Cost of sales	124,126	59.3	141,774	57.5	(17,648)	(12.4)
Gross profit	85,253	40.7	104,711	42.5	(19,458)	(18.6)
Operating expenses:						
Research, development and engineering	26,625	12.7	23,111	9.4	3,514	15.2
Selling, general and administrative	54,086	25.8	57,963	23.5	(3,877)	(6.7)
Amortization of intangibles	2,100	1.0	1,429	0.6	671	47.0
Gain on disposition of Wet business	(2,934)	(1.4)	-	-	(2,934)	n/m <sup>(1)</sup>
Total operating expenses	79,877	38.1	82,503	33.3	(2,626)	(3.2)
Income from operations	5,376	2.6	22,208	9.0	(16,832)	(75.8)
Interest income	2,855	1.4	1,242	0.5	1,613	129.9
Interest expense	(195)	(0.1)	(81)	-	114	140.7
Other income (expense), net	(537)	(0.3)	753	0.3	(1,290)	n/m <sup>(1)</sup>
Income before income taxes	7,499	3.6	24,122	9.8	(16,623)	(68.9)
Benefit for income taxes	(3,800)	(1.8)	(6,871)	(2.8)	(3,071)	(44.7)
Net income	\$ 11,299	5.4 %	\$ 30,993	12.6 %	\$ (19,694)	(63.5) %

(1) not meaningful

**Sales.** The decrease in net sales in 2005 compared with 2004 was primarily due to a \$38.1 million decrease in system sales, or 18.4%, and a \$4.3 million decrease in service and spare parts sales, or 12.8%. Sales in 2005 represented a decline following very strong capital spending by semiconductor manufacturers in 2004. Korea was the fastest growing equipment market in 2005, with a 55% increase in sales from 2004; however overall sales declined due to a 30% decline in sales for Japan, Taiwan and other Asian countries. Net sales for 2005 included \$10.8 million of royalty revenue from DNS, compared with \$5.8 million for 2004.

International sales, predominantly to customers based in Europe and Asia, including China, Japan, Korea, Singapore and Taiwan, accounted for 84% of net sales in 2005, compared to 87% for 2004.

**Gross Profit and Gross Profit Margin.** The decrease in gross profit for 2005 compared with 2004 was primarily due to the overall decline in sales. Additionally, gross margin was negatively impacted by \$2.8 million in 2005 due to inventory valuation charges. Gross profit for 2005 included \$10.8 million of royalty revenue received from DNS, compared with \$5.8 million for 2004.

Gross profit margin declined in 2005 compared with 2004 primarily due to inventory valuation charges, which accounted for 1.3 percentage points of the decline in 2005. Additionally, warranty expenses as a percentage of sales increased 0.8 percentage points in 2005, although total warranty expenses were slightly lower.

**Research, Development and Engineering.** The increase in RD&E expenses in 2005 compared with 2004 was primarily due to increased activity in 2005 to expand the portfolio of products capable of addressing stringent sub-65 nm requirements.

**Selling, General and Administrative.** The decrease in SG&A expenses in 2005 compared with 2004 was primarily the result of a \$2.9 million reduction due to reduced accounts receivables reserves in 2005, a \$1.1 million decrease in travel expenses and a \$0.7 million decrease in corporate insurance expenses, partially offset by an increase of \$0.9 million for outsourcing costs for professional services, primarily related to increased accounting and consulting expenses related to Sarbanes-Oxley compliance. As a percentage of net sales, our SG&A expenses increased in 2005 compared to 2004 because of the decrease in net sales in 2005.

**Amortization of Intangibles.** Amortization expenses increased in 2005 compared with 2004 primarily due to our acquisition of Vortek Industries Ltd. in October 2004.

**Gain on Disposition of Wet Business.** In 2005, earn-out payments of approximately \$2.9 million were received in relation to the disposition of the Wet business in 2003. This payment was recorded as additional proceeds from the sale of the Wet business, and the payment was recorded as a reduction of operating expenses.

**Interest and Other Income (Expense), Net.** Interest income increased in 2005 compared with 2004 due to higher investment balances in 2005. Interest expense for 2005 and 2004 were minimal. The decrease in other income (expense), net in 2005 compared with 2004 was primarily due to \$1.3 million in losses on forward foreign exchange contracts settled in January 2005.

**Provision for Income Taxes.** The tax benefit in 2005 primarily consisted of a \$3.0 million benefit due to a reduction in the deferred tax asset valuation allowance and a \$0.6 million benefit from the release of certain foreign tax reserves. The tax benefit in 2004 was primarily due to a \$4.5 million tax benefit resulting from reduced foreign income tax liabilities and a one-time \$2.2 million tax benefit related to a refund of taxes that had been previously withheld and expensed at the time of the DNS settlement in the third quarter of 2002, partially offset by tax expenses related to foreign operations.

#### ***Deferred Revenue at December 31, 2006 and 2005***

Deferred revenue at December 31, 2006 increased to \$16.8 million from \$12.5 million at December 31, 2005, primarily due to a \$5.2 million increase for the deferral of a portion of system shipments in accordance with our revenue recognition policy, partially offset by a \$0.4 million decrease in deferred service contract revenue and a \$0.5 million decrease in deferred revenue for system shipments which were fully deferred in accordance with our revenue recognition policy.

Deferred revenue at December 31, 2006 of \$16.8 million consisted of \$10.7 million of deferred revenue related to installation services awaiting completion for sales of established products, \$4.2 million of deferred revenue related to tools deferred in accordance with our policy and \$1.9 million in unearned service contract revenue.

#### **Liquidity and Capital Resources**

Our cash, cash equivalents and short-term investments were \$138.9 million at December 31, 2006, an increase of \$9.6 million from \$129.3 million held as of December 31, 2005. Stockholders' equity at December 31, 2006 was \$238.9 million.

#### ***Credit Arrangements***

In April 2006, we renewed our \$10 million revolving line of credit with a bank, which may be increased to \$20 million at our option. The revolving line of credit now expires in April 2007 and has an annual commitment fee of \$30,000. At December 31, 2006, we were in compliance with all covenants and we had no borrowing under this credit line.

Our Japanese subsidiary has a credit facility with a Japanese bank in the amount of 600 million Yen (approximately \$5.1 million at December 31, 2006), collateralized by specific trade accounts receivable of the Japanese subsidiary. There are no financial covenant requirements for this credit facility. At December 31, 2006, there was no borrowing under this credit facility.

### ***Contractual Obligations***

Under U.S. generally accepted accounting principles, certain obligations and commitments are not required to be included in our consolidated balance sheets. These obligations and commitments, while entered into in the normal course of business, may have a material impact on our liquidity.

Our contractual commitments as of December 31, 2006 are summarized in the following table:

	<b>Operating Lease Payments</b>	<b>Vendor Commitments</b>			<b>Total</b>	<b>Sublease Income</b>
		<b>Subcontractor</b>	<b>Inventory</b>	<b>Other</b>		
			(thousands)			
2007	\$ 4,757	\$ 5,028	\$ 28,266	\$ 5,877	\$ 39,171	\$ (1,494)
2008	4,654	-	-	2,045	2,045	-
2009	4,609	-	-	1,547	1,547	-
2010	4,567	-	-	1,320	1,320	-
2011	4,081	-	-	770	770	-
Thereafter	24,315	-	-	-	-	-
	<u>\$ 46,983</u>	<u>\$ 5,028</u>	<u>\$ 28,266</u>	<u>\$ 11,559</u>	<u>\$ 44,853</u>	<u>\$ (1,494)</u>

- (1) Other vendor commitments primarily include service-related contracts and agreements for information technology support, commitments for non-inventory purchases of assets, and other service-related commitments.

In connection with the acquisition of Vortek, we became party to an agreement between Vortek and the Canadian Minister of Industry (the Minister) relating to an investment in Vortek by Technology Partnerships Canada. Under that agreement, as amended, we or Vortek agreed to various covenants, including (a) payment by us of a royalty to the Minister of 1.4% of revenues from Flash RTP products, up to a total of CAD14,269,290 (approximately \$12.3 million at December 31, 2006), and (b) Vortek maintaining a specified average workforce of employees in Canada through October 27, 2009. If we, or Vortek, do not satisfy our obligations, the Minister may demand payment of liquidated damages in the amount of CAD14,269,290 (approximately \$12.3 million at December 31, 2006) less any royalties paid by Vortek or us to the Minister. At December 31, 2006, we were in compliance with the covenants of this agreement.

### ***Off-Balance Sheet Arrangements***

As of December 31, 2006, we do not have any significant “off-balance sheet” arrangements as defined in Item 303 (a)(4)(ii) of Regulation S-K.

### ***Legal Settlement***

On June 24, 2002, we entered into a settlement agreement and a license agreement with DNS under which DNS agreed to make payments to us totaling between \$75 million (minimum) and \$105 million (maximum), relating to past damages, partial reimbursement of attorney fees and costs, and license fees. See Note 14 to the accompanying consolidated financial statements.

For the years ended December 31, 2006, 2005 and 2004, DNS paid us minimum annual royalty payments of \$6.0 million each year. In 2006, 2005 and 2004, DNS made additional payments of \$2.4 million, \$5.4 million and \$0.4 million, respectively, based on sales by DNS for their fiscal years ended March 31, 2006, 2005 and 2004, respectively. In total, \$6.0 million of these payments were applied against the minimum payment due in June 2007, and \$2.2 million of these payments were in excess of the minimum payments. We have received all scheduled minimum annual royalty payments. The remaining royalty payments to be paid by DNS under the license agreement will be due in June 2007 and June 2008, based on sales by DNS through January 15, 2008. As of December 31, 2006, DNS has made payments aggregating \$77.2 million under the terms of the settlement and license agreements.

## ***Liquidity and Capital Resources Outlook***

As of December 31, 2006, we had cash, cash equivalents and short-term investments of \$138.9 million. We believe that these balances, including interest to be earned thereon, and anticipated cash flows from operating activities will be sufficient to fund our working and other capital requirements over the course of the next twelve months and for the foreseeable future. In the normal course of business, we evaluate the merits of acquiring technology or businesses, or establishing strategic relationships with or investing in these businesses. We may use available cash and cash equivalents and marketable security investments to fund such activities in the future. In the event additional needs for cash arise, we may raise additional funds from a combination of sources including the potential issuance of debt or equity securities. Additional financing may not be available on terms favorable to us, or at all. If adequate funds were not available or were not available on acceptable terms, our ability to take advantage of unanticipated opportunities or respond to competitive pressures could be limited.

### ***Cash Flows from Operating Activities***

Net cash provided by operations of \$13.8 million in 2006 was primarily due to net income of \$17.1 million; depreciation and amortization charges of \$6.5 million; non-cash charges of \$2.6 million for impairment of intangibles and \$2.4 million for stock-based compensation due to the adoption of SFAS No. 123(R); an increase in accounts payable and accrued liabilities of \$8.2 million; an increase in deferred revenue of \$4.3 million; a decrease in prepaid expenses and other current assets of \$2.8 million and inventory valuation charges of \$1.7 million; partially offset by an increase in accounts receivable of \$26.8 million due to record sales in the fourth quarter and an increase in inventories of \$6.8 million.

Net cash provided by operations of \$42.3 million in 2005 was primarily due to net income of \$11.3 million, a decrease in accounts receivable of \$29.5 million, depreciation and amortization charges of \$10.2 million, a decrease in advance billings of \$6.6 million, a decrease in inventories of \$7.3 million and inventory valuation charges of \$2.5 million; partially offset by a decrease in accounts payable and accrued liabilities of \$13.1 million, a decrease in deferred revenue of \$6.6 million and an increase in prepaid expenses and other current and noncurrent assets of \$4.0 million. A significant portion of the change in our balance sheet accounts resulted from a higher level of sales at the end of 2004, which had required increased working capital.

Net cash used in operations of \$17.0 million in 2004 was primarily due to an increase in accounts receivable of \$25.2 million; an increase in inventories of \$13.9 million, primarily due to reduction in inventory reserves of \$8.0 million as a result of improvement in inventory control and disposal of obsolete inventories and increases of inventories of purchased parts and raw materials of \$7.6 million; a decrease in accrued liabilities of \$19.2 million, largely due to reduction in tool-related/retrofit accruals and a decrease in deferred revenue of \$2.7 million; partially offset by net income of \$31.0 million; a decrease in advanced billings of \$3.9 million and depreciation and amortization charges of \$7.2 million.

We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our net sales and operating results, amount of revenue deferred, collection of accounts receivable and timing of payments.

### ***Cash Flows from Investing Activities***

Net cash used in investing activities of \$46.3 million in 2006 was primarily due to purchases of available-for-sale investments of \$51.6 million and capital spending of \$12.0 million, partially offset by proceeds from sales and maturities of available-for-sale investments of \$16.7 million. Our capital spending in 2006 was primarily due to additions of technology used in our RD&E activities.

Net cash used in investing activities of \$12.6 million in 2005 was primarily due to purchases of available-for-sale investments of \$25.3 million and capital spending of \$5.6 million, partially offset by proceeds from sales and maturities of available-for-sale investments of \$15.2 million and gains from earn-out payments related to the sale of our Wet business of \$2.9 million. Our capital spending in 2005 was primarily due to additions of technology used in our RD&E activities.

Net cash used in investing activities of \$2.9 million in 2004 was primarily due to purchases of available-for-sale investments of \$26.2 million, capital spending of \$16.0 million, which was primarily for the build-out of our manufacturing operations as a result of consolidation of manufacturing facilities in Fremont, California, loans to Vortek prior to acquisition of \$2.6 million and net cash of \$2.2 million paid in connection with the Vortek acquisition, partially offset by proceeds from sales and maturities of available-for-sale investments of \$43.9 million.

### ***Cash Flows from Financing Activities***

Net cash provided by financing activities of \$3.9 million in 2006 consisted of \$3.9 million in proceeds from stock plans.

Net cash provided by financing activities of \$3.8 million in 2005 consisted of \$3.3 million in proceeds from stock plans and a decrease in restricted cash of \$0.5 million. In 2005, we established corporate credit cards with a new bank and closed our previous corporate account, which had required a compensating cash balance of \$0.5 million.

Net cash provided by financing activities of \$47.8 million in 2004 consisted primarily of the net proceeds of \$46.4 million from an underwritten public offering of approximately 4.3 million newly issued shares of common stock priced at \$11.50 per share issued in February 2004. We used the net proceeds received from the offering for general corporate purposes, including working capital requirements.

### **Acquisition of Vortek Industries Ltd.**

On October 27, 2004, we acquired certain outstanding debt and equity ownership interests in Vortek Industries Ltd. (Vortek), a privately held corporation amalgamated under the laws of British Columbia, for a total purchase price of \$18.9 million. Vortek, based in Vancouver, Canada, is a developer of millisecond flash annealing technology for rapid thermal processing of silicon wafers used in the manufacture of semiconductors. The purchase price consisted of approximately 1.5 million shares of Mattson common stock valued at approximately \$16.7 million and approximately \$2.2 million in cash for acquisition-related expenses. Prior to the closing date of the Vortek acquisition (October 27, 2004), Mattson provided loans to Vortek aggregating \$2.6 million. These loans still existed at December 31, 2006 and December 31, 2005 and were eliminated in consolidation. As a result of the transaction, Vortek became our wholly-owned subsidiary.

This acquisition was consummated principally to expand and strengthen our RTP technology portfolio and support our long-term growth strategy. The acquisition was accounted for as a purchase transaction and, accordingly, the assets and liabilities acquired were recorded at their fair values at the date of acquisition, based on management estimates and relative fair value assessments. The results of operations of Vortek have been included in our consolidated financial statements subsequent to the acquisition date.

Our allocation of the purchase price is summarized as follows:

	<b>Purchase Price Allocation</b>
	<b>(thousands)</b>
Goodwill	\$ 16,212
Existing technology (estimated useful life of 17 years)	11,700
Current assets	1,435
Property, plant and equipment	847
Liabilities assumed	(6,808)
Deferred tax liability on intangibles	(4,446)
	<u>\$ 18,940</u>

In addition, we acquired CAD11.0 million (approximately \$9.5 million at December 31, 2006) of deferred tax assets in connection with the acquisition of Vortek, which had a full valuation allowance at December 31, 2004. In 2005, we adjusted the fair value of the assets and liabilities acquired in the Vortek transaction. Pursuant to the adjustment, we reduced the valuation allowance for deferred tax assets by approximately \$4.4 million. This resulted in a reduction of goodwill of approximately \$4.4 million. The resulting deferred tax asset of \$2.9 million and \$4.1 million at December 31, 2006 and 2005 has been offset against the recorded deferred tax liabilities of \$2.9 million and \$4.1 million in the accompanying consolidated balance sheets in accordance with SFAS No. 109.

SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, requires us to evaluate in each reporting period the carrying value of our long-lived assets and to record an impairment charge if the carrying value of the

asset may not be recoverable. In the fourth quarter of 2006, as part of our overall evaluation of impairment, we conducted a thorough review of the intangible assets acquired in the Vortek acquisition. During this process, we looked at resource constraints, strategic focus and potential market opportunities for both the Radiant and Flash RTP technologies acquired from Vortek. We decided that it is in Mattson's best interest to focus solely on the Flash RTP business, and determined that the remaining book value of intangible assets relating to the Radiant technology were fully impaired. Accordingly, we recorded an impairment charge of \$2.6 million to write down the net book value of the Radiant technology in the fourth quarter of 2006.

### **Capital Finance Transactions**

On February 17, 2004, we sold approximately 4.3 million newly issued shares of common stock in an underwritten public offering priced at \$11.50 per share. This resulted in net proceeds to us of approximately \$46.4 million. In the same offering, a shareholder sold approximately 4.3 million previously outstanding shares.

### **Reclassifications**

For presentation purposes, certain prior period amounts have been reclassified to conform to the reporting in the current period financial statements. These reclassifications do not affect our net income, cash flows or stockholders' equity. Depreciation expense associated with customer evaluation tools was previously classified as a component of cost of goods sold. Effective July 3, 2006, we classify this depreciation expense as a selling expense, which is included in selling, general and administrative expenses in the accompanying consolidated financial statements.

### **Critical Accounting Policies and Use of Estimates**

Management's Discussion and Analysis of Financial Condition and Results of Operations discusses our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. On an on-going basis, management evaluates its estimates and judgments, including those related to reserves for excess and obsolete inventory, warranty obligations, bad debts, intangible assets, income taxes, restructuring costs, contingencies and litigation. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. These form the basis for making judgment about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We consider certain accounting policies related to revenue recognition, warranty obligations, inventories, goodwill and other intangible assets, impairment of long-lived assets, income taxes and stock-based compensation as critical to our business operations and an understanding of our results of operations. See Note 2 of the accompanying consolidated financial statements for a summary of our significant accounting policies.

**Revenue Recognition.** We recognize revenue in accordance with SEC SAB No. 104, *Revenue Recognition in Financial Statements*. We account for equipment sales as follows: 1) for equipment sales of existing products with new specifications and for all sales of new products, revenue is recognized upon customer acceptance; 2) for equipment sales to existing customers who have purchased the same equipment with the same specifications and previously demonstrated acceptance provisions, or equipment sales to new customers purchasing existing products with established reliability, we recognize revenue on a multiple element approach in which we bifurcate a sale transaction into two separate elements based on objective evidence of fair value. The two elements are the tool and installation of the tool. Under this approach, the portion of the invoice price that is due upon shipment, generally 90% of the total invoice price, is recognized as revenue upon shipment and title transfer of the tool; and the remaining portion of the total invoice price, generally 10% of the total invoice price, which is due once installation services have been accepted, is not recognized as revenue until final customer acceptance of the tool. From time to time, however, we allow customers to evaluate systems, and since customers can return such systems at any time with limited or no penalty, we do not recognize revenue until these evaluation systems are accepted by the customers. In 2006 and earlier periods, revenues associated with sales to customers in Japan were recognized upon title transfer, which generally occurred upon customer acceptance, with the exception of sales of RTP products through our distributor in Japan, where we recognized revenues upon title transfer to the distributor. In December 2006, we expanded our distributor relationship in Japan to cover all our products. Under the new distributor agreement, revenues are recognized upon title transfer, which generally occurs

upon shipment to the distributor. For spare parts, we recognize revenue upon shipment. We recognize service and maintenance contract revenue on a straight-line basis over the service period of the related contract. Accounts receivable for which revenue has not been recognized are classified as advance billings in the accompanying consolidated balance sheets.

In all cases, revenue is only recognized when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable and collectibility is reasonably assured.

**Warranty.** The warranty we offer on system sales generally ranges from 12 months to 36 months, depending on the product. A provision for the estimated cost of warranty, based on historical costs, is recorded as a cost of sale when the revenue is recognized for the sale of the equipment or parts. Our warranty obligations require us to repair or replace defective products or parts, generally at a customer's site, during the warranty period at no cost to the customer. The actual system performance and/or field expense profiles may differ from historical experience, and in those cases we adjust our warranty accruals accordingly. While our warranty costs have historically been within our expectations and the provisions we have established, we cannot be certain that we will continue to experience the same warranty costs that we have had in the past.

**Inventories.** Inventories are stated at the lower of cost or market, with cost determined on a first-in, first-out basis, and include material, labor and manufacturing overhead costs. Finished goods are reported as inventories until the point of title transfer to the customer. Under our general terms of sale, title transfers when we complete physical transfer of the products to the freight carrier unless other customer practices prevail. All intercompany profits related to the sales and purchases of inventory between our legal entities are eliminated from the consolidated financial statements.

Our policy is to assess the valuation of all inventories, including manufacturing raw materials, work-in-process, finished goods and spare parts, in each reporting period. Although we attempt to accurately forecast future inventory demand, given the competitive pressures and cyclicity of the semiconductor industry, there may be significant unanticipated changes in demand or technological developments that could have a significant impact on the value of our inventories and reported operating results.

**Inventory Valuation.** The carrying value of inventory is reduced for estimated obsolescence by the difference between its cost and the estimated market value based upon assumptions about future demand. We evaluate the inventory carrying value for potential excess and obsolete inventory exposures by analyzing historical and anticipated demand. In addition, inventories are evaluated for potential obsolescence due to the effect of known and anticipated engineering change orders and new products. If actual demand were to be substantially lower than estimated, additional inventory adjustments for excess or obsolete inventory might be required, which could have a material adverse effect on our business, financial condition and results of operations.

**Goodwill and Other Intangible Assets.** We review our goodwill and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable, and we also review goodwill annually in accordance with SFAS No. 142. Goodwill and intangible assets, such as purchased technology, are generally recorded in connection with business acquisitions. The value assigned to goodwill and intangible assets is usually based on estimates and judgments regarding expectations for the success and life cycle of products and technology acquired. A severe decline in market conditions could result in significant impairment charges, which could have a material adverse effect on our business, financial condition and results of operations.

We are required to test our goodwill for impairment at the reporting unit level. We have determined that we have only one reporting unit. The test for goodwill impairment is a two-step process. The first step compares the fair value of our reporting unit with its carrying amount, including goodwill. If the fair value of our reporting unit exceeds its carrying amount, goodwill of our reporting unit is considered not to be impaired, thus the second step of the impairment test is unnecessary. The second step, used to measure the amount of impairment loss, compares the implied fair value of our reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of our reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess. There were no events or changes in circumstances during the first three quarters of 2006 that triggered an impairment review. During the fourth quarter of 2006, we completed the first step of our annual impairment test based on management estimates and fair value assessments, which did not indicate any impairment; thus, the second step was not necessary.

**Impairment of Long-Lived Assets.** Pursuant to SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, we review our long-lived assets, including property and equipment, intangibles and other long-lived assets, for

impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. Recoverability is measured by a comparison of the assets' carrying amount to their expected future undiscounted net cash flows. If such assets are considered to be impaired, the impairment to be recognized is measured based on the amount by which the carrying amount of the asset exceeds its fair value.

In 2006, we recorded an impairment charge of \$2.6 million to write down the book value of an intangible asset, as required by SFAS No. 144. The write down represented the remaining book value of the Radiant technology acquired from Vortek in October of 2004. See Note 18 to the accompanying consolidated financial statements.

During the years ended December 31, 2005 and 2004, we did not record any impairment charge.

**Income Taxes.** At December 31, 2006 and 2005, we had net deferred tax assets of \$2.0 million and \$3.0 million, respectively, related to our German operations, as we expected that it is more likely than not that we will realize the benefit from the German net deferred tax asset as of December 31, 2006 and 2005. For all other tax jurisdictions, we recorded a 100% valuation allowance against our net deferred tax asset as we expect it is more likely than not that we will not realize our net deferred tax asset as of December 31, 2006. In assessing the need for a valuation allowance, we consider historical levels of income, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies. In the event we determine that we would be able to realize additional deferred tax assets in the future in excess of the net recorded amount, or if we subsequently determine that realization of an amount previously recorded is unlikely, we would record an adjustment to the deferred tax asset valuation allowance, which would change income in the period of adjustment.

**Stock-based Compensation.** In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (revised 2004), *Share-Based Payment*. SFAS No. 123(R) requires us to measure all employee stock-based compensation awards using a fair value method and record such expense in our consolidated financial statements. In March 2005, the SEC issued SAB No. 107, which provides the SEC Staff's views regarding interactions between SFAS No. 123(R) and certain SEC rules and regulations and provides interpretations of the valuation of share-based payments for public companies. The adoption of SFAS No. 123(R) requires additional accounting related to the income tax effects and additional disclosure regarding the cash flow effects resulting from share-based payment arrangements.

Effective January 1, 2006, we adopted SFAS No. 123(R). Total share-based compensation during 2006 was \$2.4 million. For more information on stock-based compensation costs for the year ended December 31, 2006, refer to Note 11 in the accompanying consolidated financial statements.

Determining the appropriate fair-value model and calculating the fair value of employee stock options, restricted stock awards and rights to purchase shares under employee stock purchase plans at the date of grant requires judgment. We use the Black-Scholes option pricing model to estimate the fair value of these share-based awards consistent with the provisions of SFAS No. 123(R). Option pricing models, including the Black-Scholes model, require the use of input assumptions, including expected volatility, expected life, expected dividend rate and expected risk-free rate of return. The assumptions for expected volatility and expected life are the two assumptions that significantly affect the grant date fair value. The expected dividend rate and expected risk-free rate of return are not significant to the calculation of fair value.

We use historical volatility based on past performance of our common stock to estimate expected volatility as we believe historical volatility is an appropriate indicator of expected future volatility. If we determine that another method to estimate expected volatility or expected life is more reasonable than our current methods, or if another method for calculating these input assumptions is prescribed by authoritative guidance, the fair value calculated for share-based awards could change significantly. Higher volatility and expected lives result in an increase to share-based compensation determined at the date of grant.

In addition, SFAS No. 123(R) requires us to develop an estimate of the number of share-based awards which will be forfeited due to employee turnover. Changes in the estimated forfeiture rate can have a significant effect on reported share-based compensation, as the effect of adjusting the rate for all expense amortization after January 1, 2006 is recognized in the period the forfeiture estimate is changed. The effect of forfeiture adjustments in 2006 was insignificant. The expense we recognize in future periods could also differ significantly from the current period and/or our forecasts due to adjustments in the assumed forfeiture rates.

## **New Accounting Pronouncements**

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS No. 159), which permits entities to elect to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. This election is irrevocable. SFAS No. 159 will be effective for us on January 1, 2008. We are currently assessing the potential impact that the adoption of SFAS No. 159 will have on our financial statements.

In September 2006, the SEC issued SAB No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Current Year Misstatements*. SAB No. 108 requires analysis of misstatements using multiple approaches and provides for a one-time cumulative effect transition adjustment. We adopted SAB No. 108 in the fourth quarter of 2006. The adoption of SAB No. 108 had no impact on our 2006 financial statements.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, which defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair value measurements. SFAS No. 157 does not require any new fair value measurements, but provides guidance on how to measure fair value by providing a fair value hierarchy used to classify the source of the information. This statement is effective for us beginning January 1, 2008. We are currently assessing the potential impact that the adoption of SFAS No. 157 will have on our financial statements.

In June 2006, the FASB ratified the Emerging Issues Task Force (EITF) conclusion on Issue No. 06-02, *Accounting for Sabbatical Leave and Other Similar Benefits Pursuant to FASB Statement No. 43, 'Accounting for Compensated Absences'*. The EITF concluded that companies should accrue for employee sabbatical leave over the service period in which employees earn the right to sabbatical leave. EITF No. 06-02 is effective for years beginning after June 28, 2006, and will be adopted by us on January 1, 2007. We will adopt EITF No. 06-02 as a change in accounting principle and will show the cumulative effect of adoption of approximately \$0.4 million in the first quarter of 2007, as permitted by the transition provisions of EITF No. 06-02.

In June 2006, the FASB issued FASB Interpretation (FIN) No. 48, *Accounting for Uncertainty in Income Taxes: An Interpretation of FASB Statement No. 109*. FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*. This Interpretation defines the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. FIN No. 48 is effective for fiscal years beginning after December 15, 2006. We are currently evaluating the effect that the adoption of FIN No. 48 will have on our financial position and results of operations.

## **Item 7A. Qualitative and Quantitative Disclosures About Market Risk**

### **Interest Rate Risk**

We are exposed to financial market risks, including changes in foreign currency exchange rates and changes in interest rates.

Our exposure to market risk for changes in interest rates relates to our investment portfolio of cash, cash equivalents, and short-term investments. We do not currently use derivative financial instruments in our investment portfolio, nor hedge for these interest rate exposures. We place our investments with high credit quality issuers and, by policy, limit the amount of our credit exposure to any one issuer. Our portfolio includes only marketable securities with active secondary or resale markets to ensure portfolio liquidity.

Our interest rate risk relates primarily to our investment portfolio, which consisted of \$91.4 million in cash equivalents and \$47.5 million in short-term investments as of December 31, 2006. An immediate increase in interest rates of 100 basis points would not have a material adverse affect on the fair value of our investment portfolio. Conversely, because of the short-term nature of our portfolio, an immediate decline of 100 basis points in interest rates could harm interest earnings of our investment portfolio in the future as securities mature. By policy, we limit our exposure to longer-term investments.

The maturities of short-term investments in our portfolio as of December 31, 2006 and 2005 were as follows:

	<b>December 31,</b>	
	<b>2006</b>	<b>2005</b>
	(thousands)	
Due within one year	\$ 34,644	\$ 12,689
Due in one to two years	12,825	-
	<u>\$ 47,469</u>	<u>\$ 12,689</u>

## Foreign Currency Risk

Historically, much of our revenues and capital spending has been transacted in U.S. dollars. The functional currencies of our foreign subsidiaries are their local currencies. Accordingly, all assets and liabilities of these foreign operations are translated using exchange rates in effect at the end of the reporting period, and revenues and costs are translated using average exchange rates for the period. Gains or losses from translation of foreign operations where the local currencies are the functional currency are included as a component of accumulated other comprehensive income/(loss). Foreign currency translation gains and losses are recognized in the consolidated income statements as they are incurred. We believe that foreign currency exchange rates should not materially adversely affect our overall financial position, results of operations or cash flows.

During 2006, we employed a foreign currency hedging program, utilizing foreign currency forward exchange contracts, to hedge foreign currency fluctuations associated with Japanese Yen denominated firm purchase commitments and accounts receivable balances. The goal of the hedging program was to hedge against foreign currency fluctuations associated with the sales of systems to Japan and the revaluation gains (losses) of foreign denominated accounts receivable.

During 2004, we employed a foreign currency hedging program, utilizing foreign currency forward exchange contracts, to hedge foreign currency fluctuations associated with Euro and Japanese Yen denominated accounts receivable balances. In the fourth quarter of 2004, we also included Euro denominated intercompany balances in our foreign currency hedging program. The goal of the hedging program was to hedge against foreign currency fluctuations associated with the revaluation gains (losses) of foreign denominated accounts receivable and intercompany account balances.

All forward foreign exchange contracts did not exceed one year. Under SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, these forward contracts did not qualify as designated hedges. All outstanding forward foreign currency contracts were marked to market with the resulting unrealized gains (losses) recorded in other income (expense), net. We do not use foreign currency forward exchange contracts for speculative or trading purposes.

With respect to forward foreign currency exchange contracts, we recorded a net gain of \$0.6 million in 2006, a net loss of \$1.3 million for 2005 and a net gain of \$2.3 million for 2004 in other income (expense), net. At December 31, 2006, we had one outstanding forward foreign exchange contract for the purchase in total of US\$23.7 million in exchange for 2.8 billion Japanese Yen. Recording the fair value of this contract as of December 31, 2006 resulted in an unrealized gain of \$0.1 million, which was charged to the consolidated income statement in 2006. At December 31, 2005, we had no outstanding forward foreign exchange contracts.

During January 2007, we settled one forward foreign exchange contract outstanding as of December 31, 2006 for the purchase in total of US\$23.7 million in exchange for 2.8 billion Japanese Yen (weighted average contract rate of 118 Japanese Yen to US\$1.00) upon maturity and realized a total foreign exchange gain of \$0.6 million, which was recorded under other income (expense), net.

**Item 8. *Financial Statements and Supplementary Data***

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**MATTSON TECHNOLOGY, INC.**  
**CONSOLIDATED BALANCE SHEETS**

	December 31,	
	2006	2005
	(thousands, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 91,416	\$ 116,593
Short-term investments	47,469	12,689
Accounts receivable, net of allowance for doubtful accounts of \$3,222 and \$3,591 in 2006 and 2005, respectively	55,957	29,279
Advance billings	10,463	10,145
Inventories	40,532	32,876
Inventories - delivered systems	1,879	2,517
Prepaid expenses and other current assets	11,109	13,603
	258,825	217,702
Property and equipment, net	27,838	22,515
Goodwill	18,497	20,005
Intangibles, net	7,591	10,897
Other assets	4,001	4,448
Total assets	\$ 316,752	\$ 275,567
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 19,330	\$ 17,436
Accrued liabilities	41,310	35,478
Deferred revenue	16,782	12,464
Total current liabilities	77,422	65,378
Other liabilities	400	-
Total liabilities	77,822	65,378
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock, 2,000 shares authorized; none issued and outstanding	-	-
Common stock, par value \$0.001, 120,000 authorized shares; 53,030 shares issued and 52,655 shares outstanding in 2006; 52,470 shares issued and 52,095 shares outstanding in 2005	53	52
Additional paid-in capital	620,372	614,090
Accumulated other comprehensive income	13,525	8,181
Treasury stock, 375 shares in 2006 and 2005, at cost	(2,987)	(2,987)
Accumulated deficit	(392,033)	(409,147)
Total stockholders' equity	238,930	210,189
Total liabilities and stockholders' equity	\$ 316,752	\$ 275,567

The accompanying notes are an integral part of these consolidated financial statements.

**MATTSON TECHNOLOGY, INC.**  
**CONSOLIDATED INCOME STATEMENTS**

	<b>Year Ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
	(thousands, except per share amounts)		
Net sales	\$ 281,781	\$ 209,379	\$ 246,485
Cost of sales	172,720	124,126	141,774
Gross profit	<u>109,061</u>	<u>85,253</u>	<u>104,711</u>
Operating expenses:			
Research, development and engineering	28,314	26,625	23,111
Selling, general and administrative	62,523	54,086	57,963
Amortization of intangibles	688	2,100	1,429
Gain on disposition of Wet business	(572)	(2,934)	-
Impairment of intangibles	2,618	-	-
Total operating expenses	<u>93,571</u>	<u>79,877</u>	<u>82,503</u>
Income from operations	15,490	5,376	22,208
Interest income	5,448	2,855	1,242
Interest expense	(197)	(195)	(81)
Other income (expense), net	467	(537)	753
Income before income taxes	<u>21,208</u>	<u>7,499</u>	<u>24,122</u>
Provision (benefit) for income taxes	<u>4,094</u>	<u>(3,800)</u>	<u>(6,871)</u>
Net income	<u>\$ 17,114</u>	<u>\$ 11,299</u>	<u>\$ 30,993</u>
Net income per share:			
Basic	\$ 0.33	\$ 0.22	\$ 0.63
Diluted	\$ 0.32	\$ 0.21	\$ 0.61
Shares used in computing net income per share:			
Basic	52,457	51,557	49,539
Diluted	53,468	52,784	51,073

The accompanying notes are an integral part of these consolidated financial statements.

**MATTSON TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**

	Shares of Common Stock	Common Stock and Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Treasury Stock		Accumulated Deficit	Total
				Shares	Amount		
	(thousands)						
Balance at December 31, 2003	45,826	\$ 546,144	\$ 9,468	(375)	\$ (2,987)	\$ (451,439)	\$ 101,186
Components of comprehensive income:							
Net income						30,993	30,993
Cumulative translation adjustments	-	-	6,559	-	-	-	6,559
Comprehensive income							37,552
Public offering, net of offering costs	4,313	46,370	-	-	-	-	46,370
Shares issued in Vortek acquisition	1,453	16,759	-	-	-	-	16,759
Exercise of stock options	214	816	-	-	-	-	816
Shares issued under employee stock purchase plan	86	653	-	-	-	-	653
Balance at December 31, 2004	51,892	610,742	16,027	(375)	(2,987)	(420,446)	203,336
Components of comprehensive income:							
Net income						11,299	11,299
Cumulative translation adjustments	-	-	(7,822)	-	-	-	(7,822)
Unrealized loss on investments	-	-	(24)	-	-	-	(24)
Comprehensive income							3,453
Exercise of stock options	349	1,747	-	-	-	-	1,747
Shares issued under employee stock purchase plan	229	1,543	-	-	-	-	1,543
Stock-based compensation expense for non-employee option grants	-	110	-	-	-	-	110
Balance at December 31, 2005	52,470	614,142	8,181	(375)	(2,987)	(409,147)	210,189
Components of comprehensive income:							
Net income						17,114	17,114
Cumulative translation adjustments	-	-	5,274	-	-	-	5,274
Unrealized gain on investments	-	-	70	-	-	-	70
Comprehensive income							22,458
Exercise of stock options	501	3,351	-	-	-	-	3,351
Shares issued under employee stock purchase plan	59	524	-	-	-	-	524
Stock-based compensation expense	-	2,408	-	-	-	-	2,408
Balance at December 31, 2006	53,030	\$ 620,425	\$ 13,525	(375)	\$ (2,987)	\$ (392,033)	\$ 238,930

The accompanying notes are an integral part of these consolidated financial statements.

**MATTSON TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	<b>Year Ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
		(thousands)	
Cash flows from operating activities:			
Net income	\$ 17,114	\$ 11,299	\$ 30,993
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Allowance for doubtful accounts	552	(946)	1,950
Amortization of intangibles	688	2,100	1,429
Deferred taxes	1,281	(455)	(827)
Depreciation	5,813	8,132	5,757
Gain on disposition of Wet business	(572)	(2,934)	-
Impairment of intangibles	2,618	-	-
Inventory valuation charge	1,659	2,507	(299)
Stock-based compensation	2,408	110	-
Other non-cash items	(151)	(27)	(52)
Changes in assets and liabilities:			
Accounts receivable	(26,769)	29,497	(25,227)
Advance billings	(318)	6,648	3,891
Inventories	(6,810)	7,337	(13,882)
Inventories - delivered systems	638	2,741	1,291
Prepaid expenses and other current assets	2,839	(1,052)	1,403
Other assets	(130)	(2,963)	1,481
Accounts payable	1,243	(640)	(3,046)
Accrued liabilities	6,981	(12,435)	(19,186)
Deferred revenue	4,318	(6,639)	(2,677)
Other liabilities	400	-	-
Net cash provided by (used in) operating activities	<u>13,802</u>	<u>42,280</u>	<u>(17,001)</u>
Cash flows from investing activities:			
Purchases of available-for-sale investments	(51,635)	(25,327)	(26,182)
Sales and maturities of available-for-sale investments	16,746	15,225	43,905
Purchases of property and equipment	(11,971)	(5,560)	(15,970)
Sales of property and equipment	604	104	131
Proceeds from the disposition of Wet business	-	2,934	-
Loans to Vortek prior to acquisition	-	-	(2,573)
Net cash paid for acquisition and acquisition-related expenses	-	-	(2,181)
Net cash used in investing activities	<u>(46,256)</u>	<u>(12,624)</u>	<u>(2,870)</u>
Cash flows from financing activities:			
Proceeds from stock plans	3,875	3,290	1,469
Proceeds from the issuance of common stock, net of offering costs	-	-	46,370
Restricted cash	-	511	(2)
Net cash provided by financing activities	<u>3,875</u>	<u>3,801</u>	<u>47,837</u>
Effect of exchange rate changes on cash and cash equivalents	<u>3,402</u>	<u>(6,517)</u>	<u>4,772</u>
Net increase (decrease) in cash and cash equivalents	<u>(25,177)</u>	<u>26,940</u>	<u>32,738</u>
Cash and cash equivalents, beginning of year	116,593	89,653	56,915
Cash and cash equivalents, end of year	<u>\$ 91,416</u>	<u>\$ 116,593</u>	<u>\$ 89,653</u>
Supplemental disclosures:			
Cash paid for interest	\$ 42	\$ 209	\$ 46
Cash paid for income taxes	\$ 617	\$ 62	\$ 2,260
Common stock issued for Vortek acquisition	\$ -	\$ -	\$ 16,759

The accompanying notes are an integral part of these consolidated financial statements.

**MATTSON TECHNOLOGY, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. Organization and Basis of Presentation**

***Organization***

Mattson Technology, Inc. (the Company or Mattson) was incorporated in California on November 18, 1988. In September 1997, the Company was reincorporated in the State of Delaware. As part of the reincorporation, each outstanding share of the California corporation, no par value common stock, was converted automatically to one share of the new Delaware corporation, \$0.001 par value common stock.

The Company designs, manufactures and markets semiconductor wafer processing equipment used in “front-end-of-line” and “back-end-of-line” fabrication of integrated circuits to the semiconductor manufacturing industry worldwide.

***Basis of Presentation***

The consolidated financial statements include the accounts of the Company and its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The Company’s year ends on December 31. The Company’s interim fiscal quarters end on the last Sunday in the calendar quarter.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported periods. Actual results could differ from those estimates.

**2. Summary of Significant Accounting Policies**

***Cash and Cash Equivalents***

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company’s cash and cash equivalents are carried at fair market value, and consist primarily of cash balances, high-grade money market funds and commercial paper.

***Investments***

The Company carries short-term investments, which primarily consist of United States agencies securities and United States corporate bonds at fair market value. These investments are reported in accordance with the provisions of Statements of Financial Accounting Standards (SFAS) No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. The Company classifies short-term investments as available-for-sale and they are reported at fair value, with unrealized gains and losses, net of tax, recorded in stockholders’ equity. The fair value of short-term investments is based on quoted market prices. Realized gains and losses and declines in fair value that are other than temporary are recorded in the consolidated income statements. Realized gains and losses are determined on a specific identification basis. At December 31, 2006, \$12.8 million in short-term investments had maturities of one to two years. The Company has recorded these investments as current as these investments are available for current operations and management’s intent is to realize these investments as required to fund current operations.

***Concentration of Credit Risk***

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash equivalents, investments, trade accounts receivable and financial instruments used in hedging activities.

The Company invests in a variety of financial instruments; such as United States agency securities, commercial paper, money market funds and corporate bonds. The Company limits the amount of credit exposure to any one financial institution or commercial issuer. To date, the Company has not experienced significant losses on these investments. The Company’s trade

accounts receivable are concentrated with companies in the semiconductor industry and are derived from sales in the United States, Japan, Korea, Taiwan, other Asian countries and Europe. Additionally, the Company is exposed to credit loss in the event of nonperformance by counterparties on the forward foreign exchange contracts used in hedging activities. The Company does not anticipate nonperformance by these counterparties. At December 31, 2006, one customer accounted for 35% of the Company's accounts receivable. At December 31, 2005, two customers accounted for 20% and 10% of the Company's accounts receivable.

### ***Allowance for Doubtful Accounts***

The Company performs ongoing credit evaluations of its customers and records specific allowances for bad debts when a customer is unable to meet its financial obligations, as in the case of bankruptcy filings or deteriorated financial position. Estimates are used in determining allowances for all other customers based on factors such as current trends, the length of time the receivables are past due and historical collection experience. The Company writes off a receivable account when all rights, remedies and recourses against the account and its principals are exhausted. The Company recorded a provision of \$0.6 million in 2006, a benefit of \$0.9 million in 2005 and a provision of \$2.0 million in 2004 for allowances for doubtful accounts.

### ***Inventories***

Inventories are stated at the lower of cost or market, with cost determined on a first-in, first-out basis, and include material, labor and manufacturing overhead costs. Finished goods are reported as inventories until the point of title transfer to the customer. Under the Company's terms of sale, title generally transfers when the Company completes physical transfer of the products to the freight carrier, unless other customer practices prevail. All intercompany profits related to the sales and purchases of inventory among the Company and its subsidiaries are eliminated from the consolidated financial statements.

The Company's policy is to assess the valuation of all inventories, including manufacturing raw materials, work-in-process, finished goods and spare parts, in each reporting period. The Company recorded inventory valuation charges of \$1.7 million in 2006, \$3.6 million in 2005 and \$0.3 million in 2004. Although the Company attempts to forecast future inventory demand, given the competitive pressures and cyclicity of the semiconductor industry, there may be significant unanticipated changes in demand or technological developments that could have a significant impact on the value of the Company's inventories and reported operating results.

### ***Property and Equipment***

Property and equipment are stated at cost. Depreciation is computed using the straight-line method based upon the estimated useful lives of the assets, which range from three to seven years. Leasehold improvements are amortized using the straight-line method over the useful lives or the term of the related lease, whichever is shorter.

Depreciation expense was \$5.8 million, \$8.1 million and \$5.8 million for the years ended December 31, 2006, 2005 and 2004, respectively. When assets are retired or otherwise disposed of, the assets and related accumulated depreciation are removed from the accounts. Gains or losses resulting from asset sales are included in other income (expense), net in the accompanying consolidated income statements. Repair and maintenance costs are expensed as incurred.

### ***Goodwill and Intangibles***

The Company reviews its goodwill and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable, and also reviews goodwill annually in accordance with SFAS No. 142, *Goodwill and Other Intangibles*. Goodwill and intangible assets, such as purchased technology, are generally recorded in connection with business acquisitions. The values assigned to goodwill and intangible assets are usually based on estimates and judgments regarding expectations for the success and life cycle of products and technologies acquired. A severe decline in expectations could result in significant impairment charges, which could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company is required to test its goodwill for impairment at the reporting unit level. The Company has determined that it has only one reporting unit. The test for goodwill impairment is a two-step process. The first step compares the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, thus the second step of the impairment test is unnecessary.

The second step, used to measure the amount of impairment loss, compares the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of goodwill exceeds the implied fair value of that goodwill, an impairment loss shall be recognized in an amount equal to that excess. There were no events or changes in circumstances during the first three quarters of 2006 which would have triggered an impairment review. During the fourth quarter of 2006, the Company completed its first step annual impairment test based on management estimates and fair value assessments, which did not indicate any impairment, thus the second step was not necessary.

### ***Impairment of Long-Lived Assets***

Pursuant to SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, the Company reviews its long-lived assets, including property and equipment and intangibles, for impairment whenever events or changes in circumstances indicate that the carrying amounts of these assets may not be recoverable. Recoverability is measured by a comparison of the assets' carrying amount to their expected future undiscounted net cash flows. If such assets are considered to be impaired, the impairment to be recognized is measured based on the amount by which the carrying amount of the asset exceeds its fair value.

During the year ended December 31, 2006, the Company recorded an impairment charge of \$2.6 million to write down the remaining net book value of the Radiant technology acquired from Vortek Industries Ltd. (Vortek) in October of 2004. As part of the overall evaluation of impairment, management conducted a thorough review of the intangible assets originally acquired in the Vortek acquisition. During this process, management looked at resource constraints, strategic focus and potential market opportunities for both the Radiant and Flash RTP technologies acquired from Vortek. Management decided that it is in Mattson's best interest to focus solely on the Flash RTP business and determined that the remaining net book value of the intangible asset relating to the Radiant technology was fully impaired.

During the years ended December 31, 2005 and 2004, the Company did not record any impairment charge.

### ***Warranty***

The warranty offered by the Company on its system sales generally ranges from 12 months to 36 months, depending on the product. A provision for the estimated cost of warranty, based on historical costs, is recorded as a cost of sales when the revenue is recognized. The Company's warranty obligations require it to repair or replace defective products or parts, generally at a customer's site, during the warranty period at no cost to the customer. The actual system performance and/or field expense profiles may differ from historical experience, and in those cases the Company adjusts its warranty accruals accordingly.

The following table summarizes movements in the product warranty accrual for the years ended December 31, 2006, 2005 and 2004:

	<b>Year Ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
		(thousands)	
Balance at the beginning of the year	\$ 13,458	\$ 16,044	\$ 16,508
Accrual for warranties issued during the year	19,746	14,125	12,982
Changes in liability related to pre-existing warranties	-	(6)	1,451
Settlements made during the year	(18,091)	(16,705)	(14,897)
Balance at the end of the year	<u>\$ 15,113</u>	<u>\$ 13,458</u>	<u>\$ 16,044</u>

### ***Foreign Currency Translation***

The functional currencies of the Company's foreign subsidiaries are their local currencies. Accordingly, all assets and liabilities of these foreign operations are translated using exchange rates in effect at the end of the period, and revenues and costs are translated using average exchange rates for the period. Gains or losses from translation of foreign operations where the local currencies are the functional currency are included as a component of accumulated other comprehensive income (loss). Foreign currency transaction gains and losses are recognized in the consolidated income statements as they are incurred.

## ***Revenue Recognition***

The Company derives revenue from two primary sources — equipment (tool) sales and spare part sales. The Company accounts for equipment sales in accordance with Securities and Exchange Commission (SEC) Staff Accounting Bulletin (SAB) No. 104, *Revenue Recognition in Financial Statements*, as follows: 1) for equipment sales of existing products with new specifications and for all sales of new products, revenue is recognized upon customer acceptance; 2) for equipment sales to existing customers who have purchased the same equipment with the same specifications and previously demonstrated acceptance provisions, or equipment sales to new customers purchasing existing products with established reliability, the Company recognizes revenue on a multiple element approach in which the Company bifurcates a sale transaction into two separate elements based on objective evidence of fair value. The two elements are the tool and installation of the tool. Under this approach, the portion of the invoice price that is due upon shipment, generally 90% of the total invoice price, is recognized as revenue upon shipment and title transfer of the tool; and the remaining portion of the total invoice price, generally 10% of the total invoice price, which is due once installation services have been accepted, is not recognized as revenue until final customer acceptance of the tool. From time to time, however, the Company allows customers to evaluate systems, and since customers can return such systems at any time with limited or no penalty, the Company does not recognize revenue for these evaluation systems until they are accepted by the customers. In 2006 and earlier periods, sales to customers in Japan were recognized upon title transfer, which generally occurred upon customer acceptance, with the exception of sales of RTP products through the Company's distributor in Japan, which were recognized upon title transfer to the distributor. In December 2006, the Company expanded its distributor relationship in Japan to cover all of the Company's products. Under the new distributor agreement, revenues are recognized upon title transfer, which generally occurs upon shipment to the distributor. For spare parts, the Company recognizes revenue upon shipment. The Company recognizes service and maintenance contract revenue on a straight-line basis over the service period of the related contract. Accounts receivable for which revenue has not been recognized are classified as advance billings in the accompanying consolidated balance sheets.

In all cases, revenue is only recognized when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable and collectibility is reasonably assured.

## ***Advertising Expenses***

Advertising costs are expensed as incurred. Advertising costs were not material for all periods presented.

## ***Foreign Currency Forward Exchange Contracts***

During 2006, the Company employed a foreign currency hedging program, utilizing foreign currency forward exchange contracts, to hedge foreign currency fluctuations associated with Japanese Yen denominated firm purchase commitments and accounts receivable balances. The goal of the hedging program was to hedge against foreign currency fluctuations associated with the sales of systems to Japan and the revaluation gains (losses) of foreign denominated accounts receivable.

During 2004, the Company employed a foreign currency hedging program to hedge foreign currency fluctuations associated with Euro and Japanese Yen denominated accounts receivable balances. In the fourth quarter of 2004, the Company also included Euro denominated intercompany balances in its foreign currency hedging program. The goal of the hedging program was to hedge against foreign currency fluctuations associated with the revaluation gains (losses) of foreign denominated accounts receivable and intercompany account balances.

All forward foreign exchange contracts employed by the Company did not exceed one year. Under SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, these forward contracts did not qualify as designated hedges. All outstanding forward foreign currency contracts were marked to market with the resulting unrealized gains (losses) recorded in other income (expense), net. The Company does not use foreign currency forward exchange contracts for speculative or trading purposes.

With respect to forward foreign currency exchange contracts, the Company recorded a net gain of \$0.6 million in 2006, a net loss of \$1.3 million for 2005 and a net gain of \$2.3 million for 2004 in other income (expense), net. At December 31, 2006, the Company had one outstanding forward foreign exchange contract for the purchase in total of US\$23.7 million in exchange for 2.8 billion Japanese Yen. Recording the fair value of this contract as of December 31, 2006 resulted in an

unrealized gain of \$0.1 million, which was charged to other income (expense), net in 2006. At December 31, 2005, the Company had no outstanding forward foreign exchange contracts.

### ***Income Taxes***

The Company provides for income taxes under the provisions of SFAS No. 109 *Accounting for Income Taxes*. SFAS No. 109 requires an asset and liability based approach in accounting for income taxes. Deferred income tax assets and liabilities are recorded based on the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates. Valuation allowances are provided against deferred income tax assets which are not likely to be realized. In accordance with the requirements of SFAS No. 109, future utilization of certain acquired net deferred tax assets, largely consisting of net operating loss carryforwards, if realized, will first be used to reduce the amount of goodwill recorded at the date of acquisition before reducing the tax provision.

### ***Net Income Per Share***

Basic net income per share is computed by dividing net income by the weighted average number of shares of common stock outstanding during the period. Diluted net income per share gives effect to all dilutive rights to acquire shares of common stock outstanding during the period. For purposes of computing diluted net income per share, weighted average common stock equivalents do not include stock options with an exercise price that exceeded the average market price of the Company's common stock for the period.

### ***Reclassifications***

For presentation purposes, certain prior period amounts have been reclassified to conform to the reporting in the current period financial statements. These reclassifications do not affect the Company's net income, cash flows or stockholders' equity. Depreciation expense associated with customer evaluation tools was previously classified as a component of cost of goods sold. Effective July 3, 2006, the Company classifies this depreciation expense as a selling expense, which is included in selling, general and administrative expenses in the accompanying income statements.

### ***New Accounting Pronouncements***

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS No. 159), which permits entities to elect to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. This election is irrevocable. SFAS No. 159 will be effective for the Company on January 1, 2008. The Company is currently assessing the potential impact that the adoption of SFAS No. 159 will have on its financial statements.

In September 2006, the SEC issued SAB No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Current Year Misstatements*. SAB No. 108 requires analysis of misstatements using multiple approaches in assessing materiality and provides for a one-time cumulative effect transition adjustment. The Company adopted SAB No. 108 in the fourth quarter of 2006. The adoption of SAB No. 108 had no impact to the Company's 2006 financial statements.

In September 2006, the Financial Accounting Standards Board (FASB) issued SFAS No. 157, *Fair Value Measurements*, which defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair value measurements. SFAS No. 157 does not require any new fair value measurements, but provides guidance on how to measure fair value by providing a fair value hierarchy used to classify the source of the information. This statement is effective for the Company beginning January 1, 2008. The Company is currently assessing the potential impact that the adoption of SFAS No. 157 will have on its financial statements.

In June 2006, the FASB ratified the Emerging Issues Task Force (EITF) conclusion on Issue No. 06-02, *Accounting for Sabbatical Leave and Other Similar Benefits Pursuant to Financial Accounting Standards Board (FASB) Statement No. 43, "Accounting for Compensated Absences"*. The EITF concluded that companies should accrue for employee sabbatical leave over the service period in which employees earn the right to sabbatical leave. EITF No. 06-02 is effective for years beginning after June 28, 2006, and will be adopted by the Company on January 1, 2007. The Company will adopt EITF No. 06-02 as a change in accounting principle, and will show the cumulative effect of adoption of approximately \$0.4 million in the first quarter of 2007, as permitted by the transition provisions of EITF No. 06-02.

In June 2006, the FASB issued FASB Interpretation (FIN) No. 48, *Accounting for Uncertainty in Income Taxes: An Interpretation of FASB Statement No. 109*. FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109. This interpretation defines the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. FIN No. 48 is effective for fiscal years beginning after December 15, 2006. The Company is currently evaluating the effect that the adoption of FIN No. 48 will have on its financial position and results of operations.

In December 2004, the FASB issued SFAS No. 123 (revised 2004), *Share-Based Payment*. SFAS No. 123(R) requires the Company to measure all employee stock-based compensation awards using a fair value method and record such expense in its consolidated financial statements. In March 2005, the SEC issued SAB No. 107, which provides the SEC Staff's views regarding interactions between SFAS No. 123(R) and certain SEC rules and regulations and provides interpretations of the valuation of share-based payments for public companies. The adoption of SFAS No. 123(R) requires additional accounting related to the income tax effects and additional disclosure regarding the cash flow effects resulting from share-based payment arrangements. The adoption of SFAS No. 123(R) in 2006 had a material impact on the Company's consolidated results of operations, financial position and statement of cash flows. See Note 11.

### 3. Financial Instruments

#### *Fair Value of Financial Instruments*

The carrying amounts of the Company's financial instruments as of December 31, 2006 and 2005, including cash and cash equivalents, short term investments, accounts receivable, accounts payable and forward foreign exchange contracts, approximate fair value due to the short maturities of these financial instruments.

#### *Cash, Cash Equivalents and Short-term Investments*

The Company's cash and cash equivalents and short-term investments are carried at fair market value. All short-term investments as of December 31, 2006 and 2005 are marked to market, with unrealized gains (losses) recorded as components of other comprehensive income. See Note 10.

Cash and cash equivalents by security type at December 31, 2006 and 2005 were as follows:

	<u>Amortized Cost</u>	<u>Unrealized Gains/(Losses)</u> (thousands)	<u>Estimated Fair Value</u>
<b>December 31, 2006:</b>			
Cash in bank	\$ 38,006	\$ -	\$ 38,006
Money market funds	17,483	-	17,483
Commercial paper	35,928	(1)	35,927
	<u>\$ 91,417</u>	<u>\$ (1)</u>	<u>\$ 91,416</u>
<b>December 31, 2005:</b>			
Cash in bank	\$ 35,969	\$ -	\$ 35,969
Money market funds	35,675	-	35,675
Commercial paper	44,942	7	44,949
	<u>\$ 116,586</u>	<u>\$ 7</u>	<u>\$ 116,593</u>

Short-term investments by security type at December 31, 2006 and 2005 were as follows:

	<u>Amortized Cost</u>	<u>Unrealized Gains/(Losses)</u> (thousands)	<u>Estimated Fair Value</u>
<b>December 31, 2006:</b>			
United States agency securities	\$ 37,100	\$ 14	\$ 37,114
United States corporate bonds	10,349	6	10,355
	<u>\$ 47,449</u>	<u>\$ 20</u>	<u>\$ 47,469</u>
<b>December 31, 2005:</b>			
United States agency securities	\$ 11,354	\$ (29)	\$ 11,325
Commercial paper	1,367	(3)	1,364
	<u>\$ 12,721</u>	<u>\$ (32)</u>	<u>\$ 12,689</u>

The maturities of short-term investments as of December 31, 2006 and 2005 were as follows:

	<u>December 31,</u>	
	<u>2006</u>	<u>2005</u>
	(thousands)	
Due within one year	\$ 34,644	\$ 12,689
Due in one to two years	12,825	-
	<u>\$ 47,469</u>	<u>\$ 12,689</u>

For 2006, 2005 and 2004, gross realized gains and losses on sales of short-term investments were not significant. At December 31, 2006, all gross unrealized losses on short-term investments had been in a loss position for less than 12 months. The Company reviews its investments to identify and evaluate indications of possible impairment. Factors considered in determining whether a loss is temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, credit quality and the Company's ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value.

#### 4. Balance Sheet Details

	<b>December 31,</b>	
	<b>2006</b>	<b>2005</b>
	(thousands)	
<b>Inventories:</b>		
Purchased parts and raw materials	\$ 22,964	\$ 22,529
Work-in-process	9,803	5,339
Finished goods	7,765	5,008
	<u>\$ 40,532</u>	<u>\$ 32,876</u>
<b>Property and equipment:</b>		
Machinery and equipment	\$ 47,990	\$ 38,706
Furniture and fixtures	11,597	12,777
Leasehold improvements	12,855	12,153
	<u>72,442</u>	<u>63,636</u>
Less: accumulated depreciation	<u>(44,604)</u>	<u>(41,121)</u>
	<u>\$ 27,838</u>	<u>\$ 22,515</u>
<b>Accrued liabilities:</b>		
Warranty	\$ 15,113	\$ 13,458
Accrued compensation and benefits	7,633	5,530
Income taxes payable	4,009	3,913
Other	14,555	12,577
	<u>\$ 41,310</u>	<u>\$ 35,478</u>

As of December 31, 2006 and 2005, the allowance for excess and obsolete inventory was \$16.6 million and \$19.3 million, respectively.

#### 5. Goodwill and Intangible Assets

The following table summarizes the components of goodwill and intangible assets and related accumulated amortization balances:

	<b>Goodwill</b>	<b>Developed Technology</b>	<b>Total</b>
		(thousands)	
<b>December 31, 2006:</b>			
Gross carrying amount	\$ 18,497	\$ 15,647	\$ 34,144
Accumulated amortization	-	(8,056)	(8,056)
Net carrying amount	<u>\$ 18,497</u>	<u>\$ 7,591</u>	<u>\$ 26,088</u>
<b>December 31, 2005:</b>			
Gross carrying amount	\$ 20,005	\$ 18,265	\$ 38,270
Accumulated amortization	-	(7,368)	(7,368)
Net carrying amount	<u>\$ 20,005</u>	<u>\$ 10,897</u>	<u>\$ 30,902</u>

In the fourth quarter of 2006, the Company recorded an impairment charge of \$2.6 million to write down the book value of certain intangible assets, as required by SFAS No. 144. Tax benefits of \$1.5 million related to the utilization of certain acquired deferred tax assets, consisting largely of net operating loss carryforwards, were used to reduce goodwill rather than benefit income taxes in accordance with the requirements of SFAS No. 109. See Note 18.

In 2005, the Company adjusted the fair value of the assets and liabilities acquired in the Vortek transaction. Pursuant to the adjustment in 2005, the Company reduced the valuation allowance for deferred tax assets by approximately \$4.4 million. This resulted in a reduction of goodwill during the period of approximately \$4.4 million. The resulting deferred tax asset of \$2.9 million and \$4.1 million at December 31, 2006 and 2005, respectively, has been offset against previously recorded deferred tax liabilities in the accompanying consolidated balance sheets in accordance with SFAS No. 109.

The Company recorded amortization expense for its developed technology of \$0.7 million, \$2.1 million, and \$1.4 million for the years ended December 31, 2006, 2005 and 2004, respectively. Annual amortization expense is estimated to be \$0.5 million for the years 2007 to 2011.

## **6. Restructuring Charges**

### ***2002 workforce reductions***

In 2002, the Company recorded workforce reduction restructuring charges of \$3.4 million in connection with plans to align its cost structure with projected sales resulting from the unfavorable economic conditions and to reduce future operating expenses. The Company paid \$3.3 million of the restructuring charges during 2002 and 2003, resulting in an accrued liability for workforce reduction of \$115,000 at December 31, 2003, which the Company paid in 2004.

### ***Consolidation of excess facilities***

In 2002 and 2003, the Company recorded restructuring charges of \$2.4 million for consolidation of several excess leased facilities in the U.S. and overseas. The Company paid \$1.3 million of the restructuring charges during 2002 and 2003, resulting in an accrued liability for consolidation of excess facilities of \$1,175,000 at December 31, 2003.

In 2004, the Company accrued for lease termination costs of \$450,000 in connection with the consolidation of excess facilities into the Company's current headquarters based in Fremont, California. During 2004, the Company made total cash payments of \$161,000 related to its 2002 restructuring plan, and released \$450,000 in unused facility-related reserve balances to the income statement, resulting in a remaining reserve of \$1,014,000 for consolidation of excess facilities at December 31, 2004. In 2005, the Company made cash payments of \$450,000 in connection with its 2004 accrual for lease termination costs. In 2006, the Company made cash payments of \$180,000 related to its 2002 restructuring plan.

The remaining lease obligations on vacated facilities that are non-cancelable, net of the anticipated income from subleasing these facilities, are estimated to be approximately \$375,000 as of December 31, 2006, which is expected to be paid out over the terms of the underlying leases through 2019. The income from subleasing these facilities is estimated based upon current comparable rates for leases in the respective markets. If facilities rental rates decrease in these markets, or if it takes longer than expected to sublease these facilities, the actual loss could exceed this estimate.

## **7. Guarantees**

During the ordinary course of business, the Company's bank provides standby letters of credit or other guarantee instruments on behalf of the Company to certain parties as required. The maximum potential amount that the Company could be required to pay is \$1.6 million, representing standby letters of credit outstanding as of December 31, 2006. The Company has not recorded any liability in connection with these guarantee arrangements beyond that required to appropriately account for the underlying transaction being guaranteed. The Company does not believe, based on historical experience and information currently available, that it is probable that any amounts will be required to be paid under these guarantee arrangements.

The Company is a party to a variety of agreements, pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in the context of contracts under which the Company may agree to hold the other party harmless against losses arising from a breach of representations or with respect to certain intellectual property, operations or tax-related matters. The Company's obligations under these agreements may be limited in terms of time and/or amount, and in some instances the Company may have defenses to asserted claims and/or recourse against third parties for payments made by the Company. It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the Company's obligations and the unique facts

and circumstances involved in each particular agreement. Historically, payments made by the Company under these agreements have not had a material effect on the Company's financial position or results of operations. The Company believes if it were to incur a loss in any of these matters, such loss would not have a material effect on the Company's financial position or results of operations.

## 8. Borrowing Facilities

The Company has a \$10 million revolving line of credit with a bank, which may be increased to \$20 million at the option of the Company. The revolving line of credit was renewed in April 2006, expires in April 2007 and has an annual commitment fee of \$30,000. All borrowings under this credit line bear interest at a per annum rate equal to the bank's prime rate plus 100 basis points. The line of credit is collateralized by a blanket lien on all of the Company's domestic assets including intellectual property. The line of credit requires the Company to satisfy certain quarterly financial covenants, including maintaining a minimum consolidated cash balance, maintaining a minimum domestic cash balance of unrestricted cash and cash equivalents, maintaining a minimum balance of investment accounts and not exceeding a maximum net loss limit. At December 31, 2006, the Company was in compliance with the covenants, and there was no borrowing under this credit line.

The Company's Japanese subsidiary has a credit facility with a Japanese bank in the amount of 600 million Yen (approximately \$5.1 million at December 31, 2006), collateralized by specific trade accounts receivable of the Japanese subsidiary. All borrowings under this credit line bear interest at a per annum rate equal to the Japanese prime rate. There are no financial covenant requirements for this credit facility. At December 31, 2006, there was no borrowing under this credit facility.

## 9. Commitments and Contingencies

The Company holds various operating leases related to its facilities and equipment worldwide and a sublease in respect of one of its facilities located in Exton, Pennsylvania. The following table sets forth the Company's minimum annual rental commitments with respect to its operating leases with various expiry dates through 2019 and its sublease which expires in 2007 at December 31, 2006:

	<b>Operating Lease Payments</b>	<b>Sublease Income</b>
	(thousands)	
2007	\$ 4,757	\$ (1,494)
2008	4,654	-
2009	4,609	-
2010	4,567	-
2011	4,081	-
Thereafter	24,315	-
	<u>\$ 46,983</u>	<u>\$ (1,494)</u>

Rent expense was approximately \$5.7 million, \$5.5 million and \$5.1 million, in 2006, 2005 and 2004, respectively. The Company recorded sublease income of approximately \$2.0 million, \$2.0 million and \$3.6 million in 2006, 2005 and 2004, respectively.

In 2005, the Company entered into a new lease agreement for its existing corporate headquarters building in Fremont, California. The lease is for a period of 10 years, commencing upon expiration of the current sublease on May 31, 2007, and has an initial annual base rent cost of approximately \$1.4 million, with annual base rent increases of approximately 3.5%. The Company has one five-year option to extend the lease at market lease rates in effect on the expiration date. Additionally, insurance, real property taxes and operating expenses are to be paid by the Company. The Company is responsible for an additional minimum lease payment at the end of the lease term of approximately \$1.5 million, subject to adjustment, which is being accounted for in accordance with SFAS No. 13 *Accounting for Leases*, and will be accrued on a straight-line basis over the lease term. The Company has provided the landlord a letter of credit for \$1.5 million to secure this obligation. The letter of credit amount may be increased to reflect any adjustments made to a restoration cost obligation provision included in the lease.

The Company leases two buildings previously used to house its manufacturing and administrative functions related to wet surface preparation products in Exton, Pennsylvania. The lease for both buildings will expire March 31, 2019 with a current combined rental cost of approximately \$1.5 million annually. The Company expects to make payments related to the above noted leases over the next twelve years, less any sublet amounts. The lease agreement for both buildings allows for subleasing the premises without the approval of the landlord. In June 2002, the administrative building was sublet for a period of approximately five years, until December 2007, with an option for the subtenant to extend for an additional five years. Total lease payments of approximately \$7.2 million are expected to cover all related costs on the administrative building during the sublease period. The sublessee for the manufacturing building location vacated the premises in September 2006 and the Company is currently marketing the property to prospective tenants. In determining the facilities lease loss, various assumptions were made, including the time period over which the buildings will be vacant, expected sublease terms and expected sublease rates. As of December 31, 2006 and 2005, the Company had an accrual balance of \$1.2 million and \$1.3 million, respectively, related to these leases. Adjustments to the accrual for these leases will be made in future periods, if necessary, as soon as evidence of any adjustment can be reasonably estimated as future events and circumstances become known.

In connection with the acquisition of Vortek, the Company became party to an agreement between Vortek and the Canadian Minister of Industry (the Minister) relating to an investment in Vortek by Technology Partnerships Canada. Under that agreement, as amended, the Company or Vortek agreed to various covenants, including (a) payment by the Company of a royalty to the Minister of 1.4% of revenues from Flash RTP products, up to a total of CAD14,269,290 (approximately \$12.3 million at December 31, 2006), and (b) Vortek maintaining a specified average workforce of employees in Canada through October 27, 2009. If the Company, or Vortek, does not satisfy its obligations, the Minister may demand payment of liquidated damages in the amount of CAD14,269,290 (approximately \$12.3 million at December 31, 2006) less any royalties paid by Vortek or the Company to the Minister.

In the ordinary course of business, the Company is subject to claims and litigation, including claims that it infringes third party patents, trademarks and other intellectual property rights. Although the Company believes that it is unlikely that any current claims or actions will have a material adverse impact on its operating results or its financial position, given the uncertainty of litigation, the Company cannot be certain of this. Moreover, the defense of claims or actions against the Company, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

The Company is currently party to legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these matters is not presently determinable and cannot be predicted with certainty, management does not believe that the outcome of any of these matters or any of the above mentioned legal claims will have a material adverse effect on the Company's financial position, results of operations or cash flows.

## 10. Stockholders' Equity

### *Comprehensive Income*

The components of accumulated other comprehensive income, net of related tax, at December 31, 2006 and 2005 are as follows:

	<b>December 31,</b>	
	<b>2006</b>	<b>2005</b>
	(thousands)	
Cumulative translation adjustments	\$ 13,480	\$ 8,206
Unrealized investment gain (loss)	45	(25)
	<u>\$ 13,525</u>	<u>\$ 8,181</u>

### *Share Offering*

On February 17, 2004, the Company sold approximately 4.3 million newly issued shares of common stock, and a shareholder sold approximately 4.3 million already outstanding shares of the Company's common stock, in an underwritten public offering priced at \$11.50 per share. This resulted in proceeds to the Company, net of underwriting discounts and transaction expenses, of approximately \$46.4 million. The Company used the net proceeds received from the offering for general

corporate purposes, including working capital requirements. The Company did not receive any proceeds from the sale of shares by the shareholder.

### ***Stockholder Rights Plan***

On July 28, 2005, the Company adopted a Stockholder Rights Plan (Rights Plan). Under the Rights Plan, stockholders of record at the close of business on August 15, 2005 received one share purchase right (Right) for each share of the Company's common stock held on that date.

The Rights, which currently trade with the Company's common stock and represent the right to purchase one one-thousandth of a share of preferred stock at \$55.00 per share, become exercisable when a person or group acquires 15% or more of the Company's common stock (acquiror) without prior approval of the Company's Board of Directors. In that event, the Rights permit Mattson stockholders, other than the acquiror, to purchase Mattson common stock having a market value of twice the exercise price of the Rights, in lieu of the preferred stock. Alternatively, when the Rights become exercisable, the Company's Board of Directors may authorize the issuance of one share of the Company's common stock in exchange for each Right that is then exercisable. In addition, in the event of certain business combinations, the Rights permit the purchase of the common stock of an acquiror at a 50% discount. Rights held by the acquiror will become null and void in each case. Prior to a person or group acquiring 15%, the Rights can be redeemed for \$0.001 each by action of the Board. The Rights expire on July 27, 2015. The Rights distribution was not taxable to stockholders.

The Rights Plan further authorizes the issuance of one Right with each share of common stock that becomes outstanding after the record date and before the acquisition of 15% of the Company's common stock by an acquiror. At December 31, 2006, approximately 53.0 million share purchase rights were outstanding under the Rights Plan.

## **11. Employee Stock Plans and Stock-Based Compensation**

### ***Stock Option Plans***

On May 25, 2005, the Company amended and restated the Company's 1989 Stock Option Plan (the 1989 Plan) as the 2005 Equity Incentive Plan (the 2005 Plan), under which a total of 11,975,000 shares of common stock have been reserved for issuance. The 2005 Plan amends the 1989 Plan to expand the types of stock-based incentives authorized under the 1989 Plan and to restate the 1989 Plan as the 2005 Plan. The Company had approximately 1.5 million shares available for future grants under the 2005 Plan at December 31, 2006.

In addition to stock options, the 2005 Plan authorizes the grant of stock purchase rights, stock bonuses and restricted stock units. Options and stock purchase rights granted under the 2005 Plan are for periods not to exceed seven years. Generally, incentive stock option and non-statutory stock option grants under the 2005 Plan must be at exercise prices that are at least 100% of the fair market value of the stock on the date of grant. The options generally vest 25% one year from the date of grant, with the remaining vesting 1/36th per month thereafter.

In connection with its acquisition of CFM Technologies, Inc. (CFM) in January 2001, the Company filed with the SEC in January 2001 a registration statement on Form S-8 for the four then existing stock option plans of CFM (CFM Plans), namely the 1992 Employee Stock Option Plan for approximately 248,000 shares, the Restated 1995 Incentive Plan for approximately 641,000 shares, the Restated Non-employee Directors' Plan for approximately 19,000 shares and the CFM Non-plan Stock Option Plan for approximately 21,000 shares. The options previously granted by CFM prior to the Company's acquisition had vesting terms set by CFM's then executive compensation and stock option committee of the board of directors, and expired 10 years after the date of grant. The Company continues to administer the CFM Plans to the extent that options granted previously are exercised by the optionees or that options previously granted become terminated under the respective terms of the CFM Plans. As of December 31, 2006, approximately 16,000 stock options in total remained outstanding and exercisable under the CFM Plans.

The options outstanding and exercisable at December 31, 2006 were in the following exercise price ranges:

Options Outstanding					Options Exercisable				
Range of Exercise Prices	Number	Weighted- Average Remaining Contractual	Weighted- Average Exercise Price	Aggregate Intrinsic Value	Number	Weighted- Average Remaining Contractual	Weighted- Average Exercise Price	Aggregate Intrinsic Value	
		Life				Life			
	(thousands)	(years)		(thousands)	(thousands)	(years)		(thousands)	
\$ 1.55 - \$ 3.20	796	6.1	\$ 2.49	\$ 5,437	730	6.0	\$ 2.49	\$ 4,985	
3.30 - 7.43	767	4.6	6.64	2,058	636	4.0	6.58	1,747	
7.49 - 8.30	865	5.6	7.76	1,347	571	5.2	7.71	922	
8.33 - 9.32	907	7.1	9.08	221	747	7.2	9.14	135	
9.35 - 10.44	874	4.8	10.12	-	751	4.4	10.19	-	
10.75 - 12.00	1,239	6.8	11.50	-	733	7.1	11.21	-	
12.08 - 69.20	588	4.7	18.42	-	568	4.7	18.64	-	
\$ 1.55 - \$ 69.20	<u>6,036</u>	5.8	\$ 9.27	<u>\$ 9,063</u>	<u>4,736</u>	5.6	\$ 9.22	<u>\$ 7,789</u>	

The aggregate intrinsic value in the table above represents the total pretax intrinsic value, based on the Company's closing stock price of \$9.32 as of December 31, 2006, which would have been received by the option holders had all option holders exercised their options as of that date. The total number of shares of common stock subject to in-the-money options exercisable as of December 31, 2006 was 2.7 million. The weighted average grant date fair value of options granted during the years ended December 31, 2006, 2005 and 2004 was \$7.32, \$5.77 and \$8.12 per share, respectively.

The total intrinsic value of options exercised during the year ended December 31, 2006 was \$2.3 million. The total cash received from employees as a result of employee stock option exercises during the year ended December 31, 2006 was \$3.4 million. The Company settles employee stock option exercises with newly issued common shares.

The following table summarizes the combined activity under all of the Company's equity incentive plans, including 16,000 shares outstanding under the Company's CFM plans:

	Awards Available For Grant	Options Outstanding	Weighted- Average Exercise Price
	(thousands)	(thousands)	
<b>Balances at December 31, 2005</b>	2,469	5,822	\$ 8.93
Options granted	(1,022)	1,022	10.35
Options exercised	-	(501)	6.59
Options cancelled/expired/forfeited	301	(307)	10.92
Restricted stock units granted	(264)	n/m <sup>(1)</sup>	n/m <sup>(1)</sup>
Restricted stock units cancelled	2	n/m <sup>(1)</sup>	n/m <sup>(1)</sup>
<b>Balances at December 31, 2006</b>	<u>1,486</u>	<u>6,036</u>	<u>\$ 9.27</u>

(1) not meaningful

### Restricted Stock Units

As of December 31, 2005, there were no restricted stock units outstanding and the Company had no deferred stock-based compensation balance related to restricted stock units. During the year ended December 31, 2006, the Company's Board of Directors approved the grant of 151,000 shares of restricted stock units at a weighted-average market value of \$11.39, of which 150,000 shares were outstanding at December 31, 2006. These restricted stock units generally vest 1/4 of the units granted on the first anniversary of the date of grant, and 1/12 of the units per quarter thereafter. 2005 Plan awards of

restricted stock units are counted against the total number of shares of common stock issuable under the plan at 1.75 shares for every one share subject thereto. At December 31, 2006, no shares of restricted stock units had vested. The value of the restricted stock units was based on the closing market price of the Company's common stock on the date of award.

### ***Acceleration of Stock Options***

On August 25, 2005, the Company accelerated the vesting of certain unvested and out-of-the-money stock options outstanding under the Company's stock plans. In making the decision to accelerate these options, the Board of Directors considered the interest of the stockholders in reducing the earnings impact of the adoption of SFAS No. 123(R) in 2006, and the impact that this could have had on the Company's market value. In addition, because these options had exercise prices in excess of the reported closing price on the date of the acceleration, they were not fully achieving their original objectives of incentive compensation and employee retention.

The acceleration of vesting applied to all unvested options that had an exercise price per share of \$9.05 or higher. As a result of the acceleration, options to purchase approximately 1.47 million shares of the Company's common stock became exercisable immediately. The weighted average exercise price of the affected options was \$10.20 per share. The total number of options subject to acceleration included options to purchase approximately 503,000 shares held by the executive officers and directors of the Company. In order to prevent unintended benefits to executive officers and directors, the Company imposed new restrictions on all shares received through the exercise of accelerated options held by those individuals, which will prevent the sale of those shares prior to the earlier of the original vesting date of the option or the individual's termination of employment.

In accordance with SFAS No. 123(R), the Company began applying expense recognition provisions relating to stock options in the first quarter of 2006. As a result of its action to accelerate the vesting of out-of-the-money options, the Company reduced the non-cash expense it otherwise would otherwise have been required to record in 2006 and future years. The accelerated vesting of these options did not result in a charge in 2005 based on generally accepted accounting principles.

### ***Employee Stock Purchase Plan***

In August 1994, the Company adopted an employee stock purchase plan (Purchase Plan) under which 6,175,000 shares of common stock had been reserved for issuance through December 31, 2006. The number of shares sold under the Purchase Plan were approximately 59,000 in 2006, 229,000 in 2005, and 86,000 in 2004. In 2006, the Purchase Plan did not contain a look-back option feature. At December 31, 2006, approximately 3.5 million shares were available for issue under the Purchase Plan.

The Purchase Plan is administered over varying offering periods up to 27 months. In 2004, the Company completed one six-month offering period in July 2004. In 2005, the Company completed a six-month offering period in January 2005, and a five-month offering period in October 2005. In 2006, the Company completed a seven-month offering period in November 2006. The weighted-average fair value of Purchase Plan shares issued during the years ended December 31, 2006, 2005 and 2004 was \$0.99, \$2.21 and \$2.26 per share. As there is no look-back option feature in 2006, compensation cost for 2006 is determined using the intrinsic value of the 10% discount, and the use of an option-pricing model is not applicable.

Eligible employees may designate not more than 15% of their gross cash compensation to be deducted each pay period for the purchase of common stock under the Purchase Plan, and participants may not purchase more than \$25,000 worth of common stock in any calendar year or 10,000 shares in any offering period. On the last business day of each purchase period, shares of common stock are purchased with the employees' payroll deductions accumulated during the offering period. For the offering periods in 2004 and 2005, the offering was at a price per share equal to 85% of the market price of the common stock on the date immediately preceding the offering date or the date immediately preceding the purchase date, whichever was lower. For the offering period completed in 2006, the offering is at a price per share equal to 90% of the market price of the common stock on the date immediately preceding the purchase date.

### ***Stock-Based Compensation***

Effective January 1, 2006, Mattson adopted the provisions of SFAS No. 123(R), which established accounting for stock-based awards exchanged for employee services. Accordingly, stock-based compensation cost is measured at grant date, based on the fair value of the award, and is recognized as expense over the requisite service period for the employee. The

Company previously applied Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations, and provided the required pro forma disclosures of SFAS No. 123, *Accounting for Stock-Based Compensation*.

***Prior to the adoption of SFAS No. 123(R)***

Prior to the adoption of SFAS No. 123(R), the Company provided the disclosures required under SFAS No. 123, as amended by SFAS No. 148, *Accounting for Stock-Based Compensation – Transition and Disclosures*. The pro-forma information for the years ended December 31, 2005 and 2004 were as follows:

	<b>Year Ended December 31,</b>	
	<b>2005</b>	<b>2004</b>
	(in thousands, except per share amounts)	
Net income as reported:	\$ 11,299	\$ 30,993
Deduct: Total employee stock-based compensation expense determined under fair value method, net of tax	(12,884)	(5,944)
Pro forma net income (loss)	<u>\$ (1,585)</u>	<u>\$ 25,049</u>
Basic net income (loss) per share:		
As reported	\$ 0.22	\$ 0.63
Pro forma	\$ (0.03)	\$ 0.51
Diluted net income (loss) per share:		
As reported	\$ 0.21	\$ 0.61
Pro forma	\$ (0.03)	\$ 0.49

***Impact of the adoption of SFAS No. 123(R)***

The Company elected to adopt SFAS No. 123(R) using the modified prospective application method as described therein. Accordingly, during the year ended December 31, 2006, the Company recorded stock-based compensation costs totaling the amount that would have been recognized had the fair value method been applied since the effective date of SFAS No. 123, adjusted for estimated forfeitures. Previously reported amounts have not been restated.

In November 2005, the FASB issued FASB Staff Position No. 123(R)-3, *Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards*. The Company has elected to adopt the alternative transition method provided in the FASB Staff Position for calculating the tax effects of share-based compensation pursuant to SFAS 123(R). The alternative transition method includes a simplified method to establish the beginning balance of the additional paid-in-capital pool (APIC pool) related to the tax effects of employee share-based compensation, which is available to absorb tax deficiencies recognized subsequent to the adoption of SFAS 123(R).

The effect of recording stock-based compensation for the year ended December 31, 2006 was as follows:

	<b>Year Ended</b>
	<b>December 31, 2006</b>
	(in thousands, except per share amounts)
<b>Stock-based compensation by type of award:</b>	
Stock options	\$ 1,952
Restricted stock units (1)	383
Employee stock purchase plan	73
<b>Total stock-based compensation</b>	<b>2,408</b>
Tax effect on stock-based compensation	-
<b>Effect on net income</b>	<b>\$ 2,408</b>
<b>Stock-based compensation by category of expense:</b>	
Cost of sales	\$ 56
Research, development and engineering	277
Selling, general and administrative	2,075
<b>Effect on net income</b>	<b>\$ 2,408</b>
<b>Effect on earnings per share:</b>	
Basic	\$ 0.05
Diluted	\$ 0.05

- (1) Stock-based compensation expense of \$383,000 for the year ended December 31, 2006, related to restricted stock units, would also have been recorded under the provisions of APB No. 25.

As of December 31, 2005, the Company had an unrecorded deferred stock-based compensation balance related to stock options of \$2.0 million after estimated forfeitures. In the Company's pro forma disclosures prior to the adoption of SFAS No. 123(R), the Company accounted for forfeitures upon occurrence. SFAS No. 123(R) requires forfeitures to be estimated at the time of grant and revised if necessary in subsequent periods if actual forfeitures differ from those estimates. During the year ended December 31, 2006, the Company granted stock options to acquire approximately 1,022,000 shares of common stock, with an estimated total grant-date fair value of \$7.5 million. As of December 31, 2006, the unrecorded deferred stock-based compensation balance related to stock options was \$6.5 million after estimated forfeitures, which will be recognized over an estimated weighted average amortization period of 2.9 years.

During the year ended December 31, 2006, the Company granted approximately 151,000 restricted stock units, with an estimated total grant-date fair value of \$1.5 million, after estimated forfeitures. Stock-based compensation cost for restricted stock units for the year ended December 31, 2006 was \$383,000. As of December 31, 2006, there was \$1.2 million of unrecorded deferred stock-based compensation after estimated forfeitures related to nonvested restricted stock units granted under the 2005 Plan. That cost is expected to be recognized over an estimated weighted average amortization period of 3.0 years.

### ***Valuation Assumptions***

In connection with the adoption of SFAS No. 123(R), the Company reassessed its valuation technique and related assumptions. The Company estimates the fair value of stock options using the Black-Scholes valuation model, consistent with the provisions of SFAS No. 123(R), SAB No. 107, *Share-Based Payment*, and the Company's prior period pro forma disclosures of net earnings, including stock-based compensation (determined under a fair value method as prescribed by SFAS No. 123). The fair value of each option grant is estimated on the date of grant using the Black-Scholes option valuation model and the straight-line attribution approach with the following weighted-average assumptions:

	Year Ended December 31,		
	2006	2005	2004
<b>Options:</b>			
Expected dividend yield	-	-	-
Expected stock price volatility	88%	90%	98%
Risk-free interest rate	4.4%	4.1%	3.5%
Expected life of options	5 years	4 years	5 years
<b>ESPP:</b>			
Expected dividend yield	n/a (1)	-	-
Expected stock price volatility	n/a (1)	45%	58%
Risk-free interest rate	n/a (1)	3.5%	1.8%
Expected life of options	n/a (1)	0.5 year	0.5 year

- (1) In 2006, the Company's offering does not include a look-back option feature. As there is no option feature in 2006, compensation cost for 2006 is determined using the intrinsic value of the 10% discount, and the use of an option-pricing model is not applicable.

Option-pricing models require the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying stock. The expected life of each option was determined by analyzing historical exercise and post-vest forfeiture patterns. The risk-free interest rate was determined using the rates for United States Treasury notes for similar terms. The expected stock price volatility assumption was determined using the historical volatility of the Company's common stock.

## 12. Employee Savings Plans

### *Employee Savings Plan*

The Company has a retirement/savings plan (the Plan), which is qualified under section 401(k) of the Internal Revenue Code. All full-time employees who are twenty-one years of age or older are eligible to participate in the Plan. The Plan allows participants to contribute up to an amount allowed by the applicable Internal Revenue Service guidelines. The Company may make a discretionary matching contribution equal to a percentage of the participants' contributions. In 2006, 2005 and 2004 the Company made matching contributions of approximately \$563,000, \$570,000 and \$573,000, respectively.

### *Deferred Compensation Plan*

Effective January 1, 2006, the Company adopted a deferred compensation plan. Under the deferred compensation plan, the Company provides eligible employees and non-employee members of its Board of Directors who participate in the plan (Participants) the opportunity to defer a specified percentage of their base salary or retainer fees for participation on the Company's Board and Board Committees. In addition, the Company's Board of Directors may make discretionary contributions to the accounts of one or more Participants.

Under the Plan, the Company is obligated to deliver on a future date the deferred compensation credited to a Participant's account, adjusted for any positive or negative investment results from investment alternatives selected by the Participant under the Plan (the Obligations). The Obligations are unsecured general obligations of the Company and rank in parity with other unsecured and unsubordinated indebtedness of the Company. The Obligations are not transferable, except upon death of a Participant. There is no trading market for the Obligations.

As of December 31, 2006, the Company had approximately \$400,000 in net assets under the Plan, which are invested primarily in equity investment funds. The Company has recorded these assets as other assets and has recorded the corresponding liability to Plan participants as other long-term liabilities in the accompanying consolidated balance sheets. Unrealized gains and losses on Plan investments are recorded in accumulated other comprehensive income in the accompanying consolidated balance sheets. Unrealized gains and losses for the year ended December 31, 2006 were not material.

### 13. Reportable Segments

SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, establishes standards for reporting information about operating segments, geographic areas and major customers in financial statements. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or chief decision making group, in deciding how to allocate resources and in assessing performance. The Chief Executive Officer of the Company is the Company's chief decision maker. As the Company's business is completely focused on one industry segment, the design, manufacturing and marketing of advanced fabrication equipment to the semiconductor manufacturing industry, management believes that the Company has one reportable segment. The Company's revenues and profits are generated through the sales of systems and services for this one segment.

The following shows net sales by geographic areas based on the installation locations of the systems and the location of services rendered. Royalty revenues from DNS of \$7.5 million, \$10.8 million and \$5.8 million in 2006, 2005 and 2004, respectively, are included in the net sales to Japan.

	Year Ended December 31,		
	2006	2005	2004
	(thousands)		
United States	\$ 30,481	\$ 34,461	\$ 32,423
Taiwan	75,961	65,348	108,293
Korea	63,548	29,859	19,230
Japan	58,399	37,875	33,720
Other Asia	33,356	18,313	30,556
Europe and others	20,036	23,523	22,263
	<u>\$ 281,781</u>	<u>\$ 209,379</u>	<u>\$ 246,485</u>

In 2006, two customers accounted for 15% and 12% of total revenues. In 2005, two customers accounted for 12% and 11% of total revenues. In 2004, two customers accounted for 16% and 12% of total revenues.

Geographical information relating to the Company's property and equipment as of December 31, 2006 and 2005 is as follows:

	December 31,	
	2006	2005
	(thousands)	
United States	\$ 15,616	\$ 13,868
Germany	6,248	4,978
Canada	5,613	3,231
Others	361	438
	<u>\$ 27,838</u>	<u>\$ 22,515</u>

### 14. DNS Patent Infringement Suit Settlement

On March 5, 2002, a jury in San Jose, California rendered a verdict in favor of the Company's then subsidiary, Mattson Wet Products, Inc. (formally CFM Technologies, Inc.), in a patent infringement suit against Dainippon Screen Manufacturing Co., Ltd. (DNS), a Japanese manufacturer of semiconductor wafer processing equipment. On June 24, 2002, the Company entered into a settlement agreement and a license agreement with DNS, under which DNS agreed to make payments to the Company totaling between \$75 million (minimum) and \$105 million (maximum), relating to past damages, partial reimbursement of attorney fees and costs and license fees.

The Company determined that \$16 million related to reimbursement of past attorneys' fees and an option fee agreement, and therefore recorded the \$16 million as a reduction in operating expenses in the third quarter of 2002. The Company also determined that \$29 million related to prior use of its technology and damages, and that the remaining \$30 million

in minimum payments related to royalties for future periods, which are recorded as royalty revenue in the year in which the royalties are earned or reported to the Company by DNS, which is generally when payments become due.

For the years ended December 31 2006, 2005 and 2004, DNS paid the Company minimum annual royalty payments of \$6.0 million each year. In 2006, 2005 and 2004, DNS made additional payments of \$2.4 million, \$5.4 million and \$0.4 million, respectively, based on sales by DNS for their fiscal years ended March 31, 2006, 2005 and 2004, respectively. These additional payments were recorded as royalty revenue in the second quarters of 2006, 2005 and 2004 when the Company received notification of the amount to be paid for the fiscal year. In total, \$6 million of these payments were applied against the minimum payment due in June 2007, and \$2.2 million of these payments were in excess of the minimum payments. The Company has received all scheduled minimum annual royalty payments. The remaining royalty payments to be paid by DNS under the license agreement will be due in June 2007 and June 2008, based on sales by DNS through January 15, 2008.

As of December 31, 2006, DNS has made payments aggregating \$77.2 million under the terms of the settlement and license agreements. Of this amount, \$1.5 million, net, was withheld for Japanese income tax. Effective July 1, 2004, no withholding tax is applicable on royalty payments from DNS due to the ratification of a new tax treaty on November 6, 2003, between Japan and the United States of America.

The Company recognized \$7.5 million, \$10.8 million and \$5.8 million of royalty revenue for the years ended December 31, 2006, 2005 and 2004, respectively, which is recognized as net sales in the accompanying consolidated statements of operations.

## 15. Disposition of Wet Business

On March 17, 2003, the Company sold the portion of its business that related to developing, manufacturing, selling and servicing wet surface preparation products for the cleaning and preparation of semiconductor wafers (the Wet business) to SCP Global Technologies, Inc. (SCP). SCP paid the Company the initial purchase price of \$2.0 million in cash. That initial purchase price was subject to adjustment based on a number of criteria, including an earn-out, up to an aggregate maximum of \$5.0 million, payable to the Company based upon sales by SCP of certain products to identified customers through December 31, 2004.

In 2005, the Company received earn-out payments of approximately \$2.9 million from SCP for sales in 2004. The Company has recorded this payment as additional proceeds from the sale of the Wet business. The payment has been recorded as a reduction of operating expenses for 2005 in the accompanying consolidated income statements.

In 2006, the Company concluded all activities related to the disposition of the Wet business, and released a remaining accrual of \$0.6 million, which was previously established as an estimate of a portion of the projected costs to fulfill the Company's obligations under the sale of the Wet business. The payment has been recorded as a reduction of operating expenses for 2006 in the accompanying consolidated income statements.

## 16. Income Taxes

The components of income before provision for income taxes are as follows:

	Year Ended December 31,		
	2006	2005	2004
		(thousands)	
Domestic income	\$ 23,498	\$ 4,929	\$ 17,119
Foreign income	(2,290)	2,570	7,003
Income before provision for income taxes	<u>\$ 21,208</u>	<u>\$ 7,499</u>	<u>\$ 24,122</u>

The provision (benefit) for income taxes consists of the following:

	<b>Year Ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
	(thousands)		
Current:			
Federal	\$ 674	\$ (68)	\$ (607)
State	97	60	60
Foreign	485	(336)	(5,709)
Total current	1,256	(344)	(6,256)
Deferred:			
Federal	1,444	(456)	(615)
State	113	-	-
Foreign	1,281	(3,000)	-
Total deferred	2,838	(3,456)	(615)
Provision (benefit) for income taxes	\$ 4,094	\$ (3,800)	\$ (6,871)

Deferred tax assets (liabilities) are comprised of the following:

	<b>December 31,</b>	
	<b>2006</b>	<b>2005</b>
	(thousands)	
Net operating loss carryforwards	\$ 94,893	\$ 105,907
Reserves not currently deductible	14,617	15,437
Capital loss carryforward	13,117	12,273
Depreciation	7,376	6,643
Settlement payments	(25)	1,924
Tax credit carryforwards	6,338	5,666
Deferred revenue	4,009	881
Other	1,857	669
Total deferred tax asset	142,182	149,400
Valuation allowance	(137,297)	(142,259)
Total net deferred tax asset	4,885	7,141
Deferred tax liability - acquired intangibles	(2,885)	(4,141)
Net deferred tax asset	\$ 2,000	\$ 3,000

Net changes in the income tax valuation allowance are as follows:

	<b>December 31.</b>	
	<b>2006</b>	<b>2005</b>
	(thousands)	
Balance at the beginning of the year	\$ 142,259	\$ 169,124
Utilization and other reductions, net	(4,962)	(26,865)
Balance at the end of the year	\$ 137,297	\$ 142,259

The provision for income taxes reconciles to the amount computed by multiplying income before income tax by the U.S. statutory rate of 35% as follows:

	Year Ended December 31,		
	2006	2005	2004
		(thousands)	
Provision (benefit) at statutory rate	\$ 7,423	\$ 2,625	\$ 8,443
Deferred tax asset valuation allowance	(4,324)	(6,652)	(8,875)
Settlement with foreign tax authorities	(47)	(639)	(6,227)
State taxes, net of Federal benefit	92	187	603
Foreign earnings taxed at different foreign rates	(622)	(146)	(212)
Foreign earnings taxed at U.S. rate	276	778	-
Federal refund from amended return	-	-	(628)
Nondeductible stock option expense	436	-	-
Other	860	47	25
Total provision (benefit) for income taxes	<u>\$ 4,094</u>	<u>\$ (3,800)</u>	<u>\$ (6,871)</u>

The net deferred tax asset of \$2.0 million and \$3.0 million at December 31, 2006 and 2005, respectively, relates to the Company's operations in Germany. Management has evaluated both positive and negative factors in determining whether a valuation allowance in Germany is necessary. Positive factors considered include that the Company's operations in Germany are primarily sales of products and services to the Company's operations in the United States under a transfer pricing agreement that recognizes profit for German statutory purposes. Additionally, there is also an unlimited carryover of net operating losses in Germany, and management has the intent to continue manufacturing operations in Germany for the foreseeable future. Based on the analysis of objective evidence, management believes that it is more likely than not that the Company will generate sufficient taxable income to realize this net deferred tax asset.

The valuation allowance at December 31, 2006 and 2005 is attributable to Federal and state deferred tax assets, as well as foreign deferred tax assets other than the German net deferred tax asset of \$2.0 million in 2006 and \$3.0 million in 2005. Management believes that sufficient uncertainty exists with regard to the realizability of these tax assets such that a valuation allowance is necessary. Factors considered in providing a valuation allowance include the lack of a significant history of consistent profits and the lack of carry-back capacity to realize these assets. Based on the absence of objective evidence, management is unable to assert that it is more likely than not that the Company will generate sufficient taxable income to realize these remaining net deferred tax assets. At December 31, 2006, the Company had Federal and state net operating loss carryforwards of approximately \$297.9 million and \$81.9 million, respectively, which will expire at various dates through 2025. The Company also has foreign net operating loss carryforwards in Canada of approximately \$11.5 million that will expire at various dates through 2026.

The Federal and state net operating losses acquired from the STEAG Semiconductor Division, CFM and Concept are also subject to change in control limitations as defined in Section 382 of the Internal Revenue Code. Furthermore, the Company had a change in control in April 2002, which limited its net operating losses generated prior to the date the ownership change occurred. If certain substantial changes in the Company's ownership occur, there would be an additional annual limitation on the amount of the net operating loss carryforwards that can be utilized. The Company acquired \$48.0 million of deferred tax assets as a result of its acquisitions of the Vortek, STEAG Semiconductor Division, CFM and Concept Systems Design, Inc.

Tax benefits of \$1.5 million related to the utilization of certain acquired deferred tax assets, consisting largely of net operating loss carryforwards, were used to reduce goodwill rather than benefit income taxes in accordance with the requirements of SFAS No. 109. Future utilization of certain acquired net operating losses, if realized, will first be used to reduce the amount of goodwill and identified intangibles recorded at the date of acquisition before reducing the tax provision.

At December 31, 2006, the Company has \$3.1 million of valuation allowance related to stock option deductions, which, if realized, will be accounted for as an addition to equity rather than as a reduction of the provision for taxes.

## 17. Net Income Per Share

Net income per share is calculated in accordance with SFAS No. 128, *Earnings Per Share*, which requires dual presentation of basic and diluted net income per share on the face of the income statement. Basic earnings per share is computed by dividing income available to common stockholders by the weighted-average number of shares of common stock outstanding for the period. Diluted net income per share is computed using the weighted-average number of shares of common stock outstanding plus the effect of all dilutive securities representing potential shares of common stock outstanding during the period.

The following table summarizes the incremental shares of common stock from these potentially dilutive securities, calculated using the treasury stock method.

	Year Ended December 31,		
	2006	2005	2004
		(thousands)	
Weighted average common shares outstanding - basic	52,457	51,557	49,539
Diluted potential common shares from stock options	1,011	989	1,481
Escrow shares related to Vortek acquisition	-	238	53
Weighted average common shares - diluted	53,468	52,784	51,073

Total stock options outstanding at December 31, 2006, 2005 and 2004 of 2.9 million, 3.2 million and 2.7 million, respectively, were excluded from the computations, as their inclusion would have been antidilutive.

## 18. Acquisition of Vortek Industries, Ltd.

On October 27, 2004, the Company acquired certain outstanding debt and equity ownership interests in Vortek Industries Ltd. (Vortek), a privately held corporation amalgamated under the laws of British Columbia, for a total purchase price of \$18.9 million. Vortek, based in Vancouver, Canada, was a developer of millisecond flash annealing technology for rapid thermal processing of silicon wafers used in the manufacturing of semiconductors. The purchase price consisted of approximately 1.5 million shares of Mattson common stock valued at approximately \$16.7 million and approximately \$2.2 million in cash for acquisition-related expenses. Prior to the closing date of the Vortek acquisition (October 27, 2004), Mattson provided loans to Vortek aggregating to \$2.6 million. These loans still existed at December 31, 2006 and December 31, 2005, and were eliminated in consolidation. As a result of the transaction, Vortek became a wholly-owned subsidiary of the Company. Of the shares of common stock issued by the Company in the Vortek transaction, 290,561 (the Escrow Shares) were held subject to an escrow agreement. The Escrow Shares were subject to forfeiture in the event of valid indemnification claims within a period of 12 months from October 27, 2004. No claims were presented, and the Escrow Shares were released in October 2005. In connection with the Vortek acquisition, the Company entered into a Stock Registration and Restriction Agreement, dated as of October 27, 2004, pursuant to which the Company agreed to register the shares issued in the Vortek acquisition, other than the Escrow Shares, under the Securities Act of 1933 for resale by the recipients, subject to certain restrictions on the transfer of such shares.

This acquisition was consummated principally to expand and strengthen the Company's RTP technology portfolio, and supports the Company's long-term growth strategy. The acquisition was accounted for as a purchase transaction, and accordingly the assets and liabilities acquired were recorded at their fair values at the date of acquisition based on management estimates and relative fair value assessments. The results of operations of Vortek have been included in the Company's consolidated financial statements subsequent to the acquisition date.

The Company's allocation of the purchase price is summarized as follows:

	<b>Purchase Price Allocation</b>
	(thousands)
Goodwill	\$ 16,212
Existing technology (estimated useful life of 17 years)	11,700
Current assets	1,435
Property, plant and equipment	847
Liabilities assumed	(6,808)
Deferred tax liability on intangibles	(4,446)
	<u>\$ 18,940</u>

In addition, the Company acquired CAD11.0 million (approximately \$9.5 million) of deferred tax assets in connection with the acquisition of Vortek. During the third quarter of 2005, the Company adjusted the fair value of the assets and liabilities acquired in the Vortek transaction. Pursuant to the adjustment in 2005, the Company reduced the valuation allowance for deferred tax assets by approximately \$4.4 million. This resulted in a reduction of goodwill of approximately \$4.4 million. The resulting deferred tax asset of \$2.9 million and \$4.1 million at December 31, 2006 and 2005 has been offset against the recorded deferred tax liabilities of \$2.9 million and \$4.1 million in the consolidated balance sheets in accordance with SFAS No. 109.

SFAS No. 144 requires the Company to evaluate in each reporting period the carrying value of its long-lived assets, and to record an impairment charge if the carrying value of the asset may not be recoverable. In the fourth quarter of 2006, as part of the Company's overall evaluation of impairment, management conducted a thorough review of the intangible assets originally acquired in the Vortek acquisition. During this process, management looked at resource constraints, strategic focus, and potential market opportunities for both the Radiant and Flash RTP technologies acquired from Vortek. Management decided that it is in Mattson's best interest to focus solely on the Flash RTP business, and determined that the remaining book value of intangible assets relating to the Radiant technology were fully impaired. Accordingly, the Company recorded an impairment charge of \$2.6 million to write down the book value of certain intangible assets. The write down represented the remaining book value of the Radiant technology acquired from Vortek in October of 2004.

#### ***Unaudited Pro Forma Results of Operations***

The following unaudited pro forma results of operations present the impact on the Company's results of operations for 2004 as if the Vortek acquisition had occurred on January 1, 2004.

	<b>Year Ended December 31, 2004</b>	
	<b>Reported</b>	<b>Pro forma Combined (Unaudited) <sup>(1)</sup></b>
	(thousands, except per share amounts)	
Net sales	\$ 246,485	\$ 246,793
Net income	\$ 30,993	\$ 23,788
Earnings per share - basic	\$ 0.63	\$ 0.48
Earnings per share - diluted	\$ 0.61	\$ 0.47

- (1) Net income includes interest charges on preference shares of \$1.5 million from January 1, 2004 through October 26, 2004, prior to the Company's acquisition of Vortek.

## **19. Related Party Transactions**

In Japan, the Company contracts outsource installation and repair services and sells spare parts through an unrelated party, Mattson Service Company (MSC). A director of the Company, Shigeru Nakayama, holds a minority interest in MSC. In 2006, 2005 and 2004, the value of spare parts and services transactions between the Company and MSC were \$4.2 million, \$2.9 million and \$3.6 million, respectively. The Company's management believes that the payments of commissions to MSC related to the sales of spare parts to customers in Japan and the purchases of contract installation and repair services from MSC were on terms that represent the market value of these transactions.

In December 2004, the Company entered into an agreement with the landlord of facilities leased by the Company in Pliezhausen, Germany, under which the lease was terminated and the Company paid approximately \$2.0 million to the landlord in 2005. The landlord for these facilities is an affiliate of STEAG, who was the Company's largest stockholder at the time the Company entered into this agreement.

On February 17, 2004, STEAG sold approximately 4.3 million shares of the Company's common stock in an underwritten public offering at \$11.50 per share. As of December 31, 2006, STEAG's successor entity, SES BG, did not own any shares of Mattson common stock.

## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Mattson Technology, Inc.

We have completed integrated audits of Mattson Technology, Inc.'s 2006, 2005 and 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2006 in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

### *Consolidated financial statements and financial statement schedule*

In our opinion, the consolidated financial statements listed in the index appearing under Item 8 present fairly, in all material respects, the financial position of Mattson Technology, Inc. and its subsidiaries at December 31, 2006 and 2005, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2006 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 11 to the consolidated financial statements, effective January 1, 2006 the Company changed its method of accounting for share-based payments.

### *Internal control over financial reporting*

Also, in our opinion, management's assessment, included in *Management's Report on Internal Control over Financial Reporting* appearing under Item 9A, that the Company maintained effective internal control over financial reporting as of December 31, 2006 based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, based on criteria established in *Internal Control - Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized

acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

San Jose, California

March 2, 2007

## Supplementary Financial Information

### Selected Quarterly Consolidated Financial Data (Unaudited)

The following tables set forth our unaudited condensed consolidated income (loss) statement data for each of the eight quarterly periods ended December 31, 2006. We have prepared this unaudited information on a basis consistent with our audited consolidated financial statements, reflecting all normal recurring adjustments that we consider necessary for a fair presentation of our financial position and operating results for the fiscal quarters presented. Basic and diluted earnings per share are computed independently for each of the quarters presented. Therefore, the sum of quarterly basic and diluted per share information may not equal annual basic and diluted earnings per share.

	Three Months Ended			
	April 2, 2006	July 2, 2006	October 1, 2006	December 31, 2006
	(thousands, except per share amounts)			
Net sales	\$ 58,413	\$ 63,304	\$ 76,460	\$ 83,604
Gross profit	\$ 24,382	\$ 26,055	\$ 26,267	\$ 32,357
Income from operations	\$ 2,507	\$ 4,464	\$ 3,466	\$ 5,053
Net income	\$ 3,693	\$ 5,152	\$ 4,587	\$ 3,682
Net income per share:				
Basic	\$ 0.07	\$ 0.10	\$ 0.09	\$ 0.07
Diluted	\$ 0.07	\$ 0.10	\$ 0.09	\$ 0.07
Shares used in computing net income per share:				
Basic	52,271	52,456	52,502	52,601
Add: dilutive effect from stock options	1,538	1,087	726	873
Diluted	53,809	53,543	53,228	53,474

	Three Months Ended			
	March 27, 2005	June 26, 2005	September 25, 2005	December 31, 2005
	(thousands, except per share amounts)			
Net sales	\$ 52,779	\$ 60,310	\$ 45,882	\$ 50,408
Gross profit	\$ 20,369	\$ 26,973	\$ 17,865	\$ 20,046
Income (loss) from operations	\$ (1,056)	\$ 6,388	\$ 572	\$ (528)
Net income (loss)	\$ (1,356)	\$ 6,765	\$ 1,129	\$ 4,761
Net income (loss) per share:				
Basic	\$ (0.03)	\$ 0.13	\$ 0.02	\$ 0.09
Diluted	\$ (0.03)	\$ 0.13	\$ 0.02	\$ 0.09
Shares used in computing net income (loss) per share:				
Basic	51,344	51,442	51,504	51,905
Add: dilutive effect from stock options	-	846	990	1,019
Add: escrow shares related to Vortek	-	290	290	93
Diluted	51,344	52,578	52,784	53,017

Net income for the fourth quarter of 2006 included a loss of \$2.6 million related to a writedown of intangible assets initially recorded in the acquisition of Vortek, and a reduction of \$1.5 million of tax benefits related to the utilization of acquired deferred tax assets, consisting largely of net operating loss carryforwards, which were used to reduce goodwill rather than benefit income taxes in accordance with the requirements of SFAS No. 109. The reduction of tax benefits in the fourth quarter included approximately \$0.7 million which related to the first three quarters of 2006. The Company's management has determined that the impact of recording this reduction in the fourth quarter of 2006 was not material to each quarterly period of 2006. Net income for the fourth quarter of 2005 included a benefit of \$3.0 million related to the release of a portion of the valuation allowance against deferred tax assets. Net income for the third quarters of 2006 and 2005 included nonrecurring gains of \$0.6 million and \$2.9 million, respectively, related to the sale of our Wet business in 2003.

## **Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

### **Item 9A. *Controls and Procedures***

#### **Remediation of Previously Identified Material Weaknesses**

During the process of preparing our Annual Report on Form 10-K for the year ended December 31, 2005, our management identified the following material weaknesses as of December 31, 2005:

1. We did not maintain effective controls, including monitoring, over the financial statement closing and reporting process.
2. We did not maintain effective controls over the valuation and accuracy of certain inventory and related costs of goods sold.

Beginning in the fourth quarter of 2005, and continuing through 2006, our management took actions to remedy the material weaknesses identified above. These actions included improving our finance organization by adding and redefining positions and functional roles within the organization, improving control procedures, adding significant layers of internal review and hiring additional personnel with appropriate levels of financial reporting expertise. In addition, we added an additional layer of internal review over the computation of our reserves for slow-moving and excess and obsolete inventory calculations in the fourth quarter of 2005, which we have continued in each quarter of 2006.

As of December 31, 2006, we have determined that the new controls are effectively designed and have demonstrated effective operation for a sufficient period of time to enable management to conclude the material weaknesses identified in 2005 have been remediated.

#### **Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, as of December 31, 2006. Our disclosure controls and procedures are intended to ensure that the information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as the principal executive and financial officers, respectively, to allow timely decisions regarding required disclosures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

It should be noted that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events.

#### **Management's Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting; as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended. A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and disposition of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide

reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2006. In making this assessment, management used the criteria set forth in the framework established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) entitled *Internal Control—Integrated Framework*. Based on our evaluation under the framework in *Internal Control — Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2006.

Our management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2006 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears in this Annual Report on Form 10-K.

### **Changes in Internal Control over Financial Reporting**

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, also conducted an evaluation of our internal control over financial reporting to determine whether any change occurred during the fourth quarter of 2006 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, other than the remediation of the two material weaknesses that existed at December 31, 2005, as described above, our management concluded that there was no such change during the fourth quarter.

### **Item 9B. Other Information**

None.

## **PART III**

### **Item 10. Directors, Executive Officers and Corporate Governance**

For information with respect to executive officers, see Part I of this Annual Report on Form 10-K, under "Executive Officers of the Registrant." The other information required by this item will be set forth in the 2007 Proxy Statement under the captions "Election of Directors," "Report of the Audit Committee" and "Section 16(a) Beneficial Ownership Reporting Compliance" and is incorporated herein by reference.

We have adopted a Code of Ethics and Business Conduct for all officers, directors and employees. We have posted the Code of Ethics and Business Conduct on our Website located at [www.mattson.com](http://www.mattson.com). We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or a waiver from, this Code of Ethics by posting such information on our Website.

### **Item 11. Executive Compensation**

The information required by this item will be set forth in the 2007 Proxy Statement under the captions "Executive Compensation and Other Matters" and "Report of the Compensation Committee on Executive Compensation" and is incorporated herein by reference.

## **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

Information related to the security ownership of certain beneficial owners and management will be set forth in the 2007 Proxy Statement under the caption “Security Ownership of Management and Principal Stockholders,” and is incorporated herein by reference. For information with respect to our securities authorized for issuance under our equity compensation plans, see Item 5 of Part II of this Annual Report on Form 10-K, under “Equity Compensation Plan Information.”

## **Item 13. Certain Relationships and Related Transactions, and Director Independence**

The information required by this item will be set forth in the 2007 Proxy Statement under the caption “Certain Relationships and Related Transactions, and Director Independence” and is incorporated herein by reference.

## **Item 14. Principal Accountant Fees and Services**

The information required by this item will be set forth in the 2007 Proxy Statement under the captions “Audit and Related Fees” and “Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditors” and is incorporated herein by reference.

## **PART IV**

## **Item 15. Exhibits and Financial Statement Schedules**

### **(a)(1) Financial Statements**

The financial statements filed as part of this report are listed on the Index to Consolidated Financial Statements in Item 8 on page 35.

### **(a)(2) Financial Statement Schedules**

Schedule II — Valuation and Qualifying Accounts for the three years ended December 31, 2006, 2005 and 2004, which is included on page 72 of this Form 10-K.

### **(a)(3) Exhibits**

<b>Exhibit Number</b>	<b>Description</b>	<b>Notes</b>
3.1	Amended and Restated Certificate of Incorporation of Mattson Technology, Inc.	(1)
3.2	Third Amended and Restated Bylaws of Mattson Technology, Inc.	(2)
4.1	Form of Senior Indenture.	(3)
4.2	Form of Senior Debt security (included in Exhibit 4.1).	
4.3	Form of Subordinated Indenture.	(3)
4.4	Form of Subordinated Debt security (Included in Exhibit 4.3).	
4.5	Form of Rights Agreement between the Company and Mellon Investor Services, LLC as Rights Agent (including as <u>Exhibit A</u> the form of Certificate of Designation, Preferences and Rights of the Terms of the Series A Preferred Stock, as <u>Exhibit B</u> the form of Right Certificate, and as <u>Exhibit C</u> the Summary of Terms of Rights Agreement)	(4)
4.6	Amendment No. 1 to Rights Agreement between the Company and Mellon Investor Services, LLC as Rights Agent	

<b>Exhibit Number</b>	<b>Description</b>	<b>Notes</b>
10.1	2005 Equity Incentive Plan	(5) (C)
10.2	Nonqualified Deferred Compensation Plan	(6) (C)
10.3	1989 Stock Option plan, as amended	(2) (C)
10.4	1994 Employee Stock Purchase Plan	(7) (C)
10.5	Form of Indemnity Agreement	(8) (C)
10.6	Executive Change of Control agreement between Mattson Technology, Inc. and David Dutton, dated as of March 4, 2002.	(2) (C)
10.7	Form of Executive Change of Control agreement Between Mattson Technology, Inc. and its Executive Vice Presidents and Product Division Presidents.	(2) (C)
10.8	Industrial Space Lease, dated August 1, 2005, between the Company and Renco Equities IV, a California partnership.	(9)
10.9	Sublease agreement dated February 27, 2003, by and between Lam Research Corporation, a Delaware Corporation, and Mattson Technology, Inc., a Delaware Corporation, for lease of building.	(10)
10.10	Lease agreement dated September 2, 2001, by and between RENCO EQUITIES IV, a California partnership, and Lam Research Corporation, a Delaware Corporation, for lease of building.	(10)
21.1	Subsidiaries of Registrant.	
23.1	Consent of Independent Registered Public Accounting Firm	
31.1	Certification of Chief Executive Officer Pursuant to Sarbanes-Oxley Act Section 302(a).	
31.2	Certification of Chief Financial Officer Pursuant to Sarbanes-Oxley Act Section 302(a).	
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350.	
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350.	

Notes:

- (C) Management contract or compensatory plan or arrangement.
- (1) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. current report on Form 8-K/A filed on January 30, 2001.
- (2) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. quarterly report on Form 10-Q filed on August 14, 2002.
- (3) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. registration statement on Form S-3 (File No. 333-111527) filed on December 23, 2003.
- (4) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. current report on Form 8-A12G filed on August 22, 2005.
- (5) Incorporated by reference to Appendix A to Mattson Technology, Inc. proxy statement filed on April 20, 2005.
- (6) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. current report on Form S-8 filed on December 16, 2005.
- (7) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. quarterly report on Form 10-Q filed on August 6, 2004.
- (8) Incorporated by reference to Appendix B to the Mattson Technology, Inc. Proxy Statement filed on June 20, 1997.
- (9) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. quarterly report on Form 10-Q filed on November 4, 2005.
- (10) Incorporated by reference to corresponding exhibit to Mattson Technology, Inc. quarterly report on Form 10-Q filed on May 14, 2003.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MATTSON TECHNOLOGY, INC.  
(Registrant)

March 2, 2007

By:

/s/ DAVID DUTTON

David Dutton  
*Chief Executive Officer  
and Director*

March 2, 2007

By:

/s/ WILLIAM TURNER

William Turner  
*Chief Financial Officer  
and Executive Vice President — Finance*

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each person whose signature appears below constitutes and appoints David Dutton and William Turner, and each of them, his true and lawful attorneys-in-fact, each with full power of substitution, for him in all capacities, to sign any amendments to this form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ DAVID DUTTON</u> David Dutton	Chief Executive Officer and Director	March 2, 2007
<u>/s/ WILLIAM TURNER</u> William Turner	Chief Financial Officer and Executive Vice President — Finance (Principal Financial and Accounting Officer)	March 2, 2007
<u>/s/ JOCHEN MELCHIOR</u> Dr. Jochen Melchior	Chairman of the Board and Director	March 2, 2007
<u>/s/ HANS-GEORG BETZ</u> Hans-Georg Betz	Director	March 2, 2007
<u>/s/ SHIGERU NAKAYAMA</u> Shigeru Nakayama	Director	March 2, 2007
<u>/s/ KENNETH SMITH</u> Kenneth Smith	Director	March 2, 2007
<u>/s/ KENNETH KANNAPPAN</u> Kenneth Kannappan	Director	March 2, 2007
<u>/s/ JOHN BOLGER</u> John Bolger	Director	March 2, 2007

**SCHEDULE II**  
**VALUATION AND QUALIFYING ACCOUNTS**

**Allowance for Doubtful Accounts**

<u>Fiscal Year</u>	<u>Balance at Beginning of Year</u>	<u>Charged (Credited) to Income</u>	<u>Deductions and Other</u>	<u>Balance at End of Year</u>
	(thousands)			
2006	\$ 3,591	\$ 552	\$ (921)	\$ 3,222
2005	\$ 6,392	\$ (946)	\$ (1,855)	\$ 3,591
2004	\$ 5,567	\$ 1,950	\$ (1,125)	\$ 6,392

Schedules other than those listed above have been omitted since they are either not required, not applicable, or because the information required is included in the consolidated financial statements or the notes thereto.