



# **mattson**

**Annual Report 2003**

## To Our Shareholders:

Despite a tough business environment, 2003 was a very positive year for Mattson.

Throughout 2003, the global semiconductor capital equipment industry contended with ongoing difficult business conditions. During this challenging time, the Mattson team focused on executing our business strategies to improve our operating leverage and deliver “best-of-breed” products and services.

### A Turnaround Year

In 2003, we delivered exceptional improvements in our financial results and in our products. We met our key financial and business objectives:

- Reduced operating expenditures and achieved profitability in the fourth quarter of 2003
- Customers ramped our Aspen III Highlands low-k/copper strip system for 90 nanometer (nm) production and began volume production of our next-generation RTP tool
- Gained sales momentum in our core markets
- Achieved a bookings trend higher than the overall industry average

These significant accomplishments were achieved during a year in which we realigned our operating structure, enhanced our balance sheet and strengthened our product development programs. Our focused strategies are working and have helped us to navigate our business through the downturn. The key strategies that are helping our new business model to succeed include:

- Extend **Technology Leadership** in core segments of strip and RTP
- Strengthen **Customer Collaborations and Partnerships** to build **Customer Loyalty**
- Achieve **Operational Excellence** through improved flexibility and efficiencies

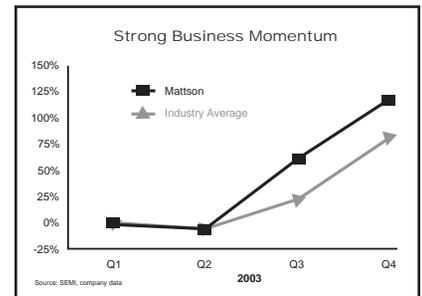
### Technology Leadership

Mattson is a global technology leader in our key markets of photoresist strip and rapid thermal processing (RTP). We intend to extend this leadership by continuing to develop innovative products and processes that deliver “results on the wafer” to our customers. During the year, we made significant product advances and built upon our leading product positions in strip and RTP.

Front-end-of-line photoresist processing requires high strip rates at very low cost of ownership (CoO). We are the industry’s bulk strip leader and are focused not only on innovating advanced technology but also on improving the reliability and productivity advantages of our existing systems. In 2003, we improved our inductively coupled plasma technology in our strip products to achieve even higher throughput across all strip applications. Our enhanced system achieved beta acceptance at a leading 300 millimeter (mm) Taiwanese foundry customer, and it is planned to go into the initial stages of production ramp in early 2004.

In 2003, we saw strong momentum in the back-end-of-line strip area, where very precise cleaning of the critical metal interconnect area is required. Our Aspen III Highlands system is currently in use in high-volume 130 nm production by chip-makers transitioning to copper and is being ramped for 90 nm production on 300 mm wafers. The Highlands is in development use for 65 nm low-k strip processes, and we are collaborating closely with our customers to expand its existing processing capabilities for next-generation applications. We continue to secure new customer wins and receive repeat production orders for the Highlands, a testament to its product performance and low total CoO.

*2003 was a very positive year for Mattson.....we delivered exceptional improvements in our financial results and in our products.*



*Mattson is a global technology leader in our key markets of photoresist strip and rapid thermal processing (RTP).*

Over the year, we also saw market success for our RTP products. Our 3000 series continued to gain acceptance with new customers in the 300 mm DRAM arena. We expanded our offering into the oxidation process area with our 3000 Steam product. Our 3000 Plus, introduced in 2002, gained significant momentum with foundry customers and was chosen by International SEMATECH for baseline control processes and the testing of new materials in advanced transistor development.

The beta units of our newest-generation RTP tool delivered excellent results in 130 nm applications at our first customer sites. In late 2003, we began to ship production units of this latest-generation RTP tool, securing orders from Europe, Taiwan and Japan, evidence of the tool's significant productivity and processing advantage. Customers are now ramping this tool for 90 nm processes and have also validated the production capability of this leading-edge RTP tool for advanced 65 nm technology node applications.

### ***Leadership in Industry Technology Transitions***

The semiconductor industry strives to build smaller, faster and cheaper chips that provide greater functionality at lower costs to support the proliferation of new electronic devices. Three key technology transitions affecting the industry's ability to accomplish this gained significant momentum over the last year:

- The move from 200 mm to 300 mm wafers
- The migration toward deep sub-micron technology nodes
- The introduction of new materials, such as copper and low-k (or capacitance) dielectrics.

During the year, semiconductor companies ramped production of chips based on sub-100 nm designs, increased production capacity for 300 mm and expanded their use of copper interconnects. We are collaborating closely with our customers to help them overcome the challenges of these next-generation processes.

We do business with most of the world's 300 mm fabs, and many future adopters are already our customers. In 2003, we continued to build upon our leading 300 mm position and expanded our customer base with new design wins for our advanced products. Our 300 mm sales and bookings grew significantly, and we believe that this will translate into further market share gains.

### **Customer Relationships**

Mattson Technology has a reputation as a dependable high quality supplier. Our customers turn to us because we provide dry strip and RTP solutions that enable them to achieve greater productivity, higher throughput, better yields and improved process repeatability. To achieve this, we work closely with our global customers to ensure that we remain responsive to their product and processing needs. We develop process and product technology roadmaps that are aligned to our customers' future technical and production requirements, enabling them to transition to new and more advanced technologies and device architectures.

### ***Penetrating Growth Markets***

We have established strong customer relationships with the top semiconductor manufacturers, and our customer-centric culture and product leadership is enabling us to win new customers, penetrate new markets, attain preferred vendor status and build loyalty. In 2003, we experienced stronger demand in our markets across geographic regions and expanded our market presence by securing key new customer wins for our products in the US, Japan, Taiwan and China for both logic and memory applications.

*In 2003, we continued to build upon our leading 300 mm position and expanded our customer base with new design wins for our advanced products.*

*Our customers turn to us because we provide dry strip and RTP solutions that enable them to achieve greater productivity, higher throughput, better yields and improved process repeatability.*

*We have established strong customer relationships with the top semiconductor manufacturers, and our customer-centric culture and product leadership is enabling us to win new customers, penetrate new markets, attain preferred vendor status and build loyalty.*

China is poised to become the second largest market for consumer chips by 2010. We have continued to invest in this growth market, and our global support infrastructure and proven technology should enable us to increase our market penetration and extend our strategic customer relationships with leading foundries in this rapidly developing area.

## **Operational Excellence**

### *Cyclically Flexible Enterprise*

Mattson is focused on increasing operational efficiencies, reducing costs and preparing operations to respond quickly to the peaks and valleys of our cyclical industry. Our new cyclically flexible enterprise (CFE) business model is focused on generating operating profits across industry conditions and leveraging our supply chain infrastructure for improved flexibility. During the recent downturn, we outsourced noncritical and noncore processes and R&D to capable outside solutions providers who specialize in these areas as a primary focus and who can help us to meet peak demand more cost-effectively during an industry upcycle. This strategy of expanding our sphere of capability through collaborative partnerships allows us to concentrate our resources on the areas that help us to win competitively: critical technologies in strip and RTP.

Our CFE outsourced manufacturing model has been a key driver of our operational improvement. Our manufacturing partner is successfully increasing production of our 200 mm strip and RTP systems to meet increasing product demand. In 2003, Mattson's excellent quality systems and operations helped us to achieve the International Organization for Standardization (ISO) 9001:2000 global certification for all Mattson operations. We expect our restructured and strengthened business model to provide further leverage.

### **Financial Results**

We have focused on coming out of the recent downturn profitable and financially and operationally healthy. We executed well in 2003 and achieved many financial milestones that we will continue to build on in the next year:

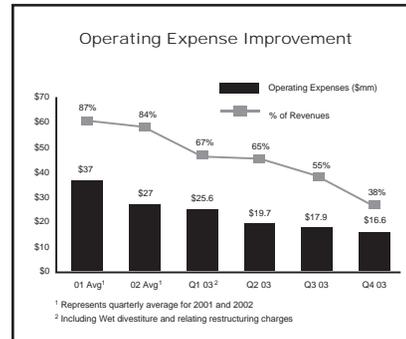
- Exceeded our projection for breakeven results in the fourth quarter, with \$0.02 EPS
- Increased revenues over 40% from the second quarter to \$43.4 million in the fourth quarter
- Decreased operating expenses for 4 consecutive quarters from \$25.6 to \$16.6 million
- Increased revenue per employee by 62% for the fourth quarter compared to the second quarter

Our crisp execution and focus on cost reduction and profitability also translated into a strengthened balance sheet, additional margin growth, cost-structure improvements and increased manufacturing efficiencies.

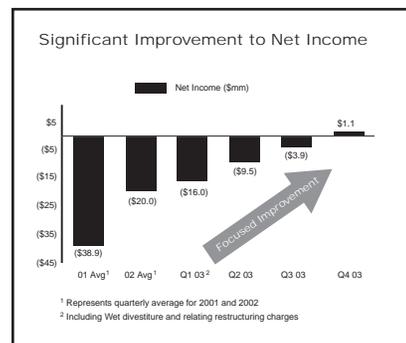
Our steadily improved financial results each quarter in 2003 reflect the steps we took to streamline our operations and the inherent benefits of our CFE business model and outsourcing initiatives. We remain focused on achieving additional margin improvements and reducing peak-to-trough volatility by further lowering our cost structuring while enhancing operational efficiencies to improve profitability as we emerge from the recent technology downturn.

## **Future Growth and Market Opportunities**

Over the past two years, we worked toward repositioning our business. In 2003, we followed through on the commitments we made: cutting our cost structure and restoring the company to profitability. We believe that we have established a solid foundation for the company.



*Our new cyclically flexible enterprise (CFE) business model is focused on generating operating profits across industry conditions and leveraging our supply chain infrastructure for improved flexibility.*



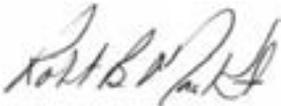
In 2004, our focus will be on growth of our business through global market expansion and strengthened technology leadership in the 90 nm and 300 mm transitions. We believe our technology leadership in strip and RTP strategically positions us to benefit from the next investment cycle as the demand for advanced chips increases and investment in leading-edge capacity resumes.

We plan to capitalize on our opportunities for growth in 2004 while continuing to build a business enterprise that generates increasing value for all of our stakeholders.

*In 2004, our focus will be on growth of our business through global market expansion and strengthened technology leadership in the 90 nm and 300 mm transitions.*



David L. Dutton  
President and Chief Executive Officer



Robert B. MacKnight  
Chief Operating Officer



Ludger H. Viefhues  
Chief Financial Officer



Ludger H. Viefhues (left)  
David L. Dutton (center)  
Robert B. MacKnight (right)

This letter to Shareholders contains forward-looking statements regarding, among other matters, industry and technology trends, including migration toward 300 mm wafer processing and reductions in device geometries, the comparative advantages we expect our products to have, our expectations of increased sales of new and current products, anticipated market share gains, future market opportunities and growth in China, and our expectations and strategies for improvement in the Company's future financial performance. Forward-looking statements address matters which are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. In addition to the general risks associated with the development of complex technology, future results of the Company will depend on a variety of factors, including the timing of significant orders, the ability of the Company to bring new systems to market, the timing of new product releases by the Company's competitors, slowdowns in the semiconductor industry, the Company's ability to control its costs, and other competitive factors. The Company's most recent Annual Report on Form 10-K, and other filings with the Securities and Exchange Commission, include further discussion of risks and uncertainties regarding the Company's business. John, please review & make any appropriate modifications for legalese.

-----

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

-----

**FORM 10-K**

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2003

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

Commission file number 0-21970

-----

**MATTSON TECHNOLOGY, INC.**

(Exact name of registrant as specified in its charter)

<b>DELAWARE</b>	<b>77-0208119</b>
<b>(State or other jurisdiction of incorporation or organization)</b>	<b>(I.R.S. employer identification number)</b>

47131 Bayside Drive  
Fremont, California 94538  
(Address and zip code of principal executive offices)

Registrant's telephone number, including area code: 510-657-5900

-----

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.

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 such 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 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 10K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 29, 2003 was \$103,286,547, based on the closing price for the registrant's common stock reported by the NASDAQ National Market System. Shares of voting stock held by each director and executive officer and by STEAG Electronics Systems AG have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares outstanding of registrant's Common Stock as of March 1, 2004: 49,770,029.

Documents incorporated by reference:

Portions of the Proxy Statement for registrant's 2004 Annual Meeting of Stockholders, which will be filed on or before April 29, 2004, are incorporated herein by reference into Part III.

---

## **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 management's current expectations. Such risks and uncertainties include those set forth herein under "Risk Factors That May Affect Future Results and Market Price of Stock" and "Management's Discussion and Analysis of Financial Condition and Results of Operations". 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 ("SEC").

## **PART I**

### **ITEM 1. BUSINESS**

We are a leading supplier of semiconductor wafer processing equipment used in the fabrication of integrated circuits (ICs). According to Gartner Dataquest, an independent research firm, we were the second largest supplier of both dry strip equipment and RTP equipment for the semiconductor industry in 2002. 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-130 nm design rules and the use of new materials, such as copper and low capacitance (low-k) dielectrics.

Our customers consist of foundries, and logic and memory device manufacturers throughout the world, and have included Elpida Memory, GSMC, He Jian, Hynix, IBM Microelectronics, Infineon Technologies, Inotera, Motorola, Nan Ya, Powerchip, ProMOS Technologies, Samsung Electronics, SMIC, Sony Corporation, Texas Instruments, Toshiba, TSMC and UMC Group. We have a global sales and support organization, focused on developing strong, long-term customer relationships. We have design and manufacturing centers in the United States and Europe. Our sales and support presence in Asia includes offices in Japan, Korea, Singapore, Taiwan and China, which represent the largest share of the world's capacity for semiconductor manufacturing. We opened our office in Shanghai in 2002 to give closer support to customers in the growing China market, where our core products are now installed at several leading foundries. In 2003, we achieved the International Organization for Standardization (ISO) 9001:2000 global certification for our manufacturing sites and sales and service operations.

During 2002 and early 2003, we focused our business on our core technologies in dry strip and RTP. We took restructuring actions to align the company with this narrower focus and divested our wet products division. As a result, we significantly streamlined our operations and are able to concentrate our resources on the development and sale of our RTP and strip products.

Mattson Technology was incorporated in California in 1988, reincorporated in Delaware in 1997, and is headquartered in Fremont, California. Our principal executive offices are 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 web site 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 formed. To build an IC, transistors are first created on the surface of the silicon wafer, known as front-end-of-line fabrication, and then the transistors are microscopically wired together by means of the interconnect metal layers, known as the back- end-of-line 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 hundreds of ICs on a single wafer.

Semiconductor manufacturers face continuing competitive pressures to manufacture increasingly complex ICs, improve their yields per wafer and reduce their manufacturing costs. Advances in semiconductor manufacturing processes focus on methods to enable smaller and smaller transistor sizes and circuit designs. Each new generation of manufacturing process is characterized by the distance between pattern lines in the design of the circuit, measured in nanometers (billionths of a meter). Current generation production processes are commonly based on 130 nm, and leading semiconductor manufacturers have pilot process lines based on 90 nm. The trend toward increasing device complexity and shrinking geometries requires new interconnect materials, such as copper conducting materials and low-k dielectric films. At the same time, the semiconductor industry is in a transition from 200 mm diameter wafers to 300 mm wafers. These developments increase manufacturing complexity and create the need for manufacturing equipment with ever more precise process control capability.

## **The Mattson Strategy**

We are committed to executing the following strategies, and investing in our technology, customer support infrastructure and operational effectiveness in order to allow us to increase our market share while building long-term customer loyalty.

Our strategy for success focuses on three key areas:

### ***Leverage innovative technologies to extend product leadership***

We plan to maintain our focus on market and technology leadership in strip and RTP and on the delivery of innovative products with superior technology and productivity to bring total cost of ownership advantages to our customers. We are continuously investing in three generations of wafer process technology—improving current generation production tools, qualifying and refining next generation equipment, and developing tools for future generation processes, to deliver better results on the wafer surface. We will continue to collaborate with customers, academia and industry consortia to develop product innovations with process control advantages that allow IC manufacturers to achieve higher productivity at lower cost.

### ***Collaborate closely with customers to strengthen customer loyalty***

We strive to attain preferred vendor status and build loyalty with our customers by helping to make them more productive while reducing their capital expenditures. Our global sales and support organization focuses on solving specific manufacturing challenges faced by customers, aligning our product development plans with our customers' future technical and production requirements, and expanding our presence in regional growth markets, such as China.

### ***Improve operational flexibility and effectiveness***

We continue to streamline our internal operations and adjust our manufacturing resources to create a flexible organization that can operate profitably through changing industry cycles. Our strategy is to outsource selected non-critical functions in manufacturing, spare parts logistics and subsystem design to third parties specializing in these areas. This allows us to concentrate our resources on our core technologies in strip and RTP, reduce our cost structure and achieve greater flexibility to expand and contract manufacturing capacity as market conditions require.

## **Markets, Applications and Products**

### *Dry Strip Market*

A strip system removes photoresist 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 chemistries

and dry technologies. The more advanced dry stripping systems, such as our Aspen Strip, 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. Complex ICs require multiple stripping steps, which 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 130 nm and below, 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 200 and 300 mm strip products are built on our high-productivity Aspen platform and feature our patented inductively coupled plasma (ICP) technology. The Aspen platform offers semiconductor manufacturers advantages in process uniformity, productivity and throughput by enabling multiple strip steps in a single chamber. We have a large installed base of dry strip systems, and a majority of our sales of dry strip systems in 2003 were of our 300 mm systems. Our Aspen ICP Strip system is used in advanced process applications for high-dose implant strip, photoresist, residue removal and surface cleaning, including low-k and oxygen and non-oxygen-based processes.

Our Aspen III Highlands, an advanced 300 mm strip resist system targeted for new low-k/copper barrier layer removal applications, is currently in use in high volume 130 nm production applications by IC manufacturers that are transitioning to copper, has been qualified for production in 90 nm applications and is in development use in 65 nm applications. We are collaborating with customers to expand the Highlands' processing capabilities.

#### *Rapid Thermal Processing*

In rapid thermal processing, semiconductor wafers are rapidly heated to process temperatures of up to 1200 °C, held for a few seconds and rapidly cooled. Thermal processing can alter and lock in material properties at the wafer surface. This is called annealing and is critical to achieve the exact electrical parameters necessary for the IC to operate. Historically, diffusion furnaces have been used to heat-treat large batches of wafers. As device features have become smaller, temperature uniformity and exposure control have become more critical.

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 wafer production. Our product line includes the 2800 and the 2900 for 200 mm applications, and the 3000 series for 300 mm fabrication and advanced applications. The 3000 series tools offer unique transistor annealing and oxidation process capabilities, in conjunction with more standard RTP capabilities, to provide IC manufacturers the thermal processing performance needed for their stringent manufacturing requirements.

In 2002, we introduced the 3000 Plus, which features enhanced temperature measurement and control capabilities for advanced processes. These enhancements provide our customers with manufacturing capability for their next-generation device designs at and below 90 nm geometries. In 2003, in addition to sales to major foundries, memory device and logic manufacturers, our 3000 Plus product was selected for advanced transistor process development by International SEMATECH, a global consortium of semiconductor manufacturers engaged in efforts to improve manufacturing technology.

We began shipping production units of our latest generation RTP tool in late 2003. Customers have qualified this tool for 90 nm processes, and we are working with our customers to demonstrate the capabilities of this RTP tool on processes for advanced 65 nm technology applications.

#### *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 these 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 increasingly important.

We are focused on PECVD applications at the front-end of the fabrication line, and our products are based on our leading Aspen platform and robotic technology that provide performance and productivity advantages to our customers. We offer a PECVD process to deposit insulating films. PECVD allows the system to process wafers at a relatively low temperature, reducing the risk of device parameter drift during processing at the front-end-of-line and of damage to metalization layers during processing at the back-end-of-line. Our Aspen III PECVD product has been production-certified at leading fabrication sites for both 200 mm and 300 mm applications. In the last two years, we narrowed our CVD efforts to a limited number of strategic customers for our CVD product line as part of the company's strategic decision to focus on core businesses in RTP and strip.

#### *Isotropic Etch Market*

The etching process selectively removes patterned material from the surface of a wafer to create the device structures. With the development of sub-micron integrated circuit feature sizes, dry, or plasma, etching has become one of the most frequently used processes in semiconductor manufacturing. An isotropic, or multi-directional, etch system performs a variety of etch processes on semiconductor wafers that can be used in several steps in a typical 130 nanometer chip fabrication.

Our Aspen II and III LiteEtch systems, developed as extensions of our strip expertise, use our patented ICP source technology for isotropic etching applications on 200 and 300 mm wafers. In 2003, our LiteEtch systems continued to be used by major chipmakers in specialized processes for fabricating 130 nanometer and below memory devices.

### **Customer Support**

One of our primary goals is to strengthen our customer partnerships, and our customer support organization is critical to maintaining these long-term relationships. Our customer support organization is headquartered in Fremont, California, with additional offices located domestically throughout the U.S. and internationally in France, Germany, Italy, Japan, Korea, Singapore, Taiwan and mainland China. 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 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 continuously improving our customer support. Over the last two years, we have enhanced our customer service and support programs. We are actively engaged in new customer 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 SEMI to ensure that our programs comply to its major support directives, and our Customer Satisfaction Assurance Program (CSAP) has shown that we have made significant improvements in increasing customer satisfaction, as evidenced by recent successful customer audits and customer satisfaction survey ratings.

In 2003, our ongoing commitment to customer satisfaction and to delivering excellence in all areas of operation earned us the International Organization for Standardization (ISO) 9001:2000 global certification for all manufacturing sites and sales and service operations.

### **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. 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 regional sales offices located throughout the United States, and maintain sales support offices in China, France, Germany, Italy, Japan, Korea, Singapore and Taiwan.

In 2003, we maintained our wholly owned direct sales and support organization in Shanghai, which was established in 2002 to support our growing customer base in China.

In 2003, we also maintained our distribution relationship with PTS SARL, which supports our direct sales and support organization, Mattson International France SARL, and has expanded our sales representation in France. Similarly, we have established distribution relationships with CSD Ltd. in the UK and MICL Ltd. in Israel.

In addition to maintaining our wholly owned subsidiary in Japan, we have a continuing relationships with Canon Sales Company for the distribution of our RTP systems in Japan, and with NOAH Corporation for regional sales activities of our plasma strip products in Japan.

International sales accounted for 87% of total net sales in 2003, 74% in 2002 and 78% in 2001. We anticipate that international sales will continue to account for a significant portion of our net sales. International sales are subject to certain risks, including unexpected changes in regulatory requirements, exchange rates, tariffs and other barriers, political and economic instability, difficulties in accounts receivable collections, extended payment terms, difficulties in managing distributors or representatives, difficulties in staffing and managing foreign subsidiary operations and potentially adverse tax consequences. Because of our dependence upon international sales in general, and on sales to Japan, China and Pacific Rim countries in particular, we are particularly at risk to effects from developments such as any Asian economic problem. Our foreign sales are also 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 "Risk Factors That May Affect Future Results and Market Price of Stock--We Are Highly Dependant on Our International Sales, and Face Significant Economic and Regulatory Risks Because a Majority of Our Net Sales Are From Outside the United States."

## Customers

Customers for our products include many of the world's top 20 semiconductor manufactures and foundries. A representative list of our major customers includes:

- |                           |                           |                       |
|---------------------------|---------------------------|-----------------------|
| * Chartered Semiconductor | * Inotera Memories        | * Sony Corporation    |
| * Elpida Memory           | * Motorola                | * Texas Instruments   |
| * GSMC                    | * Nan Ya Technology       | * Toshiba Corporation |
| * He Jian Techonology     | * Powerchip Semiconductor | * Tower Semiconductor |
| * Hynix Semiconductor     | * ProMOS Technologies     | * Trecenti            |
| * Infineon Technologies   | * Samsung Electronics     | * TSMC                |
| * IBM Microelectronics    | * SMIC                    | * UMC Group           |

In 2003, two customers, Samsung Electronics and ProMOS Technologies each accounted for more than 10% of our revenue, accounting for approximately 19% and 11%, respectively. Inotera, TSMC and Samsung accounted for approximately 21%, 20% and 11%, respectively, of our total bookings. Although the composition of the group comprising our largest customers has varied from year to year, our top ten customers accounted for 50% of our net sales in 2003, 60% in 2002, and 58% in 2001. For a discussion of risks associated with changes in our customer base, see "Risk Factors That May Affect Future Results and Market Price of Our Stock -- We Are Dependant on Large Purchases From a Few Customers, and Any Loss, Cancellation, Reduction or Delay in Purchases By, or Failure to Collect Receivables From, These Customers Could Harm Our Business."

## 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 \$40.3 million as of December 31, 2003, \$68.2 million as of December 31, 2002 and \$60.0 million as of December 31, 2001. 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 downturns, such as we continued to experience in 2003, we have experienced cancellations and delays and push-out of orders that were previously booked and included in backlog.

## 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 implement their advanced process requirements. Only

by continuously striving to develop new intellectual property for process and hardware to support new processes can we maintain and advance our competitive position in the market we serve. Accordingly, we devote a significant portion of our resources to research, development and engineering (RD&E) programs and seek to maintain close relationships with our global customers in order to remain responsive to their product and processing needs.

Our key RD&E activities during fiscal year 2003 involved the successful development of a new generation of 300 mm RTP tools. These RTP tools feature a novel, model-based temperature control system that extends our low-temperature capability to enable advanced silicide formation and additionally provides tighter peak width control for ultra-shallow junction anneal requirements. Our new generation RTP tools extend Mattson's RTP capabilities down to the 65 nanometer node and will help to further improve our tool reliability and productivity, and reduce our customers' cost of ownership. We also developed an enhanced version of our ICP strip capability that significantly increases strip rate, and lowers customer cost of ownership. Other development efforts have led to improved process uniformity for strip applications. We also made significant progress in improving the performance of almost every process in our process application suite for strip products.

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

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 both improving existing system capabilities and developing new advanced RTP and strip technologies for smaller feature sizes, low-k dielectric materials and 300 mm applications.

We maintain applications development and engineering laboratories in Fremont, California 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 RTP and strip markets, we believe that we can focus our development activities on producing new products more quickly and at relatively low cost.

The markets in which we compete are characterized by rapidly changing technology, evolving industry standards and continuous improvements in products and services. Because of continual changes in these markets, we believe that our future success will depend upon our ability to continue to improve our existing systems and processes and to develop systems and new technologies that parallel and precede the technology roadmaps of our customers more effectively than our competition. In addition, we must adapt our systems and processes to technological changes and to support emerging industry standards for target markets. We cannot be sure that we will complete our existing and future development efforts within our anticipated schedule or that our new or enhanced products will have the features to make them successful. We may experience difficulties that could delay or prevent the successful development, introduction or marketing of new or improved systems or process technologies. In addition, these new and improved systems and process technologies may not meet the requirements of the marketplace and achieve market acceptance.

Furthermore, despite testing by us, difficulties could be encountered with our products after shipment, resulting in loss of revenue or delay in market acceptance and sales, diversion of development resources, injury to our reputation or increased service and warranty costs. The success of new system introductions is dependent on a number of factors, including timely completion of new system designs and market acceptance. If we are unable to improve our existing systems and process technologies or to develop new technologies or systems, we may lose sales and customers.

Our research, development and engineering expenses were \$23.0 million for the year ended December 31, 2003, \$37.4 million for 2002 and \$61.1 million for 2001, representing 13.2% of net sales in 2003, 18.4% in 2002 and 26.6% in 2001. On March 17, 2003 we divested the Wet business and thereafter research, development and engineering expenses relate to our RTP and Strip products.

## **Competition**

The global semiconductor fabrication 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 fabrication 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 unseat 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 wafer 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 market segments in which we compete. 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 Canon, Axcelis Technologies, KEM, Novellus Systems and Shibaura Mechatronics. We believe that we compete favorably on each of the competitive elements in this market and estimate that we are one of the top two providers of dry strip products. The principal competitor for our RTP systems is Applied Materials. The market in which our Aspen LiteEtch products compete is a relatively small niche market with no dominant competitors. Principal competitors for our Aspen LiteEtch systems include Novellus, Lam Research, Shibaura Mechatronics and Tegal. Principal competitors for our PECVD systems include Applied Materials, ASM International and Novellus Systems.

## **Manufacturing**

Our Mattson-owned manufacturing operations are based in the U.S. and Europe and consist of procurement, assembly, test, quality assurance and manufacturing engineering. Historically, we have utilized an outsourcing strategy for the manufacture of components and major subassemblies. In 2003, we began to utilize an outsourcing partner in Taiwan to manufacture complete systems. This outsourcing strategy is a key element of our "cyclically flexible enterprise" (CFE) business model. We have Mattson-owned manufacturing capability in Fremont, California and Dornstadt, Germany. Our outsourcing partners have manufacturing facilities in Taiwan, China and Singapore.

Some of our components are obtained from a sole supplier or a limited group of suppliers. We generally acquire these components on a purchase order basis and not under long-term supply contracts. Our reliance on outside vendors generally, and a limited group of suppliers in particular, involves several risks, including a potential inability to obtain an adequate supply of required components and reduced control over pricing and timely delivery of components. Because the manufacture of certain of these components and subassemblies is an extremely complex process and can require long lead times, we could experience delays or shortages caused by suppliers. 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.

We are subject to a variety of federal, state and local laws, rules and regulations relating to the use, storage, discharge and disposal of hazardous chemicals used during our sales demonstrations and research and development. Public attention has increasingly been focused on the environmental impact of operations which use hazardous materials. Failure to comply with present or future regulations could result in substantial liability to us, suspension or cessation of our operations, restrictions on our ability to expand at our present locations or requirements for the acquisition of significant equipment or other significant expense. To date, compliance with environmental rules and regulations has not had a material effect on our operations.

## **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. Where appropriate, we intend to file additional patent applications on inventions resulting from our ongoing research, development and manufacturing activities to strengthen our intellectual property rights.

Although we attempt to protect our intellectual property rights through patents, copyrights, trade secrets and other measures, we cannot be sure that we will be able to protect our technology adequately, and our competitors could independently develop similar technology, duplicate our products or design around our patents. To the extent we wish

to assert our patent rights, we cannot be sure that any claims of our patents will be sufficiently broad to protect our technology or that our pending patent applications will be approved. In addition, there can be no assurance that any patents issued to us will not be challenged, invalidated or circumvented, that any rights granted under these patents will provide adequate protection to us, or that we will have sufficient resources to protect and enforce our rights. 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.

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 be able to sell our products. Royalty or licensing agreements, if required, may not be available on terms acceptable to us or at all, which could seriously harm our business. Our involvement in any patent dispute 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, 2003, we had 600 employees. There were 121 employees in manufacturing operations, 122 in research, development and engineering, 274 in sales, marketing, field service and customer support, and 83 in general, administrative and finance. The divestiture of the Wet Products Division on March 17, 2003 resulted in a reduction of 404 employees. Additionally, during 2003, we implemented reductions in force of 104 employees, in response to the continuing downturn in the semiconductor industry.

During 2003, we significantly reduced our operations and our workforce. However, 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 is 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 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. The information on our web site is not incorporated herein by reference.

## **ITEM 2: PROPERTIES**

Our principal properties as of December 31, 2003 are set forth below:

<u>Location</u>	<u>Type</u>	<u>Principal Use</u>	<u>Square Footage</u>	<u>Ownership</u>
-----------------	-------------	----------------------	-----------------------	------------------

Fremont, CA	Office, plant & Warehouse	Headquarters, Marketing, Manufacturing, Distribution Research and Engineering	167,000	Leased
Exton, PA	Office, plant & Warehouse	100% Subleased	140,000(1)	Leased
Germany	Office, plant & Warehouse	Manufacturing, Research and Engineering	245,000(2)	Leased

- (1) The two properties at Exton, PA are not needed for our operations and are sub-leased to other parties.  
(2) Includes approximately 140,000 square feet sub-leased to SCP Global Technologies, as a result of the divestiture of the Wet Products Division to SCP on March 17, 2003.

In addition to the above properties, we lease an aggregate of approximately 33,000 square feet of office space for sales and customer support offices. In total, we lease office space for headquarters, manufacturing, operations, research and engineering, distribution, marketing, sales and customer support offices in 19 locations throughout the world: 7 in the United States, 7 in Europe and one in each of Taiwan, Korea, Singapore, Japan and China. We are productively utilizing substantially all of the remaining facilities and consider them suitable and adequate to meet our requirements.

We are in the process of consolidating all of our Fremont, CA operations and facilities into one building, with approximately 101,000 square feet area. The consolidation is expected to be complete by the fourth quarter of 2004. We are productively utilizing substantially all of our facilities and consider them 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 that 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 can not 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.

Following our acquisition of CFM Technologies, Inc. on January 1, 2001, we had been litigating three ongoing cases involving wet surface preparation intellectual property, all of which were brought in the United States District Court for the District of Delaware by our subsidiary Mattson Wet Products, Inc. (formerly CFM Technologies, Inc.) and our former subsidiary Mattson Technology IP, Inc. (formerly CFMT, Inc.). On March 17, 2003, we divested our wet surface preparation business. As part of that transaction, we sold the stock of Mattson Technologies IP, Inc., which is the owner of the patents at issue in the three cases, and we sold the operating assets of Mattson Wet Products, Inc., including its right to damages in the pending lawsuits, to SCP Global Technologies, Inc. As a result, we no longer control Mattson Technology IP, Inc. and its actions in the pending litigations, although our subsidiary Mattson Wet Products, Inc. remains as a nominal co-plaintiff in those actions. None of the pending legal proceedings are material to us.

Our involvement in any patent dispute, or 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**

None

### **EXECUTIVE OFFICERS OF THE REGISTRANT**

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

Name	Age	Title
David L. Dutton	43	Chief Executive Officer, President, Director
Robert MacKnight	54	Chief Operating Officer
Ludger H. Viefhues	61	Chief Financial Officer, Executive Vice President, Finance and Secretary

**David L. Dutton - Chief Executive Officer**

David Dutton has served as Mattson's Chief Executive Officer and President since October 2001 and was elected to this position in December 2001. Prior to being elected Chief Executive Officer and President, Mr. Dutton served as the President of the Plasma Products Division. Mr. Dutton joined Mattson in 1994 as General Manager in the Strip/Plasma Etch division, then from 1998 to 2000, Mr. Dutton served as Executive Vice President and Chief Operating Officer of Mattson. From 1993 to 1994, Mr. Dutton was Engineering Manager for Thin Films Processing at Maxim Integrated Products, Inc. From 1984 to 1993, Mr. Dutton served as an engineer and then manager in plasma etch processing and yield enhancement at Intel Corp.

**Robert MacKnight - Chief Operating Officer**

Robert MacKnight has served as Mattson's Chief Operating Officer since December 2002. Prior to that Mr. MacKnight served 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. From 1998 to 2001, Mr. MacKnight served at Microbar, Inc., a manufacturer of chemical systems for the semiconductor industry where he was most recently 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.

**Ludger H. Viefhues - Chief Financial Officer**

Ludger Viefhues joined Mattson as the Chief Financial Officer in December 2000 and also serves as Executive Vice President, Finance and Secretary. From 1999 to 2000, Mr. Viefhues was Chief Financial Officer of STEAG RTP Systems GmbH. From 1996 to 1999, Mr. Viefhues was Chief Executive Officer at MEMC Electronic Materials, Inc., a supplier of silicon wafers. Prior to being appointed Chief Executive Officer at MEMC, Mr. Viefhues served as MEMC's Chief Financial Officer. From 1993 to 1996, Mr. Viefhues held the post of Chief Financial Officer at Huels AG (Germany).

**PART II**

**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

**Stock Listing**

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

**HIGH    LOW**  
 -----    -----

2003 Quarter		
First.....	\$ 3.01	\$ 1.53
Second.....	3.95	1.77
Third.....	9.95	2.95
Fourth.....	16.59	8.72
2002 Quarter		
First.....	\$ 9.90	\$ 5.41
Second.....	10.07	4.00
Third.....	4.95	1.57
Fourth.....	4.05	1.16

On March 1, 2004, the last reported sales price of our common stock on the Nasdaq National Market was \$12.00 per share. We had approximately 222 shareholders of record on that date.

### **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.

### **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 \$46.3 million. See Note 18 to the consolidated financial statements under Item 8 of this Form 10-K.

## **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 statement of operations data for the years ended December 31, 2003, 2002 and 2001 and the selected consolidated balance sheet data as of December 31, 2003 and 2002 from our audited consolidated financial statements appearing elsewhere in this report. We derived the selected consolidated statement of operations data for the years ended December 31, 2000 and 1999 and the selected consolidated balance sheet data as of December 31, 2001, 2000 and 1999 from our audited consolidated financial statements, which are not included in this report. Effective January 1, 2000, we changed our method of accounting for revenue to implement the revenue recognition provisions of SEC Staff Accounting Bulletin No. 101 (SAB 101). This change in accounting method effects the comparability of our financial data for 2000, 2001, 2002 and 2003 to our reported results for previous years. Unaudited pro forma information is provided below to show the effect this accounting method change would have had in year prior to 2000.

On January 1, 2001, we completed the acquisitions of the STEAG Semiconductor Division and CFM. The acquisitions had been accounted for under the purchase method of accounting, and the results of operations of the acquired companies are included in our selected financial data for 2001 and thereafter. On March 17, 2003, we divested our wet surface preparation products business. During 2001 and 2002, we incurred charges relating to impairment of long-lived assets, inventory valuation charges and restructuring costs. These acquisitions and charges affect the comparability of our financial data for 2003, 2002 and 2001 to our reported results for previous years, and the divestiture affects the comparability of our financial data for 2003 to our reported results for 2002 and 2001. These transactions are further discussed in Management's Discussion and Analysis of Financial Conditions and Results of Operations, and in Notes 1, 3, 4, and 6 to our Consolidated Financial Statements.

	<b>Year Ended December 31,</b>				
	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>
	<b>(in thousands, except per share data)</b>				
<b>CONSOLIDATED STATEMENT OF OPERATIONS DATA:</b>					
Net sales	\$ 174,302	\$ 203,520	\$ 230,149	\$180,630	\$ 103,458
Cost of sales	112,783	163,063	224,768	93,123	53,472
Gross profit	61,519	40,457	5,381	87,507	49,986
Operating expenses:					
Research, development and engineering	22,988	37,395	61,114	28,540	19,547
Selling, general and administrative	54,292	86,218	110,785	54,508	31,784
Acquired in-process research and development	-	-	10,100	-	-
Amortization of goodwill and intangibles	2,151	6,591	33,457	-	-
Restructuring and other charges	489	17,307	-	-	-
Impairment of long-lived assets and other charges	-	-	150,666	-	-
Total operating expenses	79,920	147,511	366,122	83,048	51,331
Income (loss) from operations	(18,401)	(107,054)	(360,741)	4,459	(1,345)
Loss on disposition of Wet Business	(10,257)	-	-	-	-
Interest and other income, net	653	12,636	5,016	6,228	743
Income (loss) before provision (benefit) for income taxes and cumulative effect of change in accounting principle	(28,005)	(94,418)	(355,725)	10,687	(602)
Provision (benefit) for income taxes	350	(147)	(18,990)	1,068	247
Income (loss) before cumulative effect of change in accounting principle	(28,355)	(94,271)	(336,735)	9,619	(849)
Cumulative effect of change in accounting principle, net of tax benefit	-	-	-	(8,080)	-
Net income (loss)	<u>\$ (28,355)</u>	<u>\$ (94,271)</u>	<u>\$ (336,735)</u>	<u>\$ 1,539</u>	<u>\$ (849)</u>
Income (loss) per share, before cumulative effect of change in accounting principle:					
Basic	\$ (0.63)	\$ (2.23)	\$ (9.14)	\$ 0.50	\$ (0.05)
Diluted	\$ (0.63)	\$ (2.23)	\$ (9.14)	\$ 0.45	\$ (0.05)
Cumulative effect of change in accounting principle					
Basic	\$ -	\$ -	\$ -	\$ (0.42)	\$ -
Diluted	\$ -	\$ -	\$ -	\$ (0.38)	\$ -
Net income (loss) per share:					
Basic	\$ (0.63)	\$ (2.23)	\$ (9.14)	\$ 0.08	\$ (0.05)
Diluted	\$ (0.63)	\$ (2.23)	\$ (9.14)	\$ 0.07	\$ (0.05)
Shares used in computing net income (loss) per share:					
Basic	44,997	42,239	36,854	19,300	15,730
Diluted	44,997	42,239	36,854	21,116	15,730
Pro forma amounts with the change in accounting principle related to revenue recognition applied retroactively (unaudited):					
Net sales	N/A	N/A	N/A	N/A	\$ 102,781
Net income (loss)	N/A	N/A	N/A	N/A	(3,036)
Net income (loss) per share:					
Basic	N/A	N/A	N/A	N/A	\$ (0.19)
Diluted	N/A	N/A	N/A	N/A	\$ (0.19)

	<b>As of December 31,</b>				
	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>
	<b>(in thousands)</b>				
<b>CONSOLIDATED BALANCE SHEET DATA:</b>					
Cash and cash equivalents	\$ 77,115	\$ 87,879	\$ 64,057	\$ 33,431	\$ 16,965
Working capital	56,914	62,120	74,044	150,234	37,009
Total assets	207,387	312,159	432,705	269,668	81,148
Long-term debt, net of current portion	-	-	1,001	-	-
Total stockholders' equity	83,704	106,105	141,738	186,127	52,019

## **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 Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this document. In addition to historical information, the discussion in this document 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 the caption "Risk Factors that May Affect Future Results and Market Price of Stock" and elsewhere in this document.

### **OVERVIEW**

We are a leading supplier of semiconductor wafer processing equipment used in the fabrication of integrated circuits. Our products include dry strip, rapid thermal processing ("RTP") and plasma enhanced chemical vapor deposition ("PECVD") equipment. Our manufacturing equipment utilizes innovative technology to deliver advanced processing capability and high productivity to semiconductor manufacturers for both 200 mm and 300 mm wafer production at technology nodes at and below 130 nm.

Our most recent three fiscal years, 2001 to 2003, were a period of great challenge and significant change for our Company. The external market environment was extremely difficult, with the semiconductor industry experiencing a significant downturn, resulting in severe capital spending cutbacks by our customers. At the beginning of 2001, we had just completed the simultaneous acquisition of the semiconductor equipment division of STEAG Electronic Systems AG and CFM Technologies, Inc. This more than doubled the size of our company and changed the nature and breadth of our product lines. On top of the many challenges in integrating multiple merged companies, we were faced with the impact of dramatically lower sales as a result of the downturn in the industry, that resulted in excess production capacity. We determined to refocus our business on our core technologies in dry strip and rapid thermal processing, and in 2002 and the first quarter of 2003 we took restructuring actions to align our business with this focus and to reduce our cost structure. As part of this restructuring effort, we divested a significant line of business, our wet surface preparation products (the "Wet Business"), in March of 2003.

Our Company is very different at the end of 2003 than it was at the beginning of 2003 or during 2001 and 2002. Because of our significant restructurings and divestitures during this period, both our revenue sources and our cost structure have significantly changed. This affects the comparability of our reported financial information for the annual periods discussed in this report, and causes our historical information not to be a good indicator or predictor of results for future periods. Our size, structure and product focus have been more stable during the last three quarters of 2003.

We had losses from operations in each of fiscal years 2001, 2002 and 2003. However, as a result of our restructurings and divestitures, we reduced our cost structure and reduced our rate of losses throughout that period. As we finished 2003, we achieved a small profit from operations for the fourth quarter. Despite our operational losses and net use of cash in operations during each of these three years, we ended 2003 with just over \$77 million in cash and cash equivalents, or approximately \$10.8 million less than we had at the beginning of the year. We had no long-term debt at the end of 2003, and during the first quarter of 2004 we successfully completed an underwritten public offering of approximately 4.3 million shares of common stock, with net proceeds of approximately \$46.3 million. With the recent improvements in our operating results and the infusion of additional cash on our balance sheet, we believe we are in a healthy position in terms of liquidity and capital resources.

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. The semiconductor industry began experiencing a severe downturn in 2001, which resulted in capital spending cutbacks by our customers. Declines in demand for semiconductors occurred throughout 2001, 2002 and the first half of 2003. There are more recent signs of market improvement, however semiconductor companies continue to reevaluate their capital equipment purchase decisions. Our backlog of firm orders was at a relatively low level in relation to our anticipated sales for much of that period, but has recently begun to improve. The cyclicality and uncertainties regarding overall market conditions continue to present significant challenges to us and impair our ability to forecast near term revenue. Given that many of our costs are fixed in the short-term, our ability to quickly modify our operations in response to changes in market conditions is limited. Although we have implemented cost cutting and operational flexibility measures, we are largely dependent upon increases in sales in order to improve our profitability.

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) develop and bring to market new products that address our customers' needs, (b) grow customer loyalty through collaboration with and support of our customers, and (c) create a cost structure which will enable us to operate effectively and profitably throughout changing industry cycles

## CRITICAL ACCOUNTING POLICIES

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 and 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 period. On an on-going basis, management evaluates its estimates and judgements, 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 judgements on historical experience and on various other factors that are believed to be reasonable under the circumstances. These form the basis for making judgements 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, and income taxes as critical to our business operations and an understanding of our results of operations. See Note 1 of Notes to the Consolidated Financial Statements for a summary of our significant accounting policies.

*Revenue recognition.* We recognize revenue in accordance with SEC Staff Accounting Bulletin No. 104, Revenue Recognition in Financial Statements (SAB 104).

We derive revenue from two primary sources- equipment sales and spare part sales. We account for equipment sales as follows: 1) for equipment sales of existing products with new specifications or to a new customer, for all sales of new products (and, for the first quarter of 2003 and earlier periods, for all sales of our wet surface preparation 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, 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 after installation services have been performed and upon final customer acceptance of the tool has been obtained, generally 10% of the total invoice price, is deferred until final customer acceptance of the tool. The remaining portion of the total invoice price relating to the tool, generally 90% of the total invoice price, is recognized upon shipment and title transfer 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 customer. Revenues associated with sales to customers in Japan are recognized upon title transfer, which generally occurs upon customer acceptance, with the exception of sales of our RTP products through our distributor in Japan, where revenues are recognized upon title transfer to the distributor. For spare parts, revenue is recognized upon shipment. Service and maintenance contract revenue is recognized on a straight-line basis over the service period of the related contract.

Revenues are difficult to predict, due in part to our reliance on customer acceptance related to a portion of our revenues. Any shortfall in revenue or delay in recognizing revenue could cause our operating results to vary significantly from quarter to quarter and could result in future operating losses.

*Warranty.* Our warranties 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 warranty offered on our systems ranges from 12 months to 36 months, depending on the product. At the time we first recognize revenue for a system sale, we record a provision for the estimated cost of warranty as a cost of sales based on our historical costs. 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 repair costs that we have in the past. An increase in the costs to repair our products could have a material adverse impact on our operating results for the period or periods in which such additional costs materialize.

*Inventories.* We state inventories at the lower of cost or market, with cost determined on a first-in, first out basis. Due to changing market conditions, estimated future requirements, age of the inventories on hand and our introduction of new products, we regularly monitor inventory quantities on hand and declare obsolete inventories that are no longer used in current production. Accordingly, we write down our inventories to estimated net realizable value. Actual demand may differ from forecasted demand and such difference may result in write downs that have a material effect on our financial position and results of operations. In the future, if our inventory is determined to be overvalued, we would be required to recognize the decline in value in our cost of goods sold at the time of such determination. Although we attempt to accurately forecast future product demand, given the competitive pressures and cyclical nature 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 inventory and our reported operating results.

*Goodwill and Other Intangible Assets.* We assess the realizability of goodwill and other intangible assets at a minimum annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable, in accordance with the provisions of SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 also requires that intangible assets with estimable useful lives be amortized over their respective estimated useful lives to their estimated residual values and reviewed for impairment in accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." Our judgments regarding the existence of impairment indicators are based on changes in strategy, market conditions and operational performance of our business. Future events, including significant negative industry or economic trends, could cause us to conclude that impairment indicators exist and that goodwill or other intangible assets are impaired. Any resulting impairment loss could have a material adverse impact on our results of operations. In assessing the recoverability of goodwill and other intangible assets, we must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the respective assets. If these estimates or their related assumptions change in the future, we may be required to record impairment charges for these assets.

*Impairment of Long-Lived Assets.* We assess the impairment of identified intangibles, long-lived assets and related goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable, in accordance with the provisions of SFAS No. 144 "Accounting for the Impairment or Disposal of Long-Lived Assets." Our judgments regarding the existence of impairment indicators are based on changes in strategy, market conditions and operational performance of our business. Future events, including significant negative industry or economic trends, could cause us to conclude that impairment indicators exist and that long-lived assets are impaired. Any resulting impairment loss could have a material adverse impact on our results of operations. In assessing the recoverability of long-lived assets, we must make assumptions regarding estimated future cash flows and other factors, including discount rates and probability of cash flow scenarios, to determine the fair value of the respective assets. If these estimates or their related assumptions change in the future, we may be required to record impairment charges for these assets.

*Income taxes.* We record a valuation allowance to reduce our net deferred tax asset to the amount we estimate is more likely than not to be realized. 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 deferred tax assets in the future in excess of the net recorded amount, we would record an adjustment to the deferred tax asset valuation allowance. This adjustment would increase income in the period such determination was made.

## **Results of Operations**

The following table sets forth selected consolidated financial data for the periods indicated, expressed as a percentage of net sales:

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Net sales	100.0 %	100.0 %	100.0 %
Cost of sales	64.7	80.1	97.7
Gross margin	35.3	19.9	2.3
Operating expenses:			
Research, development and engineering	13.2	18.4	26.6
Selling, general and administrative	31.1	42.4	48.1
In-process research and development	-	-	4.4
Amortization of goodwill and intangibles	1.2	3.2	14.5
Restructuring and other charges	0.3	8.5	65.5
Loss from operations	(10.6)	(52.6)	(156.8)
Interest and other income, net	0.4	6.2	2.2
Loss before provision (benefit) for income taxes	(16.1)	(46.4)	(154.6)
Provision (benefit) for income taxes	(0.2)	0.1	8.3
Net Loss	(16.3) %	(46.3) %	(146.3) %

The divestiture of our Wet Business on March 17, 2003 has significantly affected the comparability of our net sales and our costs in the twelve months period ended December 31, 2003 to our reported results for prior periods. Our reported results for 2001, 2002 and the first quarter of 2003 include sales of Wet Business products and related costs, while our results for the second and third quarters of 2003 do not. Our results for the fourth quarter of 2003 include the recognition of revenue from the sale of one Wet Business tool shipped in a prior period, along with related costs. The following table summarizes the amount of our net sales in each quarter of 2002 and 2003 attributable to products of the Wet Business, to RTP and strip products, and to royalties from DNS. We believe this additional information regarding our prior period sales will facilitate comparison of our current and future results of operations to our results from prior periods:

Three Months Ended	<b>Net Sales (in millions)</b>				<b>Percent of total net sales</b>		
	Wet	RTP and	DNS	Reported	Wet	RTP and	DNS
	Business Products	Strip Products	Royalty Revenue	Total Net Sales	Business Products	Strip Products	Royalty Revenue
March 31, 2002	\$ 23.7	\$ 22.5	\$ -	\$ 46.2	51.3%	48.7%	-
June 30, 2002	15.3	32.0	-	47.3	32.3%	67.7%	-
September 29, 2002	15.5	42.3	3.0	60.8	25.6%	69.5%	4.9%
December 31, 2002	23.0	22.9	3.3	49.2	46.8%	46.5%	6.7%
	<u>\$ 77.5</u>	<u>\$ 119.7</u>	<u>\$ 6.3</u>	<u>\$ 203.5</u>	<u>38.1%</u>	<u>58.8%</u>	<u>3.1%</u>
March 30, 2003	\$ 32.3	\$ 32.5	\$ 3.0	\$ 67.8	47.7%	47.9%	4.4%
June 29, 2003	-	27.5	3.0	30.5	-	90.2%	9.8%
September 28, 2003	-	29.6	3.0	32.6	-	90.8%	9.2%
December 31, 2003	1.3	39.1	3.0	43.4	3.0%	90.1%	6.9%
	<u>\$ 33.6</u>	<u>\$ 128.7</u>	<u>\$ 12.0</u>	<u>\$ 174.3</u>	<u>19.3%</u>	<u>73.8%</u>	<u>6.9%</u>

#### **Years Ended December 31, 2003 and 2002**

*Net Sales.* Our net sales for the year ended December 31, 2003 were \$174.3 million, reflecting a decrease of \$29.2 million, or 14.4%, compared to net sales of \$203.5 million for the year ended December 31, 2002. Net sales for 2003 included \$12.0 million of revenue from DNS royalties and \$33.6 million from the Wet Business that we divested on March 17, 2003. The Wet Business revenue includes \$1.3 million revenue recognized during the fourth quarter of 2003 upon customer acceptance of a wet tool excluded from the divestiture of the Wet Business. Net sales decreased in 2003 due to the divestiture of the Wet Business. Net sales of RTP and Strip products for 2003 were \$128.7 million, an increase of 7.5% from 2002 net sales of RTP and Strip products of \$119.7 million. The increase in 2003 net sales of RTP and Strip products over 2002 primarily resulted from an increase in the numbers of units sold. Shipments for 2003 were \$131.4 million, a 25% decrease from shipments of \$174.6 million in 2002. Results in 2002 and the first quarter of 2003 included shipments of products from the Wet Business.

Our deferred revenue at December 31, 2003 was approximately \$38.7 million, a decrease of \$70.0 million from \$108.7 million at December 31, 2002. The \$38.7 million in deferred revenue consists of \$21.0 million of deferred revenue related to tools shipped and awaiting customer acceptance and \$17.7 million in advanced payments related to DNS royalties. The decline in deferred revenue compared to 2002 results primarily from the sale of the Wet Business, which had accounted for the majority of our deferred revenue at December 31, 2002. We generally expect deferred revenue from particular product sales to be recognized as revenue in our consolidated statement of operations with a time lag of three to ten months from product shipment.

International sales, predominantly to customers based in Europe, Japan and the Pacific Rim, including Taiwan, Singapore, Korea and China, accounted for 87% of total net sales for 2003, 74% of total net sales for 2002 and 78% of total net sales for 2001. We anticipate that international sales will continue to account for a significant portion of our sales.

*Gross Margin.* Gross margin for the year ended December 31, 2003 was 35.3%, an increase from gross margin of 19.9% for the year ended December 31, 2002. The increase in gross margin in 2003, compared to 2002, was due to the efficiencies gained from the divestiture of the Wet business, a greater proportion of RTP and strip products sales as well as spares parts and service revenues with relatively higher margins, better absorption of our production facilities, improved manufacturing overhead efficiencies and higher royalty revenue by \$5.7 million recognized from DNS with no associated cost of sales. Gross Margin was also favorably impacted by improvements in our inventory management. Inventory valuation charges in 2003 were \$1.6 million, an 88.8% decrease compared to \$14.3 million in charges in 2002. Acquisition-related inventory costs, determined by Accounting Principles Board Opinion No. 16 (APB 16) "Business Combinations", had adversely affected the gross margin in 2002 by \$9.2 million. In addition, our gross margin in 2003 was favorably affected by an increase in the proportion of revenue from customer acceptances (with no associated cost of sales, because costs for the accepted systems were recorded in a prior year), when compared to 2002.

Our RTP and Strip products have relatively higher gross margins than did the Wet Business products we offered until the first quarter of 2003. Because Wet Business products historically represented a significant percentage of our revenue and our cost of sales, our gross margins for 2003 and prior years are not good indicators of our gross margins for future periods. In the three quarters following our divestiture of the Wet Business, our gross margins have been 39.5%, 39.1% and 41.7%.

Due to intense competition we continue to face pricing pressure from competitors that can affect our gross margin. In response, we are continuing with our cost reduction efforts to differentiate our product portfolio. Our gross margin has varied over the years and will continue to vary based on many factors, including competitive pressures, product mix, economies of scale, overhead absorption levels, and costs associated with the introduction of new products.

*Research, Development and Engineering.* Research, development and engineering expenses were \$23.0 million, or 13.2% of net sales, for the year ended December 31, 2003, compared to \$37.4 million, or 18.4% of net sales, for the year ended December 31, 2002. The decrease in research, development and engineering expenses in 2003 was primarily due to reductions in personnel and associated costs by \$1.6 million and reduction in depreciation and amortization expense by \$7.3 million resulting from the divestiture of our Wet Business in March 2003, other restructuring and cost control measures which included more selective research and development project funding, a \$2.2 million credit for cost sharing with an alliance partner in connection with an R&D project, and control of other costs that resulted in an additional \$3.0 million reduction in expenses. Our major research, development and engineering efforts in 2003 were focused on the development of a new generation of 300 mm RTP tools, sub-90nm low-K copper strip process development for Highlands, and evolutionary development of our Aspen bulk strip tool.

*Selling, General and Administrative.* Selling, general and administrative expenses were \$54.3 million, or 31.1% of net sales, for the year ended December 31, 2003, compared with \$86.2 million, or 42.4% of net sales, for the year ended December 31, 2002. The decrease in selling, general and administrative expenses is primarily due to the divestiture of our Wet Business in March 2003, other restructuring and cost control measures which included a reduction in personnel and related costs by \$19.0 million, reduction in building rent expenses by \$3.4 million, reduction in outside professional services by \$6.9 million, reduction in depreciation and amortization expense by \$2.9 million, reduction in sales commissions by \$1.6 million, and reduction in travel expenses by \$2.1 million.

*Amortization of Goodwill and Intangibles.* Upon adoption of SFAS 142 on January 1, 2002, we no longer amortize goodwill. We continue to amortize identified intangibles, and our amortization expense during 2003 was \$2.2 million. In 2002, we recorded amortization expense of \$6.6 million. We estimate our amortization expense to be \$1.3 million for each of fiscal years 2004 and 2005.

*Restructuring and Other Charges.* In the third quarter of 2003, we recorded a restructuring charge of \$0.5 million, primarily related to headcount reduction. In 2002, we recorded a charge of \$11.6 million that included \$6.5 million for

impaired and abandoned property and equipment, \$4.4 million for the write off of intangible assets for developed technology and \$0.7 million for impairment of other long term assets.

*Interest and Other Income, Net.* Interest income of \$0.7 million during 2003 was primarily related to interest income of \$1.2 million from investment of our cash balances, excess income over net rental on property sublease of \$1.0 million and other net income of \$0.3 million partially off-set by interest expense of \$0.1 million, loss on sale of fixed assets of \$0.7 million and a foreign exchange loss of \$1.0 million. In 2002, interest expense of \$1.7 million was primarily related to interest on notes payable to SES. Interest income of \$2.4 million in 2002 primarily resulted from the investment of our cash balances during the year. We also had net other income in 2002 of \$11.9 million which primarily included DNS settlement payments of \$15.0 million offset by approximately \$2.0 million foreign exchange loss.

*Provision for Income Taxes.* We recorded a tax expense of approximately \$0.4 million for the year ended December 31, 2003, compared to a tax benefit of \$0.1 million for the year ended December 31, 2002. The tax expense recorded in 2003 primarily consists of tax expense related to foreign operations. These expenses were offset by the tax benefit recorded related to amortization of the identifiable intangibles acquired in 2001. The tax benefit recorded in 2002 is a result of amortization of identifiable intangibles acquired in 2001 and the receipt of a federal tax refund. These benefits were offset by tax expenses related to foreign operations. FASB Statement No. 109 provides for the recognition of deferred tax assets if realization of such assets is more likely than not. Based upon available data, which includes our historical operating performance, we have provided a full valuation allowance against our net deferred tax asset at December 31, 2003, as the future realization of the tax benefit is not sufficiently assured. We intend to evaluate the realization of our deferred tax assets on a quarterly basis.

### **Years Ended December 31, 2002 and 2001**

*Net Sales.* Our net sales for the year ended December 31, 2002 were \$203.5 million, reflecting a decrease of \$26.6 million, or 11.6%, compared to net sales of \$230.1 million for the year ended December 31, 2001. Net sales for 2002 included approximately \$6.3 million of revenue from DNS royalties. Net sales decreased in 2002 primarily due to lower demand and lower shipments as a result of the continuing economic downturn in the semiconductor industry. Shipments in 2002 declined by approximately 44.2% compared to shipments in 2001.

Our total deferred revenue at December 31, 2002 was approximately \$108.7 million, which related to tools shipped and awaiting customer acceptance, down \$27.9 million, from \$136.6 million deferred revenue at December 31, 2001.

*Gross Margin.* Gross margin for the year ended December 31, 2002 was 19.9%, an increase from gross margin of 2.3% for the year ended December 31, 2001. The increase in gross margin in 2002, compared to 2001, was due to better absorption of our production facilities, improved manufacturing overhead efficiencies, royalty revenue recognized from DNS with no associated cost of sales, and a decrease in inventory valuation charges related to the merger that adversely affected margins in 2001. Inventory valuation charges in 2002 were \$14.3 million, a 45.8% decrease, compared to \$26.4 million in 2001. Acquisition-related inventory costs, determined by Accounting Principles Board Opinion No. 16 (APB 16) "Business Combinations", continued to effect us in 2002, although to a lesser extent, as the inventory acquired in the merger was sold and recorded as cost of sales. The inventory subject to these costs was revalued upward, to reflect its market value, at the time of the merger. The difference between the original cost basis of the inventory and its allocated acquisition costs are our "APB16 costs." The largest portion of this revalued inventory related to our wet surface preparation products, as to which all revenue was deferred until we obtained customer acceptances. During 2002, these APB 16 costs were \$9.2 million, or 4.5% of net sales. During 2001, the APB 16 costs had been \$13.8 million, or 6.0% of net sales.

*Research, Development and Engineering.* Research, development and engineering expenses were \$37.4 million, or 18.4% of net sales, for the year ended December 31, 2002, compared to \$61.1 million, or 26.6% of net sales, for the year ended December 31, 2001. The decrease in research, development and engineering expenses in 2002 was primarily due to the reduction of personnel and associated costs, more selective research and development project funding, and various cost control measures as a result of post-merger product rationalization efforts that resulted in reduction in expenses for professional fees, outside services, licenses, and engineering materials. Our major research, development and engineering effort in 2002 was focused on the development of a new generation of 300 mm RTP tools, our low-K copper Highlands strip tool, continuous improvement of our Aspen ICP strip tool, and our next generation wet tool.

*Selling, General and Administrative.* Selling, general and administrative expenses were \$86.2 million, or 42.4% of net sales, for the year ended December 31, 2002, compared with \$110.8 million, or 48.1% of net sales, for the year ended December 31, 2001. The decrease in selling, general and administrative expenses is primarily due to reduction in

personnel and related expenses, lower bonus pay-outs, fewer buildings, lower utilities, lower sales commissions, lower outside services, lower professional fees, lower repair & maintenance, and lower travel expenses.

*Amortization of Goodwill and Intangibles.* Upon adoption of SFAS 142 on January 1, 2002, we no longer amortize goodwill. We continued to amortize identified intangibles, and the amortization expense during 2002 was \$6.6 million. In 2001, we recorded amortization expense of \$33.5 million.

*Restructuring and Other Charges.* In the third and fourth quarters of 2002, we performed assessments of the carrying values of our long-lived assets to be held and used, including other intangible assets and property and equipment. The assessment was performed pursuant to SFAS No. 144 as a result of continuing deteriorated market conditions in the semiconductor industry in general, a reduced demand specifically for RTP products and certain Wet Business products, and revised projected cash flows for these products in the future. As a result of these assessments, we recorded a charge of \$11.6 million to reduce the carrying value of intangible assets, other long term assets and property and equipment, as it was determined that the carrying amount of these assets exceeded the estimated future cash flows from the use of these assets. The charge of \$11.6 million recorded includes \$6.5 million for impaired and abandoned property and equipment, \$4.4 million for the write off of intangible assets for developed technology resulting from our Concept Systems acquisition and our Wet Business, and \$0.7 million for impairment of other long term assets.

*Interest and Other Income, Net.* Interest expense of \$1.7 million during 2002 was primarily related to interest on our notes payable to SES. Interest income of \$2.4 million primarily resulted from the investment of our cash balances during the year. We also had net other income of \$11.9 million which primarily included DNS settlement payments of \$15.0 million offset by an approximately \$2.0 million foreign exchange loss. In 2001, interest expense of \$3.0 million was primarily related to interest on our notes payable to SES. Interest income of \$4.4 million resulted from the investment of our cash balances during the year. We also had other income of \$3.7 million which included losses on sales of fixed assets of \$2.3 million and the remainder was due to foreign exchange gains.

*Provision for Income Taxes.* We recorded a tax benefit of approximately \$0.1 million for the year ended December 31, 2002, compared to a tax benefit of \$19.0 million for the year ended December 31, 2001. The tax benefit recorded in 2001 resulted from the release of the deferred tax liability recorded in conjunction with the purchase of the STEAG Semiconductor Division and CFM. FASB Statement No. 109 requires that a deferred tax liability be recorded to offset the tax impact of non-deductible, identifiable intangible assets recorded as part of purchase accounting. The deferred tax liability decreases proportionally to any amortization or write-down of the identifiable intangibles. The tax benefit recorded in 2002 is a result of amortization of identifiable intangibles acquired in 2001 and the receipt of a federal tax refund. These benefits were offset by tax expenses related to foreign operations.

## **Quarterly Results of Operations**

The following table sets forth our unaudited consolidated statements of operations data for each of the eight quarterly periods ended December 31, 2003. This information should be read in conjunction with our consolidated financial statements and related notes appearing elsewhere in this annual report. We have prepared this unaudited consolidated 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 quarters presented. The divestiture of our Wet Business on March 17, 2003 has significantly affected the comparability of our net sales, costs and expenses in the quarters ending June 29, September 28 and December 31, 2003 to our reported results for prior quarterly periods. A table summarizing the amount of our net sales in each quarter of 2002 and of 2003 attributable to products of the Wet Business, to RTP and strip products, and to royalties from DNS is presented under the caption "Results of Operations." Conclusions about our future results should not be drawn from the operating results for any past quarter.

	Quarter Ended (Unaudited)							
	MAR 31, 2002	JUN 30, 2002	SEP 29, 2002	DEC 31, 2002	MAR 30, 2003	JUN 29, 2003	SEP 28, 2003	DEC 31, 2003
<b>CONSOLIDATED STATEMENTS OF OPERATIONS</b>								
Net sales	\$ 46,205	\$ 47,263	\$ 60,808	\$ 49,244	\$ 67,758	\$ 30,535	\$ 32,633	\$ 43,376
Cost of sales	38,786	37,810	47,307	39,160	49,167	18,442	19,886	25,288
Gross profit	7,419	9,453	13,501	10,084	18,591	12,093	12,747	18,088
Operating expenses:								
Research, development and engineering	9,564	9,348	10,003	8,480	7,550	6,683	4,483	4,272
Selling, general and administrative	22,097	21,098	22,058	20,965	16,873	12,798	12,638	11,983
Amortization of intangibles	1,687	1,687	1,687	1,530	1,167	328	328	328
Restructuring and other charges	-	-	6,171	11,136	-	-	489	-
Total operating expenses	33,348	32,133	39,919	42,111	25,590	19,809	17,938	16,583
Income (loss) from operations	(25,929)	(22,680)	(26,418)	(32,027)	(6,999)	(7,716)	(5,191)	1,505
Loss on disposition of Wet Business	-	-	-	-	(10,257)	-	-	-
Interest and other income (expense), net	1	(2,005)	15,728	(1,088)	1,203	(1,605)	1,267	(212)
Income (loss) before provision (benefit) for								
income taxes	(25,928)	(24,685)	(10,690)	(33,115)	(16,053)	(9,321)	(3,924)	1,293
Provision (benefit) for income taxes	(151)	(162)	1,346	(1,180)	(62)	225	(21)	208
Net Income (loss)	\$ (25,777)	\$ (24,523)	\$ (12,036)	\$ (31,935)	\$ (15,991)	\$ (9,546)	\$ (3,903)	\$ 1,085
Net loss per share:								
Basic	\$ (0.70)	\$ (0.58)	\$ (0.27)	\$ (0.71)	\$ (0.36)	\$ (0.21)	\$ (0.09)	\$ 0.02
Diluted	\$ (0.70)	\$ (0.58)	\$ (0.27)	\$ (0.71)	\$ (0.36)	\$ (0.21)	\$ (0.09)	\$ 0.02
Shares used in computing loss per share:								
Basic	37,079	42,315	44,696	44,753	44,859	44,897	44,975	45,245
Diluted	37,079	42,315	44,696	44,753	44,859	44,897	44,975	47,249

## Liquidity and Capital Resources

(\$ in 000s)	2003	2002	2001
Cash flows from operating activities:	\$ (16,351)	\$ (10,900)	\$ (32,276)
Cash flows from investing activities:	(6,045)	4,964	63,266
Cash flows from financing activities:	4,213	20,247	9,620
Net increase (decrease) in cash and cash equivalents	(10,766)	23,822	30,626

Our cash and cash equivalents (excluding restricted cash) and short-term investments were \$77.1 million at December 31, 2003, a decrease of \$10.8 million from \$87.9 million held as of December 31, 2002. Stockholders' equity at December 31, 2003 was approximately \$83.7 million.

We had losses from operations in each of fiscal years 2001, 2002 and 2003. However, as a result of our restructurings and divestitures, we reduced our cost structure and our rate of losses decrease over the course of that period. We had no long-term debt at the end of 2003. Subsequent to the end of 2003, we completed an underwritten public offering of common stock, with net proceeds of approximately \$46.3 million. With the recent improvements in our operating results and the additional cash provided by the recent stock offering, we believe we have adequate liquidity and capital resources for our operations.

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 \$46.3 million.

On April 30, 2002, we issued 7.4 million shares of common stock in a private placement transaction. Of the 7.4 million shares issued, 1.3 million shares were issued to Steag Electronic Systems AG ("SES") upon conversion of \$8.1 million of outstanding promissory notes at \$6.15 per share. The remaining 6.1 million shares were sold to other investors at \$6.15 per share for aggregate net cash proceeds of \$34.9 million.

We have a revolving line of credit with a bank in the amount of \$20.0 million, which will expire on April 26, 2004. At December 31, 2003, we were in compliance with the covenants and there were no borrowings under this credit line. All borrowings under this credit line bear interest at a per annum rate equal to the bank's prime rate plus 125 basis points. The line of credit is collateralized by a blanket lien on all of our domestic assets including intellectual property. The line of credit requires us to satisfy certain quarterly financial covenants, including maintaining a minimum balance of unrestricted cash and cash equivalents and a minimum balance of investment accounts, and not exceeding a maximum net loss limit.

Our Japanese subsidiary has a credit facility with a Japanese bank in the amount of 900 million Yen (approximately \$8.4 million at December 31, 2003), collateralized by specific trade accounts receivable of the Japanese subsidiary. At December 31, 2003, there were no borrowings under this credit facility. The facility bears interest at a per annum rate of TIBOR plus 75 basis points. The facility will expire on June 20, 2004. We have given a corporate guarantee for this credit facility. There are no financial covenant requirements for this credit facility.

On July 2, 2002, we timely retired two obligations, of \$26.9 million and 10.2 million EUROS, including accrued interest thereon, and made payments in full to SES in the total amount of approximately \$37.7 million.

On June 24, 2002, we entered into a settlement agreement and a cross 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's fee and costs, and license fees. The license fee obligations of DNS would cease if all four patents that had been the subject of the lawsuit were to be held invalid by a court.

During the year ended December 31, 2003, DNS paid us \$24.0 million and as of December 31, 2003, DNS has made payments aggregating \$51.0 million under the terms of the settlement and license agreements. Of the \$51.0 million paid by DNS as of December 31, 2003, \$4.0 million was subjected to Japanese withholding tax, and the net amount we received was \$47.0 million. In future periods, we are scheduled to receive minimum royalty payments as follows:

<u>Fiscal Year Ending December 31,</u>	<u>Future DNS Payments to be received</u>
	(in thousands)
2004	\$ 6,000
2005	6,000
2006	6,000
2007	6,000
	<u>\$ 24,000</u>

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

As of December 31, 2003, we did not have any significant "off-balance sheet" arrangements (as defined in Item 303(a)(4)(ii) of SEC Regulation S-K).

### **Contractual Obligations**

Our largest long term obligations are under operating leases for our facilities. At December 31, 2003, we had inventory purchase commitments with our vendors to support our manufacturing build plan in the amount of \$10.8 million. Most of these inventory commitments are non-cancelable. Additionally, we had commitments to our outsourced contract manufacturers in the amount of \$2.0 million, which are non-cancelable.

The following table summarizes the our contractual obligations under open purchase order commitments and non-cancelable operating leases as of December 31, 2003:

	Payments due by period (in \$ thousands)				
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Contractual Obligations					
Inventory commitments	\$ 10,806	\$ 10,806	\$ -	\$ -	\$ -
Subcontractor commitments	2,041	2,041	-	-	-
Non-cancelable operating leases	35,264	5,709	9,021	4,694	15,840
	<u>\$ 48,111</u>	<u>\$ 18,556</u>	<u>\$ 9,021</u>	<u>\$ 4,694</u>	<u>\$ 15,840</u>

## Cash Flows

We used \$16.3 million in net cash in operating activities for the year ended December 31, 2003 and \$10.9 million for the year ended December 31, 2002. The net cash used in operations in 2003 was primarily attributable to net losses of \$28.4 million, a decrease in deferred revenue of \$22.1 million, and a decrease in accrued liabilities of \$13.0 million. These uses of cash were offset by the decreases in inventories and inventories - delivered systems of \$13.0 million, a loss on disposition of the Wet business of \$10.3 million, increases in accounts payable of \$6.9 million, a decrease in other assets of \$6.0 million, and the non-cash depreciation and amortization of \$8.0 million. The decrease in deferred revenue was primarily attributable to the disposition of the Wet Business on March 17, 2003, which carried a majority of our deferred revenue. The decrease in accrued liabilities was primarily attributable to a reduction in salaries and benefits accruals, a reduction in reserve for tools return, and settlement of liabilities related to the Wet Business divestiture. The decreases in inventories and inventories - delivered systems was primarily attributable to tighter inventory management aimed at keeping lower inventory, and inventory transferred to SCP as part of the disposition of the Wet Business. The increase in accounts payable resulted from timing control of vendor disbursements. The decrease in other assets resulted from a reclassification of equipment to property and equipment, and decreases in deposits, deferred financing costs and other long term assets.

The net cash used in operations in 2002, of \$10.9 million, was primarily attributable to the net loss of \$94.3 million, a decrease in deferred revenue of \$43.9 million, decrease in accrued liabilities of \$8.1 million, and deferred taxes of \$4.3 million. These uses of cash were offset by the decreases in inventories and inventories - delivered systems of \$41.2 million, decreases in accounts receivable and advance billings of \$49.1 million, and a non-cash impairment of long-lived assets and other charges of \$16.0 million.

The net cash used in operations in 2001, of \$32.3 million, was primarily attributable to the net loss of \$336.7 million and a decrease in accrued liabilities of \$25.4 million and accrued payables of \$20.7 million. These uses of cash were offset by non-cash impairment of long-lived assets and other charges of \$150.7 million and depreciation and amortization of goodwill and intangibles of \$33.5 million, an increase in deferred revenue of \$95.9 million, a decrease in accounts receivable of \$50.4 million, inventory valuation charges of \$26.4 million and acquired in-process research and development charges of \$10.1 million.

Net cash used in investing activities was \$6.0 million for the year ended December 31, 2003, which consisted of purchase of property and equipment of \$8.0 million offset by the proceeds from the disposition of the Wet Business of \$2.0 million. The purchase of property and equipment was primarily attributable to implementation of a new enterprise resource planning (ERP) system which is expected to be completed in the fourth quarter of 2004.

Net cash provided by investing activities in 2002 was \$5.0 million, which consisted of the sale of \$20.8 million of investments and proceeds from the sale of equipment of \$3.7 million, offset by the purchase of \$15.0 million of investments and \$4.6 million of property and equipment. Net cash provided by investing activities in 2001 was \$63.3 million, which consisted of the sale of \$58.3 million of investments and cash acquired from the acquisition of the STEAG Semiconductor Division and CFM of \$38.0 million, offset by the purchase of \$17.2 million of property and equipment and \$16.3 million of investments.

Net cash provided by financing activities was \$4.2 million for the year ended December 31, 2003, primarily due to \$3.6 million in proceeds from stock plans and a decrease in restricted cash of \$0.6 million. The decrease in restricted cash resulted from pledge deposits that were no longer required for leases in Germany.

Net cash provided by financing activities was \$20.2 million in 2002, primarily resulting from a decrease in restricted cash of \$26.2 million, and the net proceeds from the issuance of common stock of \$34.9 million, offset by the payment on notes payable of \$38.8 million, and payment on a line of credit of \$5.3 million. Net cash provided by financing activities was \$9.6 million in 2001, primarily resulting from \$9.0 million of borrowings against lines of credit, \$3.6

million in proceeds from stock plans and \$2.7 million of interest accrued on the notes payable to SES, offset by the repayment of \$4.9 million against our line of credit.

Based on current projections, we believe that our current cash and investment positions together with cash provided by operations and the public offering completed on February 17, 2004 will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next twelve months.

Our operating plans are based on and require us to reduce our operating losses, control expenses, manage inventories, and collect accounts receivable balances. As a result of the prolonged semiconductor market downturn, we are exposed to a number of challenges and risks, including delays in payments of accounts receivable by customers, and postponements or cancellations of orders. Postponed or cancelled orders can cause excess inventory and underutilized manufacturing capacity. If we are not able to sustain profitability over the upcoming quarters, the operating losses could adversely affect cash and working capital balances, and we may be required to seek additional sources of financing through public or private financing, or other sources, to fund operations. We may not be able to obtain adequate or favorable financing when needed. Failure to raise capital when needed could harm our business. When additional funds are raised through the issuance of equity securities, the percentage ownership of our stockholders is reduced, and these equity securities may have rights, preferences or privileges senior to our common stock. Any additional equity financing may be dilutive to stockholders, and debt financing, if available, may involve restrictive covenants on the Company's operations and financial condition.

### **New Accounting Pronouncements**

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities", an Interpretation of ARB No. 51. FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 were initially required to be applied for the first interim or annual period beginning after June 15, 2003. At its meeting on October 8, 2003, the FASB deferred the latest date by which all public entities must apply FIN 46 to the first reporting period ending after December 15, 2003. This deferral applies to all variable interest entities (VIEs) and potential VIEs, both financial and non-financial in nature. The adoption of FIN 46 did not have a material impact on the Company's financial condition or statement of operations.

In April 2003, the FASB issued Statement of Financial Accounting Standards No. 149 (SFAS 149), "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." This statement amends SFAS 133 to provide clarification on the financial accounting and reporting of derivative instruments and hedging activities and requires contracts with similar characteristics to be accounted for on a comparable basis. SFAS 149 was effective for contracts entered into or modified after June 30, 2003, and the adoption of SFAS 149 did not have a material effect on the Company's financial condition or results of operations.

In May 2003, the FASB issued Statement of Financial Accounting Standards No. 150 (SFAS 150), "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS 150 establishes standards on the classification and measurement of financial instruments with characteristics of both liabilities and equity. SFAS 150 is effective for financial instruments entered into or modified after May 31, 2003. While the effective date of certain elements of SFAS 150 have been deferred, the adoption of SFAS 150 when finalized is not expected to have a material effect on the Company's financial condition, results of operations or cash flows.

In December, 2003, the Securities and Exchange Commission (or SEC) issued Staff Accounting Bulletin No. 104 (or SAB 104), "Revenue Recognition", which supersedes SAB 101, "Revenue Recognition in Financial Statements." SAB 104's primary purpose is to rescind the accounting guidance contained in SAB 101 related to multiple-element revenue arrangements that was superseded as a result of the issuance of EITF 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." Additionally, SAB 104 rescinds the SEC's related "Revenue Recognition in Financial Statements Frequently Asked Questions and Answers" issued with SAB 101 that had been codified in SEC Topic 13, "Revenue Recognition." While the wording of SAB 104 has changed to reflect the issuance of EITF 00-21, the revenue recognition principles of SAB 101 remain largely unchanged by the issuance of SAB 104, which was effective upon issuance. The Company's adoption of SAB 104 did not have a material effect on its financial position or results of operations.

### **Mergers, Acquisitions and Divestitures**

As part of our restructuring efforts in 2002 and 2003, in March 17, 2003, we sold the portion of our business that was engaged in 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"). We had originally acquired the Wet Business on January 1, 2001, as part of our merger with the STEAG Semiconductor Division and CFM. The Wet Business represented a significant portion of our revenues and our costs in 2001, 2002 and the first quarter of 2003, and the divestiture of that business affects the comparability of our financial statements in the current and future periods to our reported results for 2001, 2002, and 2003 and quarters within those periods.

As part of the Wet Business disposition, SCP acquired certain subsidiaries and assets, and assumed certain contracts relating to the Wet Business, including the operating assets, customer contracts and inventory of CFM, all outstanding stock of Mattson Technology IP, Inc. ("Mattson IP"), a subsidiary that owns various patents relating to the Wet Business, and all equity ownership interest in Mattson Wet Products GmbH, a subsidiary in Germany that owned our principal Wet Business operations. We retained all the cash from the Wet Business entities, and we retained all rights to payments under the settlement and license agreements with DNS. SCP acquired the rights to any damages under pending patent litigation relating to patents owned by Mattson IP. SCP assumed responsibility for the operations, sales, marketing and technical support services for our former wet product lines worldwide. The initial purchase price paid to us by SCP to acquire the Wet Business was \$2 million in cash. That initial purchase price was subject to adjustment based on a number of things, including the net working capital of the Wet Business at closing, determined on a pro forma post-closing balance sheet, and an earn-out payable to us, up to an aggregate maximum of \$5 million, based upon sales by SCP of certain products to identified customers through December 31, 2004. We assumed certain real property leases relating to transferred facilities in Germany, subject to a sublease to SCP.

During the first quarter of 2003, we recorded accruals of approximately \$11.9 million to cover future obligations relating to the Wet disposition. We did not record any additional accruals for this transaction thereafter. On December 5, 2003, we paid \$4.4 million to SCP to satisfy and be released from any further liabilities relating to (i) working capital adjustments, (ii) pension obligations, (iii) reductions in force in Germany (iv) reimbursement of legal fees, and (v) reimbursement of amounts necessary to cover specified customer responsibilities.

On January 1, 2001, we simultaneously acquired the semiconductor equipment division of STEAG Electronic Systems AG (the "STEAG Semiconductor Division") and CFM Technologies, Inc. ("CFM"), which we refer to as "the merger." We entered into a definitive Strategic Business Combination Agreement on June 27, 2000, (as subsequently amended on December 15, 2000 and November 5, 2001, the "Combination Agreement") to acquire eleven direct and indirect subsidiaries comprising the semiconductor equipment division of STEAG Electronic Systems AG ("the STEAG Semiconductor Division"), and we entered into an Agreement and Plan of Merger ("Plan of Merger") to acquire CFM Technologies, Inc. ("CFM").

Under the Combination Agreement, we issued to STEAG Electronic Systems AG ("SES") 11,850,000 shares of common stock, valued at approximately \$124 million as of the date of the amended Combination Agreement. We also paid SES \$100,000 in cash, and reimbursed SES \$3.3 million in acquisition related costs. We also assumed certain obligations of SES and STEAG AG, the parent company of SES, and assumed certain intercompany indebtedness and obligations owed by the acquired subsidiaries to SES. We issued 1.3 million shares of common stock to SES in exchange for the conversion of \$8.1 million of outstanding promissory notes on April 30, 2002, and we made payment in full, on July 2, 2002, in the total amount of approximately \$37.7 million, including accrued interest thereon. The acquisition had been accounted for under the purchase method of accounting, and the results of operations of the STEAG Semiconductor Division are included in our consolidated statement of operations from the date of acquisition. The purchase price of this acquisition was \$148.6 million, which included \$6.2 million of direct acquisition related costs (including the amount reimbursed to SES).

Under the Plan of Merger with CFM, we agreed to acquire CFM in a stock-for-stock merger in which we issued 4,234,335 shares of our common stock, valued at approximately \$150.2 million. In addition, we assumed all outstanding CFM stock options, which resulted in our issuance of options to acquire 927,457 shares of our common stock, valued at approximately \$20.4 million. The merger had been accounted for under the purchase method of accounting and the results of operations of CFM are included in our consolidated statement of operations from the date of acquisition. The purchase price of the acquisition of CFM was \$174.6 million, which included \$4.0 million of direct acquisition related costs.

### **Capital Finance Transactions and DNS Settlement**

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 \$46.3 million. In the same offering, SES sold approximately 4.3 million outstanding shares. Following this public offering, SES remains our

largest stockholder, holding approximately 8.9 million shares, or approximately 17.8 percent, of the 49.2 million shares of our common stock outstanding.

On April 30, 2002, we issued 7.4 million shares of common stock in a private placement transaction. Of the 7.4 million shares issued, 1.3 million shares were issued to Steag Electronic Systems AG upon conversion of \$8.1 million of outstanding promissory notes at \$6.15 per share. The remaining 6.1 million shares were sold to other investors at \$6.15 per share for aggregate net cash proceeds of \$34.9 million.

On June 24, 2002, we settled a patent infringement lawsuit with Dainippon Screen Manufacturing Co., Ltd. ("DNS"). As part of the settlement, DNS agreed to pay us, at minimum, \$75 million, relating to past damages, partial reimbursement of attorney's fees and costs, and royalties, payable in varying amounts at varying dates through April 1, 2007, in return for our granting DNS a worldwide license under the previously infringed patents. Depending on the volume of future product sales by DNS, we could receive up to an additional \$30 million in royalty payments. We determined, based on relative fair values, how much of the aggregate payments due to us are attributable to past damages and how much are attributable to future royalties on DNS sales of wet processing products. Based on our analysis, which included an independent appraisal, we allocated \$15.0 million to past damages, which we recorded as "other income" during 2002, and we allocated \$60 million to royalty income, which is being recognized in our income statements on a straight-line basis over the license term. During 2002 and 2003, we recognized royalty revenue of approximately \$6.3 million and \$12.0 million, respectively. During 2002, DNS made payments of \$27.0 million and during 2003 DNS made payments of \$24.0 million, aggregating to \$51.0 million.

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

### **The Semiconductor Equipment Industry is Cyclical, has Recently Been in a Severe and Prolonged Downturn, and Causes Our Operating Results to Fluctuate Significantly.**

The semiconductor industry is highly cyclical and has historically experienced periodic downturns, whether the result of general economic changes or capacity growth temporarily exceeding growth in demand for semiconductor devices. During periods of declining demand for semiconductor manufacturing equipment, customers typically reduce purchases, delay delivery of products and/or cancel orders. Increased price competition may result, causing pressure on our net sales, gross margin and net income. We have at times experienced cancellations, delays and push-outs of orders, which reduced our revenues, caused delays in our ability to recognize revenue on the orders and reduced our backlog. If we have future order cancellations, reductions in order size or delays in orders, it will materially adversely affect our business and results of operations.

Following the very strong year in 2000, the semiconductor industry entered a significant and prolonged downturn. The severity and duration of the downturn are unknown, but is impairing our ability to sell our systems and to operate profitably. If demand for semiconductor devices and our systems remains depressed for an extended period, it will seriously harm our business.

As a result of acquisitions we made at the beginning of 2001, we grew to be a larger, more geographically diverse company, less able to react quickly to the cyclicity of the semiconductor business, particularly in Europe and other regions where restrictive laws relating to termination of employees prohibited us from quickly reducing costs in order to meet the downturn. Accordingly, during this latest downturn we have been unable to reduce our expenses quickly enough to avoid incurring a loss. For the fiscal years ended December 31, 2001 and 2002 and 2003, our net loss was \$336.7 million, \$94.3 million and \$28.4 million, respectively, compared to net income of \$1.5 million for the year ended December 31, 2000. Our net losses in 2002 and the first three quarters of 2003 primarily reflect the impact of our continuing depressed level of net sales. If our actions to date are insufficient to effectively align our cost structure with prevailing market conditions, we may be required to undertake additional cost-cutting measures, and may be unable to continue to invest in marketing, research and development and engineering at the levels we believe are necessary to maintain our competitive position in our remaining core businesses. Our failure to make these investments could seriously harm our long-term business prospects.

### **We are Exposed to the Risks Associated with Industry Overcapacity, Including Reduced Capital Expenditures, Decreased Demand for Our Products, Increased Price Competition and Delays by Our Customers in Paying for Our Products.**

As a result of the current economic downturn, inventory buildups in telecommunication products and slower than expected personal computer sales have resulted in overcapacity of semiconductor devices and has caused semiconductor manufacturers to reduce their capital spending. As our business depends in significant part upon capital expenditures by manufacturers of semiconductor devices, including manufacturers that open new or expand existing facilities, continued overcapacity and reductions in capital expenditures by our customers could cause further delays or decreased demand for our products. If existing fabrication facilities are not expanded or 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. In addition, the reduced demand levels result in increased competition and may cause downward pressure on our product prices and margins in order to win customer orders.

In addition, many semiconductor manufacturers are continuing to forecast that revenues in the short-term will remain flat or lower than in previous high-demand years. As a result, if customers are not successful generating sufficient revenue or securing alternative financing arrangements, we may be unable to close sales or collect accounts receivables from such customers or potential customers, and may be required to take additional reserves against our accounts receivables.

**We Depend on Large Purchases From a Few Customers, and Any Loss, Cancellation, Reduction or Delay in Purchases By, or Failure to Collect Receivables From, These Customers Could Harm Our Business.**

Currently, we derive most of our revenues from the sale of a relatively small number of systems to a relatively small number of customers, which makes our relationship with each customer critical to our business. The list prices on our systems range from \$500,000 to over \$2.2 million. Our lengthy sales cycle for each system, coupled with customers' capital budget considerations, make the timing of customer orders uneven and difficult to predict. Any delay in scheduled shipments or in acceptances of shipped products would delay our ability to recognize revenue and collect outstanding accounts receivable, and could materially adversely affect our operating results for that quarter. A delay in a shipment or customer acceptance near the end of a quarter could cause net sales in that quarter 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. Accordingly, it is difficult for us to accurately forecast our revenues and operating results from year to year. If we are unable to collect a receivable from a large customer, our financial results will be negatively impacted.

**We May Not Achieve Anticipated Revenue Growth if We Are Not Selected as "Vendor Of Choice" for New or Expanded Fabrication Facilities or If Our Systems and Products Do Not Achieve Broader Market Acceptance.**

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 for a significant period of time upon equipment from this "vendor of choice" for the specific production line application. In addition, the semiconductor manufacturer frequently will attempt to consolidate its other capital equipment requirements with the same vendor. Accordingly, we may face narrow windows of opportunity to be selected as the "vendor of choice" by substantial 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 grow our business and our operating results and financial condition will be adversely affected.

**We Are Engaged in the Implementation of a New Enterprise Resource Planning System, Which May Be More Difficult or Costly Than Anticipated, and Could Cause Disruption to the Management of Our Business and the Preparation of Our Financial Statements.**

We are currently engaged in the implementation of a new enterprise resource planning, or ERP, system, which is expected to become 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. However, the new ERP system could eventually become more costly, difficult and time consuming to purchase and implement than we currently anticipate. In addition, implementation of the new ERP system requires us to change our internal business practices, transfer records to a new computer system and train our employees in the correct use of and input of data into the system, which could result in disruption of our procedures and controls and difficulties achieving accuracy in the

conversion of data. If we fail to manage these changes effectively, our operations could be disrupted, which could result in the diversion of management's attention and resources, cause us to improperly state or delay reporting of our financial results, materially and adversely affect our operating results, and impact our ability to manage our business. In addition, to manage our business effectively, we may need to implement additional and improved management information systems, further develop our operating, administrative, financial and accounting systems and controls, add experienced senior level managers, and maintain closer coordination among our executive, engineering, accounting, marketing, sales and operations organizations. We may incur additional unexpected costs and our systems, procedures or controls may not be adequate to support our operations.

**We Have Implemented New Financial Systems, and Will Need to Continue to Improve or Implement New Systems, Procedures and Controls.**

We have implemented new financial systems used in the consolidation of our financial results, in order to further automate processes and align the disparate systems used by our acquired businesses. We have recently implemented new financial systems to aid in the consolidation of our financial reporting operations. These financial systems are new and we have not had extensive experience with them. We may encounter unexpected difficulties, costs or other challenges that make implementation and use of these systems more difficult or costly than expected, may cause the consolidation and reporting of our financial results to be more time-consuming than expected, and may require additional management resources than expected before they are fully implemented and operating smoothly. Continued improvement or implementation of new systems, procedures and controls may be required, and could cause us to incur additional costs, and place further burdens on our management and internal resources. If our new financial systems do not result in the expected improvements, or if we are unable to fully implement these systems, procedures and controls in a timely manner, our business could be harmed.

In addition, new requirements adopted by the Securities and Exchange Commission in response to the passage of the Sarbanes-Oxley Act of 2002, will require annual review and evaluation of our internal control systems, and attestation of these systems by our independent auditors. We are currently reviewing our internal control procedures and considering further documentation of such procedures that may be necessary. Any improvements in our internal control systems or in documentation of such internal control systems could be costly to prepare or implement, divert attention of management or finance staff, and may cause our operating expenses to increase over the ensuing year.

**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 already 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, 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 which 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, time consuming and difficult and could result in unforeseen operations problems. 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.

**Delays or Technical and Manufacturing Difficulties Incurred in the Introduction of New Products Could Be Costly and Adversely Affect Our Customer Relationships.**

From time to time, we have experienced delays in the introduction of, and certain technical and manufacturing difficulties with, the introduction of new systems and enhancements, and may experience such delays and technical and manufacturing difficulties in future introductions or volume production of new systems or enhancements. For example, 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. In addition, we may from time to time incur unanticipated costs to ensure the functionality and reliability of our products early in their life cycles, which costs can be substantial. If new products or enhancements experience reliability or quality problems, we could encounter 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.

**Unless We Can Continue To Develop and Introduce New Systems that Compete Effectively On the Basis of Price and Performance, We May Lose Future Sales and Customers, Our Business May Suffer, and Our Stock Price May Decline.**

Because of continual changes in the markets in which our customers and we compete, our future success will depend in part upon our ability to continue to improve our systems and technologies. These markets are characterized by rapidly changing technology, evolving industry standards, and continuous improvements in products and services. Due to the continual changes in these markets, our success will also depend upon our ability to develop new technologies and systems that compete effectively on the basis of price and performance and that adequately address customer requirements. In addition, we must adapt our systems and processes to support emerging target market industry standards.

The success of any new systems we introduce is dependent on a number of factors, including timely completion of new system designs accepted by the market, and may be adversely affected by manufacturing inefficiencies and the challenge of producing systems in volume which meet customer requirements. We may not be able to improve our existing systems or develop new technologies or systems in a timely manner. In particular, the transition of the market to 300 mm wafers will present us with both an opportunity and a risk. To the extent that we are unable to introduce 300mm systems that meet customer requirements on a timely basis, our business could be harmed. We may exceed the budgeted cost of reaching our research, development and engineering objectives, and estimated 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. Because of the complexity of our systems, significant delays can occur between the introduction of systems or system enhancements and the commencement of commercial shipments.

**Our Backlog Orders are Subject to Cancellation or Delay, and Our Current Backlog is Relatively Low in Relation to Our Projected Revenues, so that we Must Book and Ship Significant Orders Within the Same Quarter to Achieve Our Revenue Goals.**

Although we maintain a backlog of customer orders expected to be filled within 12 months, customers may request cancellations or delivery delays. As a result, our backlog may not be a reliable indication of our future revenues. In addition, our backlog is relatively low in relation to our projected quarterly revenues, so meeting our revenue goals requires that we book and ship significant orders in the same quarter, in addition to shipping orders out of backlog on schedule. Given our current limited bookings visibility, this makes predicting revenues increasingly difficult. If we do not receive sufficient orders that can be shipped within a relatively short time-frame, or if shipments of such orders or of previously scheduled orders in backlog are cancelled or delayed, our revenues could fall below our expectations and the expectations of market analysts and investors.

**Our Results of Operations May Suffer if We Do Not Effectively Manage Our Inventory.**

To achieve commercial success with our product lines, we need to manage our inventory of component parts and finished goods effectively to meet changing customer requirements. Some of our products and supplies have in the past and may in the future become obsolete while in inventory due to rapidly changing customer specifications. If we are not successfully able to manage our inventory, including our spare parts inventory, we may need to write off unsaleable or obsolete inventory, which would adversely affect our results of operations.

**Warranty Claims in Excess of Our Projections Could Seriously Harm Our Business.**

We offer a warranty on our products. 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 experienced product failures at an unexpectedly high level, our reputation in the marketplace could be damaged, customers may decline to place new or additional orders with us, and our business would suffer.

### **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 installed base;
- breadth of product line;
- delivery availability; and
- customer support.

The current economic downturn has increased competitive pressure in several areas. In particular, there is increased price competition, and customers are waiting to make purchase commitments, which are then placed with demands for rapid delivery dates and increased product support. The following characteristics of our major competitors' systems may give them a competitive advantage over us:

- broader product lines;
- longer operating history;
- greater experience with high volume manufacturing;
- broader name recognition;
- substantially larger customer bases;
- substantially greater customer support resources; and
- substantially greater financial, technical, and marketing resources.

In addition, to expand our sales we must often replace 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.

### **Our Lengthy Sales Cycle Increases Our Costs and Reduces the Predictability of Our Revenue.**

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. Potential new customers evaluate the need to acquire new semiconductor manufacturing equipment infrequently. Even after the customer determines that our systems meet their qualification criteria, we experience delays finalizing system sales while the customer obtains approval for the purchase and constructs new facilities or expands its existing facilities. We may expend significant sales and marketing expenses during this evaluation period. 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. In this difficult economic climate, the average sales cycle has lengthened even further and is expected to

continue to make it difficult to accurately forecast future sales. If sales forecasted from a specific customer for a particular quarter 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.

**The Timing of the Transition to 300mm Technology is Uncertain and Competition May Be Intense.**

We have invested, and are continuing to invest, substantial resources to develop new systems and technologies to automate the processing of 300mm wafers. However, the timing of the industry's transition to 300mm manufacturing technology is uncertain, partly as a result of the recent period of reduced demand for semiconductors. Delay in the transition to 300mm manufacturing technology could adversely affect our potential revenues and opportunities for future growth. Moreover, delay in the transition to 300mm technology could permit our competitors to introduce competing or superior 300mm products at more competitive prices, causing competition to become more vigorous.

**We Are Highly Dependent on Our International Sales, and Face Significant Economic and Regulatory Risks Because a Majority of Our Net Sales Are From Outside the United States.**

Asia has been a particularly important region for our business, and we anticipate that it will continue to be important as we expand our sales and marketing efforts by opening an office in China. Our sales to customers located in Taiwan, Japan, other Asian countries and recently China accounted for 71% of our total sales in 2003, 47% in 2002 and 47% in 2001. During 2001, Europe also emerged as an important region for our business. During 2003, 2002 and 2001, sales to customers in Europe accounted for 16%, 27% and 31%, respectively. Our international sales accounted for 87% of our total net sales in 2003, 74% in 2002 and 78% in 2001 and we anticipate international sales will continue to account for a significant portion of our future net sales. Because of our continuing dependence upon international sales, however, 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, 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, particularly in Asia;
- differing labor regulations;
- reduced protection for intellectual property;
- difficulties in accounts receivable collections;
- difficulties in managing distributors or representatives;
- difficulties in staffing and managing foreign subsidiary operations; and
- changes in tariffs or taxes.

In the U.S., our sales to date have been denominated primarily in U.S. dollars, while our sales in Japan are usually denominated in Japanese Yen. Our sales to date in Europe have been denominated in various currencies, currently 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 become less price-competitive where 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, we are exposed to the risks of operating a global business, and maintain certain manufacturing facilities in Germany. Managing our global operations presents challenges, including varying business conditions and demands, political instability, export restrictions and fluctuations in interest and currency exchange rates.

**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. 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, as it was in 2000, our suppliers strained to provide 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 and subassemblies is an extremely complex process and requires long lead times. As a result, we have in the past and we may in the future experience delays or shortages. If we are unable to obtain adequate and timely deliveries of our required components or subassemblies, 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.

**We Are Highly Dependent on Our Key Personnel to Manage Our Business and Their Knowledge of Our Business, Management Skills, and Technical Expertise Would Be Difficult to Replace.**

Our success will depend to a large extent upon the efforts and abilities of our executive officers, our current management and our technical staff, any of whom would be difficult to replace. In past years we have had significant turnover among our executive officers and key employees, and several have recently joined us or have assumed new responsibilities at the company. The addition, reassignment or loss of key employees could limit or delay our ability to develop new products and adapt existing products to our customers' evolving requirements and result in lost sales and diversion of management resources.

**As a Result of the Industry Downturn, We Have Implemented Restructuring and Workforce Reductions, Which May Adversely Affect the Morale and Performance of our Personnel and our Ability to Hire New Personnel.**

In connection with our efforts to streamline operations, reduce costs and bring our staffing and structure in line with current demand for our products, during 2002 and 2003 we restructured our organization and reduced our workforce by 257 and 508 positions, respectively. We incurred costs associated with these workforce reductions, and may incur further costs if additional restructuring is needed to right size our business further or bring our costs down to respond to continued industry and economic slowdowns. Our restructuring may also yield unanticipated consequences, such as attrition beyond our planned reduction in workforce and loss of employee morale and decreased performance. The effects of the restructuring may be further exacerbated by our sale of the Wet Business to SCP, which involved the transfer or termination of employment of our employees engaged in the Wet Business. In addition, the declines in our common stock price since mid-2000 have decreased the value of the stock options we granted to employees pursuant to our stock option plan. As a result of these factors, our remaining personnel may seek employment with larger, more established companies or companies they perceive as having less volatile operations or stock prices. Continuity of personnel can be an important factor in the successful sales of our products and completion of our development projects in our ongoing core businesses, and turnover in our sales and research and development personnel could materially and adversely impact our sales, development and marketing efforts. We believe that hiring and retaining qualified individuals at all levels is essential to our success, and there can be no assurance that we will be successful in attracting and retaining the necessary personnel.

**Because of Competition for Additional 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 due to our lack of capacity to develop and market our products to our customers, or we could fail to meet our delivery commitments or experience deterioration in service levels or decreased customer satisfaction.

If the current downturn ends suddenly, we may not have enough personnel to promptly return to our previous production levels. If we are unable to expand our existing manufacturing capacity to meet demand, a customer's placement of a large order for our products during a particular period might deter other customers from placing similar orders with us for the same period. It could be difficult for us to rapidly recruit and train substantial numbers of qualified technical personnel to meet increased demand.

**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 thus could cause delays in shipments of products to our customers, result in cancellation of orders or loss of customers and seriously harm our business.

**If We Are Unable to Protect Our Intellectual Property, We May Lose a Valuable Asset, Experience Reduced Market Share, and Efforts to Protect Our Intellectual Property May Require Additional Costly Litigation.**

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, our competitors may be able to legitimately ascertain the non-patented proprietary technology embedded in our systems. 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. In addition, 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, duplicate our products, 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.

**We Might Face Intellectual Property Infringement Claims that May Be Costly to Resolve and Could Divert Management Attention Including the Potential for Patent Infringement Litigation.**

We may from time to time be subject to claims of infringement of other parties' proprietary rights. In addition, we on occasion receive notification from customers who believe that we owe them indemnification or 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.

**Our Failure to Comply with Environmental 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. These laws, rules, and regulations govern the use, storage, discharge, and disposal of hazardous chemicals during manufacturing, research and development and sales demonstrations. If we fail to comply with present or future regulations, we could be subject to substantial liability for clean up efforts, personal injury, and 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 or we could be required to acquire costly remediation equipment or incur other significant expenses.

**We Incurred Net Operating Losses for the Fiscal Years 1998, 1999, 2001, 2002 and 2003. We May Not Achieve or Maintain Profitability on an Annual Basis, and If We Do Not, We May Not Utilize Deferred Tax Assets.**

We incurred net losses of approximately \$22.4 million for the year ended December 31, 1998, \$0.8 million for the year ended December 31, 1999, \$336.7 million for the year ended December 31, 2001, \$94.3 million for the year ended December 31, 2002 and \$28.4 million for the year ended December 31, 2003. We expect to continue to incur significant research and development and selling, general and administrative expenses and may not return to profitability in 2003. We will need to generate significant increases in net sales to achieve and maintain profitability on an annual basis, and we may not be able to do so. In addition, our ability to realize our deferred tax assets in future periods will depend on our ability to achieve and maintain profitability on an annual basis.

**Our Quarterly Operating Results Fluctuate Significantly and Are Difficult to Predict, and May Fall Short of Anticipated Levels, Which Could Cause Our Stock Price to Decline.**

Our quarterly 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. This fluctuation is due to a number of factors, including:

- cyclical nature of the semiconductor industry;
- delays, cancellations and push-outs of orders by our customers;
- delayed product acceptance or payments of invoices by our customers;
- size and timing of sales, shipments and acceptance of our products;
- entry of new competitors into our market, or the announcement of new products or product enhancements by competitors;
- sudden changes in component prices or availability;
- variability in the mix of products sold;
- manufacturing inefficiencies caused by uneven or unpredictable order patterns, reducing our gross margins;
- higher fixed costs due to increased levels of research and development costs; and
- successful expansion of our worldwide sales and marketing organization.

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.

**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. We believe that a number of factors could cause the price of our common stock to fluctuate, perhaps substantially, including:

- general conditions in the semiconductor industry or in the worldwide economy;
- announcements of developments related to our business;
- fluctuations in our operating results and order levels;
- announcements of technological innovations by us or by our competitors;
- new products or product enhancements by us or by our competitors;
- developments in patent litigation or other intellectual property rights; or

- developments in our relationships with our customers, distributors, and suppliers.

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.

**Future Sales of Shares by STEAG Could Adversely Affect the Market Price of Our Common Stock.**

There are approximately 49.8 million shares of our common stock outstanding as of March 2004, of which approximately 8.9 million (or 17.8%) are held beneficially by STEAG Electronic Systems AG. STEAG may sell these shares in the public markets from time to time, subject to certain limitations on the timing, amount and method of such sales imposed by SEC regulations. STEAG has reduced its ownership in our common stock on February 17, 2004 by selling approximately 4.1 million shares. We have currently registered approximately 2.9 million additional shares of our common stock for resale by STEAG. STEAG has the contractual right to require us to register for resale all of the shares they hold. If STEAG were to sell additional large number of shares, the market price of our common stock could decline. Moreover, the perception in the public markets that such sales by STEAG might occur could also adversely affect the market price of our common stock.

**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 additional 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;
- 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.

**Legislative actions, higher insurance cost and potential new accounting pronouncements are likely to cause our general and administrative expenses to increase and impact our future financial position and results of operations.**

In order to comply with the Sarbanes-Oxley Act of 2002, as well as changes to listing standards recently adopted by Nasdaq, and proposed accounting changes by the Securities and Exchange Commission, we will be required to increase our internal controls, hire additional personnel and additional outside legal, accounting and advisory services, all of which will cause our general and administrative costs to increase. Insurers are also likely to increase premiums as a result of the high claims rates incurred in recent periods, and so our premiums for our various insurance policies, including our directors' and officers' insurance policies, are likely to increase. Proposed changes in the accounting rules, including legislative and other proposals to account for employee stock options as a compensation expense among others, could materially increase the expenses that we report under generally accepted accounting principles and adversely affect our operating results.

## **We May Need Additional Capital, Which May Not Be Available and Which Could Be Dilutive to Existing Stockholders.**

Based on current projections, we believe that our current cash and investments along with cash generated through operations will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for the next 12 months. Management's projections are based on our ability to manage inventories and collect accounts receivable balances in this market downturn. If we are unable to manage our inventories or accounts receivable balances, or if we otherwise experience higher operating costs or lower revenue than we anticipate, we may be required to seek alternative sources of financing. We may need to raise additional funds in future periods through public or private financing or other sources to fund our operations. We may not be able to obtain adequate or favorable financing when needed. If we fail to raise capital when needed, we would be unable to continue operating our business as we plan, or at all. In addition, we may need to continue reducing costs, which could cause us to curtail research and development activities, resulting in a delay in new product introduction or enhancement. If we raise additional funds through the issuance of equity securities, the percentage ownership of our stockholders would be reduced. In addition, any future equity securities may have rights, preferences or privileges senior to our common stock. Furthermore, debt financing, if available, may involve restrictive covenants on our operations.

## **The Effect of Terrorism, the War in Iraq, and Political Instability Could Harm our Results of Operation.**

The threat of terrorism targeted at the regions of the world in which we do business, including the United States, increases the uncertainty in our markets and may delay any recovery in the general economy. Any delay in the recovery of the economy and the semiconductor industry could seriously impact our business. Increased international political instability, as demonstrated by the September 2001 terrorist attacks, disruption in air transportation and further enhanced security measures as a result of the terrorist attacks, and the effects of war in Iraq, may hinder our ability to do business and may increase our costs of operations. Such continuing instability could cause us to incur increased costs in transportation, make such transportation unreliable, increase our insurance costs, and cause international currency markets to fluctuate. This same instability could have the same effects on our suppliers and their ability to timely deliver their products. If this international political instability continues or increases, our business and results of operations could be harmed.

## **ITEM 7A: QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK**

### **Interest Rate Risk**

Our exposure to market risk for changes in interest rates relates to our investment portfolio. We do not use derivative financial instruments in our investment portfolio. We place our investments with high credit quality issuers and, by policy, limit the amount of credit exposure to any one issuer. The portfolio includes only marketable securities with active secondary or resale markets to ensure portfolio liquidity. We have no cash flow exposure due to rate changes for cash equivalents and short-term investments, as all of these investments are at market interest rates.

The table below presents the fair value of principal amounts and related weighted average interest rates for our investment portfolio as of December 31, 2003.

	<b>Fair Value</b>	
	<b>December 31,</b>	
	<b>2003</b>	
	<u>(In thousands)</u>	
<b>Assets</b>		
Cash and cash equivalents	\$	77,115
Average interest rate		0.80%
Restricted cash	\$	509
Average interest rate		0.65%

These securities are subject to interest rate risk and will decline in value if interest rates increase. Due to the short duration of our investment portfolio, an immediate 10 percent change in interest rates is not expected to have a material effect on our near-term financial condition or results of operations.

### **Foreign Currency Risk**

We are primarily a US Dollar functional currency entity. We transact business in various foreign countries and employ a foreign currency hedging program, utilizing foreign currency forward exchange contracts, to hedge foreign currency fluctuations associated with the Japanese Yen. Our subsidiaries in Germany are EURO functional currency entities and they also employ foreign currency hedging programs, utilizing foreign currency forward exchange contracts, to hedge foreign currency fluctuations associated with the US Dollar and Japanese Yen. The goal of the hedging program is to lock in exchange rates to minimize the impact of foreign currency fluctuations. We do not use foreign currency forward exchange contracts for speculative or trading purposes.

The following table provides information as of December 31, 2003 about us and our subsidiaries' derivative financial instruments, which are comprised of foreign currency forward exchange contracts. The information is provided in U.S. dollar and EURO equivalent amounts, as listed below. The table presents the notional amounts (at the contract exchange rates), the weighted average contractual foreign currency exchange rates, and the estimated fair value of those contracts.

The local currency is the functional currency for all our foreign sales operations. Our exposure to foreign currency risk has increased as a result of our global expansion of business. To neutralize our US operation's exposure to exchange rate volatility, we keep EUROS in a foreign currency bank account. The balance of this bank account was 7.8 million EUROS at December 31, 2003.

<u>Notional Amount</u>	<u>Average Contract Rate</u>	<u>Estimated Fair Value</u>
----------------------------	--------------------------------------	-------------------------------------

(In thousands, except for average contract rate)

**Foreign currency forward sell exchange contracts:**

Mattson Technology Inc. (US Dollar equivalent amount)					
Japanese Yen	\$	2,800	111.02	\$	2,898
Mattson Thermal Products GmbH (Euro equivalent amount)					
U.S. Dollar	EUR	9,155	1.19	EUR	8,832
	\$	11,325		\$	10,925
Japanese Yen	EUR	2,344	132.79	EUR	2,342
	\$	2,899		\$	2,897

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**Index to Consolidated Financial Statements**

	Page
	-----
Consolidated Financial Statements:	
Consolidated Balance Sheets as of December 31, 2003 and 2002 .....	39
Consolidated Statements of Operations for the years ended December 31, 2003, 2002 and 2001.....	40
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2003, 2002 and 2001.....	41
Consolidated Statements of Cash Flows for the years ended December 31, 2003, 2002 and 2001.....	42
Notes to Consolidated Financial Statements .....	43
Report of Independent Auditors .....	62
Financial Statement Schedules:	
Schedule II .....	72

**MATTSON TECHNOLOGY, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(IN THOUSANDS)

	<b>As of December 31,</b>	
	<b>2003</b>	<b>2002</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 77,115	\$ 87,879
Restricted cash	509	1,105
Accounts receivable, net of allowance for doubtful accounts of \$5,567 and \$10,552 in 2003 and 2002, respectively	34,260	34,834
Advance billings	20,684	27,195
Inventories	27,430	50,826
Inventories - delivered systems	6,549	47,444
Prepaid expenses and other current assets	12,995	13,676
Total current assets	179,542	262,959
Property and equipment, net	16,211	18,855
Goodwill	8,239	12,675
Intangibles, net	2,626	15,254
Other assets	769	2,416
Total assets	\$ 207,387	\$ 312,159
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 21,340	\$ 14,346
Accrued liabilities	62,608	77,795
Deferred revenue	38,680	108,698
Total current liabilities	122,628	200,839
Long-term liabilities:		
Deferred income taxes	1,055	5,215
Total long-term liabilities	1,055	5,215
Total liabilities	123,683	206,054
Commitments and contingencies (Note 17)		
Stockholders' equity:		
Preferred stock, 2,000 shares authorized; none issued and outstanding	--	--
Common Stock, par value \$0.001, 120,000 authorized shares; 45,826 shares issued and 45,451 shares outstanding in 2003; 45,232 shares issued and 44,857 shares outstanding in 2002	45	45
Additional paid-in capital	546,099	542,482
Accumulated other comprehensive income	9,468	7,131
Treasury stock, 375 shares in 2003 and 2002 at cost	(2,987)	(2,987)
Accumulated deficit	(468,921)	(440,566)
Total stockholders' equity	83,704	106,105
Total liabilities and stockholders' equity	\$ 207,387	\$ 312,159

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

**MATTSON TECHNOLOGY, INC. AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF OPERATIONS**

(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Net sales	\$ 174,302	\$ 203,520	\$ 230,149
Cost of sales	112,783	163,063	224,768
Gross profit	<u>61,519</u>	<u>40,457</u>	<u>5,381</u>
Operating expenses:			
Research, development and engineering	22,988	37,395	61,114
Selling, general and administrative	54,292	86,218	110,785
Acquired in-process research and development	-	-	10,100
Amortization of goodwill and intangibles	2,151	6,591	33,457
Restructuring and other charges	489	17,307	-
Impairment of long-lived assets and other charges	-	-	150,666
Total operating expenses	<u>79,920</u>	<u>147,511</u>	<u>366,122</u>
Loss from operations	(18,401)	(107,054)	(360,741)
Loss on disposition of Wet Business	(10,257)	-	-
Interest expense	(122)	(1,660)	(2,989)
Interest income	1,207	2,380	4,354
Other income (expense), net	(432)	11,916	3,651
Loss before provision (benefit) for income taxes	(28,005)	(94,418)	(355,725)
Provision (benefit) for income taxes	350	(147)	(18,990)
Net loss	<u>\$ (28,355)</u>	<u>\$ (94,271)</u>	<u>\$ (336,735)</u>
Net loss per share:			
Basic	\$ (0.63)	\$ (2.23)	\$ (9.14)
Diluted	\$ (0.63)	\$ (2.23)	\$ (9.14)
Shares used in computing net loss per share:			
Basic	44,997	42,239	36,854
Diluted	44,997	42,239	36,854

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

MATTSON TECHNOLOGY, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY  
(IN THOUSANDS)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Treasury Stock		Accumulated Deficit	Total
	Shares	Amount		(Loss)	Shares	Amount		
Balance at December 31, 2000	20,815	\$ 20	\$ 198,835	\$ (181)	(375)	\$ (2,987)	\$ (9,560)	\$ 186,127
Components of comprehensive loss:								
Net loss	-	-	-	-	-	-	(336,735)	(336,735)
Cumulative translation adjustments	-	-	-	(6,463)	-	-	-	(6,463)
Increase in minimum pension liability	-	-	-	36	-	-	-	36
Unrealized loss on investments	-	-	-	(61)	-	-	-	(61)
Accumulated derivative gain	-	-	-	116	-	-	-	116
Comprehensive loss	-	-	-	-	-	-	-	(343,107)
Exercise of stock options	362	1	2,418	-	-	-	-	2,419
Shares issued to Concept shareholder	20	-	-	-	-	-	-	-
Shares issued to STEAG shareholders	11,850	12	124,176	-	-	-	-	124,188
Shares issued to CFM shareholders	4,234	4	170,614	-	-	-	-	170,618
Shares issued under employee stock purchase plan	125	-	1,161	-	-	-	-	1,161
Income tax benefits realized from activity in employee stock plans	-	-	332	-	-	-	-	332
Balance at December 31, 2001	37,406	37	497,536	(6,553)	(375)	(2,987)	(346,295)	141,738
Components of comprehensive loss:								
Net loss	-	-	-	-	-	-	(94,271)	(94,271)
Cumulative translation adjustments	-	-	-	13,570	-	-	-	13,570
Unrealized loss on investments	-	-	-	(103)	-	-	-	(103)
Accumulated derivative gain	-	-	-	217	-	-	-	217
Comprehensive loss	-	-	-	-	-	-	-	(80,587)
Private placement, net of offering costs	6,124	7	34,855	-	-	-	-	34,862
Shares issued for conversion of STEAG notes	1,300	1	8,139	-	-	-	-	8,140
Exercise of stock options	114	-	596	-	-	-	-	596
Shares issued under employee stock purchase plan	288	-	1,224	-	-	-	-	1,224
Issuance of options to non-employees	-	-	132	-	-	-	-	132
Balance at December 31, 2002	45,232	45	542,482	7,131	(375)	(2,987)	(440,566)	106,105
Components of comprehensive loss:								
Net loss	-	-	-	-	-	-	(28,355)	(28,355)
Cumulative translation adjustments	-	-	-	2,621	-	-	-	2,621
Unrealized loss on investments	-	-	-	86	-	-	-	86
Accumulated derivative gain	-	-	-	(370)	-	-	-	(370)
Comprehensive loss	-	-	-	-	-	-	-	(26,018)
Exercise of stock options	399	-	3,329	-	-	-	-	3,329
Shares issued under employee stock purchase plan	195	-	288	-	-	-	-	288
Balance at December 31, 2003	45,826	\$ 45	\$ 546,099	\$ 9,468	(375)	\$ (2,987)	\$ (468,921)	\$ 83,704

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

**MATTSON TECHNOLOGY, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(IN THOUSANDS)

	<u>Year Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Cash flows from operating activities:			
Net loss	\$ (28,355)	\$ (94,271)	\$ (336,735)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	5,858	10,632	16,611
Deferred taxes	(828)	(4,322)	(19,673)
Provision for allowance for doubtful accounts	--	482	6,850
Inventory valuation charges	1,586	14,303	26,418
Amortization of goodwill and intangibles	2,151	6,592	33,457
Impairment of long-lived assets, restructuring and other charges	489	11,598	150,666
Loss on disposal of Wet Business	10,257	--	--
Loss on disposal of fixed assets	2,730	1,268	2,256
Acquired in-process research and development	--	--	10,100
Income tax benefit realized from activity in employee stock plans	--	132	332
Changes in assets and liabilities:			
Restricted cash	--	--	4,695
Accounts receivable	709	8,320	50,360
Advance billings	182	40,783	(21,170)
Inventories	1,225	5,263	56,638
Inventories - delivered systems	10,234	35,936	(62,474)
Prepaid expenses and other current assets	(415)	2,550	(3,180)
Other assets	6,034	2,163	2,695
Accounts payable	6,884	(282)	(20,656)
Accrued liabilities	(13,003)	(8,131)	(25,357)
Deferred Revenue	(22,089)	(43,916)	95,891
Net cash used in operating activities	<u>(16,351)</u>	<u>(10,900)</u>	<u>(32,276)</u>
Cash flows from investing activities:			
Purchases of property and equipment	(8,045)	(4,557)	(17,209)
Proceeds from the sale of equipment	--	3,716	486
Proceeds from the disposition of Wet Business	2,000	--	--
Purchases of available for sale investments	--	(14,962)	(16,314)
Proceeds from the sale and maturity of available for sale investments	--	20,767	58,257
Net cash acquired from acquisitions	--	--	38,046
Net cash provided by (used in) investing activities	<u>(6,045)</u>	<u>4,964</u>	<u>63,266</u>
Cash flows from financing activities:			
Restricted cash	596	26,195	--
Payment on line of credit	--	(5,341)	(4,888)
Borrowings against line of credit	--	194	9,043
Payment on STEAG notes payable	--	(38,775)	(805)
Change in interest accrual on STEAG note	--	1,292	2,690
Proceeds from the issuance of Common Stock, net of offering costs	--	34,862	--
Proceeds from stock plans	3,617	1,820	3,580
Net cash provided by financing activities	<u>4,213</u>	<u>20,247</u>	<u>9,620</u>
Effect of exchange rate changes on cash and cash equivalents	<u>7,419</u>	<u>9,511</u>	<u>(9,984)</u>
Net increase in cash and cash equivalents	(10,764)	23,822	30,626
Cash and cash equivalents, beginning of year	87,879	64,057	33,431
Cash and cash equivalents, end of year	<u>\$ 77,115</u>	<u>\$ 87,879</u>	<u>\$ 64,057</u>
Supplemental disclosures:			
Cash paid for interest	\$ 24	\$ 1,313	\$ 805
Cash paid for income taxes	\$ 1,588	\$ 2,478	\$ 545
Common stock issued for acquisition of STEAG Semiconductor division	\$ -	\$ -	\$ 124,188
Common stock issued for acquisition of CFM	\$ -	\$ -	\$ 170,618
Common stock issued for STEAG note conversion	\$ -	\$ 8,140	\$ -
Non-cash adjustment to goodwill and intangibles	\$ 14,912	\$ 9,697	\$ 14,003

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

# MATTSON TECHNOLOGY, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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" fabrication of integrated circuits to the semiconductor manufacturing industry worldwide.

The Company refocused its business on core technologies in dry strip and rapid thermal processing, and accordingly in line with that focus the Company divested its Wet Products Division on March 17, 2003. The transaction involved the transfer of certain subsidiaries, assets and intellectual property related to the Wet Products Division. As part of the transaction, the Company retained the rights to all future royalty and settlement payments under agreements with Dainippon Screen Manufacturing Co., Ltd.

#### **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 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 and 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.

The Company's fiscal year ends on December 31. The Company's fiscal quarters end on the last Sunday in the calendar quarter.

#### **Revenue Recognition**

Mattson derives revenue from two primary sources - equipment sales and spare part sales. In December 1999, the Securities and Exchange Commission (or SEC) issued Staff Accounting Bulletin No. 101 (SAB 101), "Revenue Recognition in Financial Statements." The Company implemented the provisions of SAB 101 in the fourth quarter of 2000, retroactive to January 1, 2000. In December, 2003, the SEC issued Staff Accounting Bulletin No. 104 (or SAB 104), "Revenue Recognition", which supersedes SAB 101. The adoption of SAB 104 did not have a material effect on our revenue recognition policy. The Company accounts for equipment sales as follows: 1) for equipment sales of existing products with new specifications or to a new customer, for all sales of new products (and, for the first quarter of 2003 and earlier periods, for all sales of the wet surface preparation 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, 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 after installation services have been performed and upon final customer acceptance of the tool has been obtained, generally 10% of the total invoice price, is deferred until final customer acceptance of the tool. The remaining portion of the total invoice price relating to the tool, generally 90% of the total invoice price, is recognized upon shipment and title transfer 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 until these evaluation systems are accepted by the customer. Revenues associated with sales to customers in Japan are recognized upon title transfer, which generally occurs upon customer acceptance, with the exception of sales of the RTP products through the Company's distributor in Japan, where revenues are recognized upon title transfer to the distributor. For spare parts, revenue is recognized upon shipment. Service and maintenance contract revenue is recognized on a straight-line basis over the service period of the related contract. Equipment that has been delivered to customers but has not been accepted is classified as "Inventories - delivered systems" in the accompanying consolidated balance sheets. Receivables for which revenue has not been recognized are classified as

"Advance Billings" in the accompanying consolidated balance sheets. Deferred revenue for tools awaiting customer acceptance was \$21.0 million as of December 31, 2003 and \$108.7 million as of December 31, 2002. These amounts represent equipment that was shipped for which amounts were billed per the contractual terms but have not been recognized as revenue in accordance with SAB 104.

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

### **Cash and Cash Equivalents**

The Company considers all highly liquid investments purchased with 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 high-grade money market funds and auction rate securities.

### **Restricted Cash**

At December 31, 2003, the Company had \$0.5 million of long-term restricted cash towards collateral for the Company's corporate credit card. At December 31, 2002, the Company had \$1.1 million of restricted cash of which \$0.5 million was collateral for the Company's corporate credit card, and \$0.6 million was pledged as deposits for leases in Germany.

### **Investments**

Generally, the Company's investments primarily consist of overnight money market funds and auction rate securities. The investments are reported at fair market value, in accordance with the provisions of Statements of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities." The fair value of the Company's investments, if any, is determined based on the quoted market prices at the reporting date for those instruments. Investments with a contractual maturity of one year or less are classified as short-term. At December 31, 2003 and 2002, the Company did not have any short-term investments or long-term investments.

### **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 money market and auction rate securities. 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, other Pacific Rim countries and Europe. 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. During the year ended December 31, 2003, the Company did not provide for any additional allowance for doubtful accounts receivable, as the current level is deemed appropriate by management to provide for potential uncollectible accounts. In 2003, two customers, Samsung and Promos each accounted for more than 10% of the Company's revenue, accounting for approximately 19% and 11%, respectively. In 2002, three customers, Samsung, Infineon, and UMC each accounted for more than 10% of the Company's revenue, accounting for approximately 12%, 11% and 11%, respectively. At December 31, 2003, two customers, TSMC and UMC, accounted for more than 10% of the Company's accounts receivables, accounting for 14% and 19%, respectively. At December 31, 2002, two customers, Infineon and UMC, accounted for more than 10% of the Company's accounts receivables, accounting for 17% and 14%, respectively.

The Company is exposed to credit loss in the event of non performance by counterparties on the forward foreign exchange contracts used in hedging activities. The Company does not anticipate nonperformance by these counterparties.

### **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.

During 2003, inventory valuation charges of approximately \$1.6 million were recorded. In 2002, due to the changing market conditions, prolonged economic downturn since 2001 and estimated future requirements, inventory valuation charges of approximately \$14.3 million were recorded. In 2001, inventory valuation charges of approximately \$26.4 million were recorded that largely related to inventories for RTP and Omni products that were acquired in the merger with the Steag Semiconductor Division and CFM. As of December 31, 2003 and 2002, the allowance for excess and obsolete inventory was approximately \$29.0 million and \$49.7 million, respectively.

### **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 term of the related lease or the estimated useful lives of the improvements, whichever is shorter. Depreciation expense was \$5.9 million, \$10.6 million, and \$16.6 million for the years ended December 31, 2003, 2002 and 2001, 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 in the accompanying consolidated statements of operations. Asset retirements, write downs or other dispositions, as well as repair and maintenance costs are expensed as incurred.

### **Goodwill and Intangibles**

In connection with its merger with the semiconductor equipment division of STEAG Electronics Systems AG and CFM Technologies, Inc., effective January 1, 2001, the Company recorded \$207.3 million of goodwill and intangible assets which were being amortized on a straight-line basis over three to seven years. Those goodwill and intangible assets reflected the purchase price of the STEAG Semiconductor Division and CFM, in excess of identified net tangible assets. Intangible assets were comprised of purchased technology and workforce and are presented at cost, net of accumulated amortization. The intangible asset for workforce was reclassified as goodwill upon adoption of SFAS 141 on January 1, 2002. The Company continues to amortize other intangible assets for developed technology. Amortization expense was \$2.2 million, \$6.6 million and \$33.5 million for the years ended December 31, 2003, 2002 and 2001, respectively. The Company assesses the realizability of goodwill and other intangible assets at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable, in accordance with the provisions of SFAS No. 142 and SFAS No. 144. SFAS No. 142 requires that intangible assets with estimable useful lives be amortized over their respective estimated useful lives and reviewed for impairment in accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets."

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

Pursuant to SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS 144"), the Company reviews the recoverability of long-lived assets based upon its estimate of the future undiscounted cash flows to be generated by the long-lived assets and reserves for impairment whenever such estimated future cash flows indicate that the carrying amount of the assets may not be fully recoverable. During the year ended December 31, 2003, the Company did not record any impairment charge. During the year ended December 31, 2002, the Company recorded an aggregate impairment loss of \$6.1 million for intangible assets, property and equipment and other long-term assets relating to the wet operation as it was determined that the carrying amount of these assets exceeded the estimated future cash flows from the use of these assets.

### **Warranty**

The warranty offered by the Company on its systems generally ranges from 12 months to 36 months depending on the product. A provision for the estimated cost of warranty is recorded as a cost of sales when the revenue is recognized.

Under its warranty obligations, the Company is required to repair or replace defective products or parts, generally at a customer's site, during the warranty period at no cost to the customer. A provision for the estimated cost of warranty is recorded as a cost of sales, based on the historical costs, at the time of revenue recognition. 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 is the detail of the product warranty accrual, for the years ended December 31, 2003 and 2002:

(in thousands)

	Year Ended	
	December 31, 2003	December 31, 2002
Balance at beginning of period	\$ 16,486	\$ 19,936
Accrual for warranties issued during the period	10,378	5,715
Changes in liability related to pre-existing warranties	(462)	413
Settlements made during the period	(9,894)	(9,578)
Balance at end of period	<u>\$ 16,508</u>	<u>\$ 16,486</u>

### Stock-Based Compensation

In October 1995, the Financial Accounting Standards Board issued SFAS No. 123, "Accounting for Stock-Based Compensation." As allowed by the provisions of SFAS No. 123, the Company has continued to apply APB Opinion No. 25 in accounting for its stock option plans and, accordingly, does not recognize compensation cost because the exercise price of stock options equals the market price of the underlying stock at the date of option grant. The Company adopted the disclosure provisions of SFAS No. 123. In April 2000, the Financial Accounting Standards Board issued FIN 44, "Accounting for Certain Transactions Involving Stock Compensation: An Interpretation of APB No. 25." The Company has adopted the provisions of FIN 44, and such adoption did not materially impact the Company's results of operations. In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation Transition and Disclosure." The statement amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. The Company has adopted the disclosure provisions of SFAS No. 148.

If the Company had elected to recognize compensation cost based on the fair value of the options granted at grant date as prescribed by SFAS No. 123, net loss and loss per share would have been adjusted to the pro forma amounts indicated in the table below:

	Year Ended December 31,		
	2003	2002	2001
	(in thousands, except per share amounts)		
Net loss:			
As reported	\$ (28,355)	\$ (94,271)	\$ (336,735)
Add: Stock-based compensation expense included in reported net loss	-	-	-
Deduct: Total stock-based compensation expense determined under fair value method	(2,095)	(7,233)	(10,589)
Pro forma	<u>\$ (30,450)</u>	<u>\$ (101,504)</u>	<u>\$ (347,324)</u>
Diluted net loss per share:			
As reported	\$ (0.63)	\$ (2.23)	\$ (9.14)
Pro forma	\$ (0.68)	\$ (2.40)	\$ (9.42)

### Foreign Currency

The local currency is the functional currency for all foreign operations. 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 statements of operations as they are incurred.

### Forward Foreign Exchange Contracts

The Company uses forward foreign exchange contracts primarily to hedge the short-term impact of foreign currency fluctuations of third party receivable denominated in Japanese Yen, and third party non functional currency accounts receivable for its German Thermal division. All forward foreign exchange contracts employed by the Company are

short-term in nature. Because the impact of movements in currency exchange rates on forward foreign exchange contracts offsets the related impact on the underlying items being hedged, these financial instruments do not subject the Company to speculative risks that would otherwise result from changes in currency exchange rates. All foreign currency contracts are marked-to-market and gains and losses on forward foreign exchange contracts are deferred and recognized in the accompanying consolidated statements of operations when the related transactions being hedged are recognized. Gains and losses on unhedged foreign currency transactions are recognized as incurred. While the Company does record foreign exchange gains or losses related to transactions and revaluations, in ordinary course of business, to date, there are no significant losses as of December 31, 2003 for open forward exchange contracts.

The following table provides information as of December 31, 2003 about the Company and its subsidiaries' derivative financial instruments, which are comprised of foreign currency forward exchange contracts. The information is provided in U.S. dollar and EURO equivalent amounts, as listed below. The table presents the notional amounts (at the contract exchange rates), the weighted average contractual foreign currency exchange rates, and the estimated fair value of those contracts.

	<u>Notional Amount</u>	<u>Average Contract Rate</u>	<u>Estimated Fair Value</u>
(In thousands, except for average contract rate)			
<b>Foreign currency forward sell exchange contracts:</b>			
Mattson Technology Inc. (US Dollar equivalent amount)			
Japanese Yen	\$ 2,800	111.02	\$ 2,898
Mattson Thermal Products GmbH (Euro equivalent amount)			
U.S. Dollar	EUR 9,155	1.19	EUR 8,832
	\$ 11,325		\$ 10,925
Japanese Yen	EUR 2,344	132.79	EUR 2,342
	\$ 2,899		\$ 2,897

### Comprehensive Income (Loss)

The Company's comprehensive income includes net loss, foreign currency translation adjustments, increase in minimum pension liability, derivative gains and losses and unrealized gains and losses on investments and is presented in the statement of stockholders' equity. At December 31, 2003, the accumulated other comprehensive income was \$9.5 million which consisted of currency translation adjustment gains. At December 31, 2002, the accumulated other comprehensive income was \$7.1 million, primarily consisting of \$6.8 million currency translation adjustment gains.

The following are the components of comprehensive loss:

(in thousands)	<u>Year ended</u>	
	<u>December 31, 2003</u>	<u>December 31, 2002</u>
Net loss	\$ (28,355)	\$ (94,271)
Cumulative translation adjustments.....	2,621	13,570
Unrealized investment gain (loss).....	86	(103)
Gain (loss) on cash flow hedging instruments.....	(370)	217
Comprehensive loss.....	<u>\$ (26,018)</u>	<u>\$ (80,587)</u>

The components of accumulated other comprehensive income, net of related tax, are as follows:

	<u>2003</u>	<u>2002</u>
Cumulative translation adjustments.....	\$ 9,469	\$ 6,848
Unrealized investment loss .....	(1)	(87)
Gain on cash flow hedging instruments .....	-	370
	<u>\$ 9,468</u>	<u>\$ 7,131</u>

## Net Income (Loss) Per Share

Basic earnings per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted earnings per share gives effect to all dilutive potential common shares outstanding during the period. For purposes of computing diluted earnings per share, weighted average common share 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.

## 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 assets which are not likely to be realized.

## New Accounting Pronouncements

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities", an Interpretation of ARB No. 51. FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 were initially required to be applied for the first interim or annual period beginning after June 15, 2003. At its meeting on October 8, 2003, the FASB deferred the latest date by which all public entities must apply FIN 46 to the first reporting period ending after December 15, 2003. This deferral applies to all variable interest entities (VIEs) and potential VIEs, both financial and non-financial in nature. The adoption of FIN 46 did not have a material impact on the Company's financial condition or statement of operations.

In April 2003, the FASB issued Statement of Financial Accounting Standards No. 149 (SFAS 149), "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." This statement amends SFAS 133 to provide clarification on the financial accounting and reporting of derivative instruments and hedging activities and requires contracts with similar characteristics to be accounted for on a comparable basis. SFAS 149 was effective for contracts entered into or modified after June 30, 2003, and the adoption of SFAS 149 did not have a material effect on the Company's financial condition or results of operations.

In May 2003, the FASB issued Statement of Financial Accounting Standards No. 150 (SFAS 150), "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS 150 establishes standards on the classification and measurement of financial instruments with characteristics of both liabilities and equity. SFAS 150 is effective for financial instruments entered into or modified after May 31, 2003. While the effective date of certain elements of SFAS 150 have been deferred, the adoption of SFAS 150 when finalized is not expected to have a material effect on the Company's financial condition, results of operations or cash flows.

In December, 2003, the Securities and Exchange Commission (or SEC) issued Staff Accounting Bulletin No. 104 (or SAB 104), "Revenue Recognition", which supersedes SAB 101, "Revenue Recognition in Financial Statements." SAB 104's primary purpose is to rescind the accounting guidance contained in SAB 101 related to multiple-element revenue arrangements that was superseded as a result of the issuance of EITF 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." Additionally, SAB 104 rescinds the SEC's related "Revenue Recognition in Financial Statements Frequently Asked Questions and Answers" issued with SAB 101 that had been codified in SEC Topic 13, "Revenue Recognition." While the wording of SAB 104 has changed to reflect the issuance of EITF 00-21, the revenue recognition principles of SAB 101 remain largely unchanged by the issuance of SAB 104, which was effective upon issuance. The Company's adoption of SAB 104 did not have a material effect on its financial position or results of operations.

## 2. BALANCE SHEET DETAIL

	<u>As of December 31,</u>	
	<u>2003</u>	<u>2002</u>
	<u>(in thousands)</u>	
<b>INVENTORIES:</b>		
Purchased parts and raw materials	\$ 18,884	\$ 27,085
Work-in-process	5,444	20,492
Finished goods	3,102	3,249
	<u>\$ 27,430</u>	<u>\$ 50,826</u>
<b>PROPERTY AND EQUIPMENT, NET:</b>		
Land and buildings	\$ 2,376	\$ 2,746
Machinery and equipment	30,359	35,705
Furniture and fixtures	18,550	22,346
Leasehold improvements	2,831	5,735
	<u>54,116</u>	<u>66,532</u>
Less: accumulated depreciation	<u>(37,905)</u>	<u>(47,677)</u>
	<u>\$ 16,211</u>	<u>\$ 18,855</u>
<b>ACCRUED LIABILITIES:</b>		
Warranty and installation	\$ 16,508	\$ 16,486
Accrued compensation and benefits	6,596	11,140
Income taxes	6,992	5,797
Other	32,512	44,372
	<u>\$ 62,608</u>	<u>\$ 77,795</u>

## 3. DISPOSITION OF WET BUSINESS

On March 17, 2003, the Company sold the portion of its business that was engaged in 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"). The Company had originally acquired the Wet Business on January 1, 2001, as part of its merger with the STEAG Semiconductor Division and CFM. As part of this disposition, SCP acquired certain subsidiaries and assets, and assumed certain contracts relating to the Wet Business, including the operating assets, customer contracts and inventory of CFM, all outstanding stock of Mattson Technology IP, Inc. ("Mattson IP"), a subsidiary that owns various patents relating to the Wet Business, and all equity ownership interest in Mattson Wet Products GmbH, a subsidiary in Germany that owned the Company's principal Wet Business operations. The Company retained rights to all the cash from the Wet Business entities, and the Company retained all rights to payments under the settlement and license agreements with DNS. See Note 8. SCP acquired the rights to any damages under pending patent litigation relating to patents owned by Mattson IP. SCP assumed responsibility for the operations, sales, marketing and technical support services for the Company's former wet product lines worldwide.

The initial purchase price paid to the Company by SCP to acquire the Wet Business was \$2 million in cash. That initial purchase price was subject to adjustment based on a number of criteria, including the net working capital of the Wet Business at closing, to be determined post-closing based on a pro forma closing date balance sheet, and an earn-out, up to an aggregate maximum of \$5 million, payable to the Company based upon sales by SCP of certain products to identified customers through December 31, 2004. There has been no earn-out received during the twelve months ended December 31, 2003. The Company assumed certain real property leases relating to transferred facilities in Germany, subject to a sublease to SCP. The Company made payments of \$4.4 million to SCP during the fourth quarter of 2003, settling substantially all of its outstanding obligations to SCP. The Company's obligations were to (i) fund salary and severance costs relating to reductions in force to be implemented in Germany after the closing, (ii) fund a net working capital adjustment, (iii) reimburse SCP for future legal fees, up to a maximum of \$1 million, in pending patent litigations, and (iv) reimburse SCP for amounts necessary to cover specified customer responsibilities. As a result of significant continuing involvement subsequent to the disposition, the transaction was accounted for as a sale of assets and liabilities.

During the first quarter of 2003, as part of the loss on disposition of the Wet Business, the Company recorded accruals of approximately \$11.9 million to cover the future obligations relating to this transaction. The Company did not record any additional accrual for this transaction during the fourth quarter of 2003.

In the first quarter of 2003, the Company recorded a \$10.3 million loss on the disposition of its Wet Business, as detailed below (in thousands):

Contractual purchase price payment from SCP	\$ 2,000
Net book value of assets sold, including goodwill and intangibles	(80,824)
Net book value of liabilities assumed by SCP, including deferred revenues	76,117
Other	(7,550) (A)
Loss on disposition of the Wet Business	<u>\$ (10,257)</u>

(A) Included in the Other category are cumulative translation adjustments, estimated future costs associated with reduction in force, working capital adjustment, indemnification for future legal fees, investment banker's fees, and legal, accounting and other professional fees directly associated with the disposition of the Wet Business.

On December 5, 2003, the Company signed the Second Amendment to Stock and Asset Purchase Agreement for Wet Products Division (the "Second Amendment") with SCP. Under the terms of the Second Amendment, the Company paid \$4.4 million to SCP in exchange for being released from any further liabilities relating to (i) working capital adjustments, (ii) pension obligations, (iii) reductions in force in Germany (iv) reimbursement of legal fees, and (v) reimbursement of amounts necessary to cover specified customer responsibilities.

As of December 31, 2003, the Company had paid \$11.5 million relating to reductions in force, working capital adjustment, investment banker's fees, legal fees, and accounting and other professional fees which were charged against accruals established at the closing of the sale. With the signing of the Second Amendment on December 5, 2003, the Company has no further obligation to SCP relating to the sale of the Wet Business.

The Company's Wet Business represented a significant portion of the Company's net sales and costs in 2001, 2002 and the first quarter of 2003. As a result, the divestiture of the Wet Business affects the comparability of the Company's Consolidated Statements of Operations to its reported results from prior periods. For periods prior to the divestiture of the Wet Business, the Company's net sales were comprised primarily of sales of Wet Business products, sales of RTP products and strip products, and royalties received from Dainippon Screen Manufacturing Co., Ltd. ("DNS"). (See Note 8). Following the divestiture of the Wet Business, the Company's net sales are comprised primarily of sales of RTP and strip products, and royalties received from DNS. In the fourth quarter of 2003, \$1.3 million of revenue was recognized that related to a deferred Wet system that remained the property of the Company after the divestiture.

#### 4. ACQUISITIONS

In connection with the acquisitions of the STEAG Semiconductor Division and CFM Technologies in 2001, the Company allocated approximately \$10.1 million of the purchase price to in-process research and development projects. This allocation represented the estimated fair value based on risk-adjusted cash flows related to the incomplete research and development projects. At the date of acquisition, the development of these projects had not yet reached technological feasibility, and the research and development in progress had no alternative future uses. Accordingly, the purchase price allocated to in-process research and development was expensed as of the acquisition date.

#### 5. GOODWILL AND OTHER INTANGIBLE ASSETS

The following table summarizes the components of goodwill, other intangible assets and related accumulated amortization balances (in thousands):

	<u>December 31, 2003</u>			<u>December 31, 2002</u>		
	<u>Gross</u>		<u>Net</u>	<u>Gross</u>		<u>Net</u>
	<u>Carrying</u>	<u>Accumulated</u>	<u>Carrying</u>	<u>Carrying</u>	<u>Accumulated</u>	<u>Carrying</u>
	<u>Amount</u>	<u>Amortization</u>	<u>Amount</u>	<u>Amount</u>	<u>Amortization</u>	<u>Amount</u>
Goodwill	\$ 8,239	\$ -	\$ 8,239	\$ 12,675	\$ -	\$ 12,675
Developed technology	6,565	(3,939)	2,626	24,994	(9,740)	15,254
Total goodwill and intangible assets	<u>\$ 14,804</u>	<u>\$ (3,939)</u>	<u>\$ 10,865</u>	<u>\$ 37,669</u>	<u>\$ (9,740)</u>	<u>\$ 27,929</u>

Amortization expense related to intangible assets was as follows (in thousands):

	<u>For the Year Ended</u>		
	<u>December 31,</u>	<u>December 31,</u>	<u>December 31,</u>
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Goodwill amortization	\$ -	\$ -	\$ 13,384
Other intangible assets amortization	-	-	7,285
Developed technology amortization	2,151	6,592	12,788
Total amortization	<u>\$ 2,151</u>	<u>\$ 6,592</u>	<u>\$ 33,457</u>

In accordance with SFAS 142, the Company performed an annual goodwill impairment test as of December 31, 2003 and determined that goodwill was not impaired. The Company evaluates goodwill at least on an annual basis and whenever events and changes in circumstances suggest that the carrying amount may not be recoverable from its estimated future cash flow. No assurances can be given that future evaluations of goodwill will not result in charges as a result of future impairment.

An intangible asset for workforce was reclassified as goodwill upon adoption of SFAS 141 on January 1, 2002. The Company continues to amortize developed technology intangible assets. Amortization expense for developed technology and other intangible assets was \$2.2 million and \$6.6 million for the years ended December 31, 2003 and 2002, respectively. The amortization expense is estimated to be \$1.3 million for each of fiscal years 2004 and 2005. In the first quarter of 2003, goodwill and intangible assets relating to developed technology were reduced by \$4.4 million and \$10.5 million, respectively, in connection with the Wet Business divestiture.

In the third quarter of the year ended December 31, 2002, the Company wrote-off the intangible assets for developed technology related to the EPI product line and recorded a \$1.3 million impairment charge, which is included in non-recurring, restructuring and other charges.

In the fourth quarter of the year ended December 31, 2002, the Company recorded a \$3.1 million impairment charge for the intangible assets for developed technology relating to the Company's wet operation as it was determined that the carrying amount of the asset exceeded the estimated future cash flows to be derived from the use of the asset.

Net loss for 2001, on an adjusted basis, excluding goodwill amortization expense, would have been as follows (unaudited, in thousands, except per share data):

	<u>Year Ended</u>
	<u>December 31,</u>
	<u>2001</u>
Net loss, as reported	\$ (336,735)
Add: goodwill amortization	20,669
Net loss -- as adjusted	<u>\$ (316,066)</u>
Basic and diluted loss per share, as reported	\$ (9.14)
Add: goodwill amortization	0.56
Basic and diluted loss per share -- as adjusted	<u>\$ (8.58)</u>

## 6. RESTRUCTURING AND OTHER CHARGES

During the third quarter of 2003, the company recorded restructuring and other charges of \$489,000 that included \$381,000 for workforce reductions in Fremont and Germany and \$108,000 for consolidation of excess facilities in California resulting from realignment to current business conditions. In connection with the workforce reductions the Company terminated 104 employees. The Company anticipates that the accrued liabilities at December 31, 2003 for the workforce reduction and the consolidation of excess facilities will be paid out by March 31, 2004 and the next two to three years, respectively.

During the second half of 2002, the Company recorded restructuring and other charges of \$17.3 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 \$17.3 million restructuring and other charges for this restructuring program included a workforce reduction at certain locations of \$3.4 million, the shut-down of the Malvern, Pennsylvania operations and the consolidation of other excess facilities of \$2.3 million, the write-down of certain fixed assets of \$6.5 million, the write-down of certain intangible assets of \$4.4 million, and the write-down of certain other long-term assets of \$0.7 million.

The following is a summary of activities in the restructuring-related accruals during the year ended December 31, 2003:

	<b>Liability as of December 31, 2002</b>	<b>Restructuring charges during the year ended December 31, 2003</b>	<b>Cash Payments during the year ended December 31, 2003</b>	<b>Liability as of December 31, 2003</b>
Workforce reduction	\$ 2,307	381	\$ (2,573)	\$ 115
Consolidation of excess facilities	2,056	108	(989)	1,175
Total	<u>\$ 4,363</u>	<u>\$ 489</u>	<u>\$ (3,562)</u>	<u>\$ 1,290</u>

During 2002, in response to the continued slow-down in capital spending by semiconductor manufacturers, and to better align the Company with current industry conditions and its business strategy, the Company took cost reduction actions and recorded \$17.3 million of restructuring and other charges related to property and equipment, leased facilities, personnel and an intangible asset.

The following table summarizes the restructuring charges and related activity for the year ended December 31, 2002 (in thousands):

	Total Charges	Non-cash Charges	Cash Payments in 2002	Liability as of December 31, 2002
Workforce reduction	\$ 3,371	\$ -	\$ (1,064)	\$ 2,307
Consolidation of excess facilities	2,338	-	(282)	2,056
Impairment of fixed assets	6,531	(6,531)	-	-
Impairment of intangible assets	4,363	(4,363)	-	-
Impairment of other long-term assets	704	(704)	-	-
Total	<u>\$ 17,307</u>	<u>\$(11,598)</u>	<u>\$ (1,346)</u>	<u>\$ 4,363</u>

The following paragraphs describe in more detail the components of the non-recurring, restructuring and other charges.

#### *Workforce reduction*

In September 2002, the Company reduced the workforce at its Fremont, California location by approximately 30 employees, primarily in connection with the reorganization of the EPI and CVD product lines and consolidation of RTP operations into the Company's Dornstadt, Germany facility. The Company also implemented a reduction in force that affected employees at its Malvern, Pennsylvania location, where approximately 65 individuals were notified in August 2002 that their employment would cease on various dates from October 29, 2002 through April 1, 2003 in connection with the planned shutdown of the Company's Malvern facilities. Severance and related employee benefit costs related to the reduction in force at both locations amounted to \$1.0 million, which have been or will be paid at the time of their separation. During the fourth quarter of 2002, approximately 52 individual's employment ceased at the Malvern, Pennsylvania location. Additionally, in December 2002, the Company further reduced the workforce by approximately

80 employees, at its locations in California, Germany, UK, France and Italy, and recorded a charge of \$2.4 million. \$2.2 million out of the \$2.3 million accrued liability at December 31, 2002 was paid out during the first three quarters of 2003.

In fiscal 2001, the Company recorded a charge of \$8.1 million for severance. The charge was included in selling, general, and administrative expense and was related to the termination of 466 employees. During 2001, \$2.6 million was paid for severance and at December 31, 2001 the remaining severance accrual was \$5.5 million.

#### *Consolidation of excess facilities*

The Company incurred a \$2.3 million restructuring charge in 2002 for four excess leased facilities located in Pennsylvania, as well as several other excess leased facilities in the US and overseas. The remaining lease obligations on vacated facilities that are non-cancellable, net of the income from subleasing these facilities, are estimated to be approximately \$2.4 million. The income from subleasing these facilities is estimated based upon current comparable rates for leases in the respective markets. If facilities rental rates continue to decrease in these markets, or if it takes longer than expected to sublease these facilities, the actual loss could exceed this estimate. The accrued liability at December 31, 2002 of \$2.1 million is estimated to be paid out in the next one to two years.

#### *Impairment of fixed assets*

During the third quarter of 2002, restructuring costs related to abandoned property and equipment amounted to \$1.7 million, which represented the net book value of fixed assets as of September 29, 2002 relating to the reorganization of the EPI and CVD product lines and consolidation of RTP development operations into the Company's Dornstadt, Germany facility. The fixed assets included in the restructuring charges were removed from service prior to September 29, 2002. During the fourth quarter of 2002, restructuring costs related to abandoned property and equipment amounted to \$2.5 million, which represented the write off of fixed assets related to discontinued projects in the Company's Epi and wet surface preparation product lines. Additionally, the Company performed an assessment of the carrying amount of property and equipment for its Wet business, and recorded an impairment charge of \$2.3 million.

#### *Impairment of intangible assets*

During the third quarter of 2002, the Company wrote off an intangible asset with a remaining net book value of \$1.3 million as of September 29, 2002, for developed technology resulting from the Company's Concept Systems acquisition in 1998. This developed technology specifically related to the Company's Epi product line, which was reorganized during September 2002. Additionally, in the fourth quarter of 2002, the Company performed an assessment of the carrying value of intangible assets for its Wet business and as a result of this assessment, recorded a charge of \$3.1 million.

#### *Impairment of other long-term assets*

In the fourth quarter of 2002, the Company performed an assessment of the carrying value of other long term assets for its Wet business and as a result of this assessment, recorded a charge of \$0.7 million.

During 2001, in connection with its acquisitions of the STEAG Semiconductor Division and CFM, the Company, after performing an assessment of the carrying value of the long-lived assets recorded a charge of \$145.4 million to reduce goodwill, intangible assets and property and equipment based on the amount by which the carrying value of the assets exceeded their fair value. This was as a result of deteriorated market conditions in the semiconductor industry in general, a reduced demand specifically for the Thermal and wet surface preparation products acquired in the Merger and revised projected cash flows for these products in the future.

## **7. DEBT**

The Company's Japanese subsidiary has a credit facility with a Japanese bank in the amount of 900 million Yen (approximately \$8.4 million at December 31, 2003), collateralized by specific trade accounts receivable of the Japanese subsidiary. The facility bears interest at a per annum rate of TIBOR plus 75 basis points. The facility will expire on June 20, 2004. The Company has given a corporate guarantee for this credit facility. There are no financial covenant requirements for this credit facility. At December 31, 2003, there were no borrowings under this credit facility.

The Company has a revolving line of credit with a bank in the amount of \$20.0 million, which will expire on April 26, 2004. All borrowings under this credit line bear interest at a per annum rate equal to the bank's prime rate plus 125 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 balance of unrestricted cash and cash equivalents and a minimum balance of investment accounts, and not exceeding a maximum net loss limit. At December 31, 2003, the Company was in compliance with the covenants and there were no borrowings under this credit line.

## 8. PRIVATE PLACEMENT

On April 30, 2002, the Company issued 7.4 million shares of common stock in a private placement transaction. Of the 7.4 million shares issued, 1.3 million shares were issued to Steag Electronic Systems AG upon conversion of \$8.1 million of outstanding promissory notes at \$6.15 per share. The remaining 6.1 million shares were sold to other investors at \$6.15 per share for aggregate net cash proceeds of \$34.9 million. At December 31, 2003, Steag Electronic Systems AG held approximately 29.4% of the Company's common stock. See Note 18.

## 9. 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 large Japanese manufacturer of semiconductor wafer processing equipment. The jury found that six different DNS wet processing systems infringed on two of CFM's drying technology patents and that both patents were valid. On June 24, 2002, the Company and DNS jointly announced that they had amicably resolved their legal disputes with a comprehensive, global settlement agreement, which included termination of all outstanding litigation between the companies. On March 17, 2003, as part of the disposition of the Wet Business, the Company sold to SCP the subsidiary that owns the patents licensed to DNS. However, the Company retained all rights to payments under the settlement and license agreements. The settlement agreement and license agreement require DNS to make payments to Mattson totaling between \$75 million (minimum) and \$105 million (maximum), relating to past damages, partial reimbursement of attorney's fee and costs, and royalties.

During year ended December 31, 2003, DNS paid the Company \$24.0 million. As of December 31, 2003, DNS has made payments aggregating \$51.0 million under the terms of the settlement and license agreements. Of the \$51.0 million paid by DNS as of December 31, 2003, \$4.0 million was subjected to Japanese withholding tax, and the net amount the Company received was \$47.0 million. In future periods, the Company is scheduled to receive minimum royalty payments as follows:

<u>Fiscal Year Ending December 31,</u>	<u>Future DNS Payments to be received</u>
	(in thousands)
2004	\$ 6,000
2005	6,000
2006	6,000
2007	6,000
	<u>\$ 24,000</u>

The Company has obtained an independent appraisal of the DNS arrangements to determine, based on relative fair values, how much of the aggregate payments due to Mattson were attributable to past disputes and how much are attributable to future royalties on DNS sales of the wet processing products. Based on the appraisal, the Company allocated \$15.0 million to past damages, which was recorded as "other income" during 2002, and allocated \$60 million to royalty income, which is being recognized in net sales in the statement of operations on a straight-line basis over the license term. During the year ended December 31, 2003 and 2002, the Company recognized \$12.0 million and \$6.3 million of royalty income, respectively.

## 10. CAPITAL STOCK

Mattson's authorized capital stock consists of 120,000,000 shares of common stock of which 45,825,625 were issued and 45,450,825 were outstanding at December 31, 2003, and 2,000,000 shares of preferred stock, none of which were outstanding at December 31, 2003.

### Common Stock

On April 30, 2002, the Company issued 7.4 million shares of common stock in a private placement transaction. Of the 7.4 million shares issued, 1.3 million shares were issued to Steag Electronic Systems AG ("SES") upon conversion of \$8.1 million of outstanding promissory notes at \$6.15 per share. The remaining 6.1 million shares were sold to other investors at \$6.15 per share for aggregate net cash proceeds of \$34.9 million. See Note 18.

### Stock Option Plan

In September 1989, the Company adopted an incentive and non-statutory stock option plan under which a total of 11,975,000 shares of common stock have been reserved for issuance. Options granted under this Plan are for periods not to exceed ten years. Incentive stock option and non-statutory stock option grants under the Plan must be at prices at least 100% and 85%, respectively, 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. At December 31, 2003, approximately 5.7 million shares were available for grant under future options.

A summary of the status of the Company's stock option plans at December 31, 2003, 2002 and 2001 and changes during the years then ended is presented in the following tables and narrative. Share amounts are shown in thousands.

Activity	Year Ended December 31,					
	2003		2002		2001	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
Outstanding at beginning of year	5,782	\$11.11	5,680	\$12.77	2,824	\$12.44
Granted	1,380	4.83	1,674	5.36	3,299	10.67
CFM options assumed	-	-	-	-	927	18.99
Exercised	(399)	7.58	(114)	5.20	(362)	6.51
Forfeited	(1,359)	9.66	(1,458)	11.41	(1,008)	13.69
Outstanding at end of year	<u>5,404</u>	10.13	<u>5,782</u>	11.11	<u>5,680</u>	12.77
Exercisable at end of year	<u>2,847</u>	13.77	<u>2,773</u>	14.10	<u>2,259</u>	14.47
Weighted-average fair value per option granted		3.94		3.70		7.32

The weighted average fair value of options granted under the option plan was approximately \$4.83 in 2003 and \$5.36 in 2002.

The following table summarizes information about stock options outstanding at December 31, 2003 (amounts in thousands except exercise price and contractual life):

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number	Weighted-Average Contractual Life	Weighted-Average Exercise Price	Number	Weighted-Average Exercise Price
\$ 1.55 - \$ 2.83	969	9.1	\$ 2.18	77	\$ 2.07
\$ 2.85 - \$ 6.95	1,101	7.7	\$ 5.21	423	\$ 5.90
\$ 6.97 - \$ 9.36	1,010	7.2	\$ 7.78	578	\$ 7.76
\$ 9.38 - \$ 12.29	1,087	7.2	\$ 10.83	613	\$ 10.25
\$ 12.42 - \$ 30.30	958	5.2	\$ 17.29	886	\$ 17.41
\$ 30.63 - \$ 69.20	279	4.2	\$ 38.32	270	\$ 38.33
	<u>5,404</u>	<u>7.2</u>	<u>\$ 10.13</u>	<u>2,847</u>	<u>\$ 13.77</u>

Compensation cost under SFAS No. 123 for the fair value of each incentive stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model for the multiple option approach with the following weighted average assumptions:

	<u>2003</u>	<u>2002</u>	<u>2001</u>
Expected dividend yield	-	-	-
Expected stock price volatility	100%	93%	89%
Risk-free interest rate	3.0%	3.6%	6.0%
Expected life of options	4.8 years	2 years	2 years

### Employee Stock Purchase Plan

In August 1994, the Company adopted an employee stock purchase plan ("Purchase Plan") under which 4,675,000 shares of common stock have been reserved for issuance. The Purchase Plan is administered generally over offering periods of 24 months, with each offering period divided into four consecutive six-month purchase periods beginning May 1 and November 1 of each year. Eligible employees may designate not more than 15% of their 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 six months, 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 is lower. At December 31, 2003, approximately 1.0 million shares were available in the Plan.

The weighted average fair value on the grant date of rights granted under the employee stock purchase plan was approximately \$1.51 in 2003, \$2.85 in 2002, and \$5.92 in 2001. Shares sold under the Purchase Plan were approximately 195,154 in 2003 and 411,460 in 2002.

Compensation cost under SFAS No. 123 is calculated for the estimated fair value of the employees' stock purchase rights using the Black-Scholes option-pricing model with the following average assumptions:

	<u>2003</u>	<u>2002</u>	<u>2001</u>
Expected dividend yield	-	-	-
Expected stock price volatility	104%	93%	89%
Risk-free interest rate	3.0%	3.6%	6.0%
Expected life of options	2 years	2 years	2 years

## 11. INCOME TAXES

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

	<u>Year Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
	(in thousands)		
Domestic loss	\$ (35,646)	\$ (79,767)	\$ (266,719)
Foreign income (loss)	7,641	(14,651)	(89,006)
Loss before provision for income taxes	<u>\$ (28,005)</u>	<u>\$ (94,418)</u>	<u>\$ (355,725)</u>

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

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
	<b>(in thousands)</b>		
Current:			
Federal	\$ -	\$ (1,136)	\$ -
State	100	201	129
Foreign	1,078	5,110	2,782
Total current	<u>1,178</u>	<u>4,175</u>	<u>2,911</u>
Deferred:			
Federal	(828)	(4,322)	(19,163)
State	-	-	(2,738)
Total deferred	<u>(828)</u>	<u>(4,322)</u>	<u>(21,901)</u>
Provision (benefit) for income taxes	<u>\$ 350</u>	<u>\$ (147)</u>	<u>\$ (18,990)</u>

Deferred tax assets are comprised of the following:

	<b>As of December 31,</b>	
	<b>2003</b>	<b>2002</b>
	<b>(in thousands)</b>	
Reserves not currently deductible	\$ 24,828	\$ 25,489
Deferred revenue	2,260	6,672
Depreciation	8,924	6,636
Net operating loss carryforwards	105,478	108,535
Tax credit carryforwards	12,302	12,535
Other	18,433	1,482
Total net deferred taxes	<u>172,225</u>	<u>161,349</u>
Deferred tax assets valuation allowance	<u>(172,225)</u>	<u>(161,349)</u>
Net deferred tax asset	<u>-</u>	<u>-</u>
Deferred tax liability - acquired intangibles	<u>(1,055)</u>	<u>(5,215)</u>
Total deferred tax asset/(liability)	<u>\$ (1,055)</u>	<u>\$ (5,215)</u>

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

	<b>Year Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
	<b>(in thousands)</b>		
Provision (benefit) at statutory rate	\$ (9,802)	\$ (33,046)	\$ (124,504)
State taxes, net of federal benefit	(700)	(2,578)	(9,711)
Foreign earnings taxed at different rates	(124)	(3,357)	(2,011)
Current unbenefitted losses	6,288	26,079	37,935
Non-deductible amortization and impairment charge	-	-	37,471
Foreign tax credits	-	(1,968)	-
Deferred tax asset valuation allowance	4,589	12,323	41,834
Other	99	2,400	(4)
Total provision for income taxes	<u>\$ 350</u>	<u>\$ (147)</u>	<u>\$ (18,990)</u>

The valuation allowance at December 31, 2003 and 2002 is attributable to federal and state deferred tax assets, as well as foreign deferred tax assets. Management believes that sufficient uncertainty exists with regard to the realizability of 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 carryback 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 all the Company's net deferred tax assets. At December 31, 2003, the Company had federal net operating loss carryforwards of approximately \$275 million which will expire at various dates through 2023. The Company also has approximately \$12 million foreign net operating loss carryforwards in Germany, in addition to the federal net operating loss carryforwards, that are unlimited and do not have any expiration date.

Approximately \$35 million of the deferred tax asset was acquired by the Company as a result of its acquisitions of the STEAG Semiconductor Division, CFM and Concept Systems Design, Inc. and, if realized, will be used to reduce the amount of goodwill and intangibles recorded at the date of acquisition first before reducing the tax provision. The federal and state net operating losses acquired from the STEAG Semiconductor Division, CFM and Concept are also subject to change in control limitations. 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 which can be utilized. Approximately \$1.0 million of the valuation allowance is 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.

## 12. EMPLOYEE BENEFIT PLANS

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 20% of the total compensation that would otherwise be paid to the participant, not to exceed the amount allowed by the applicable Internal Revenue Service guidelines. The Company may make a discretionary matching contribution equal to a percentage of the participant's contributions. In 2003, 2002, and 2001 the Company made matching contributions of approximately \$562,000, \$920,000 and \$1,171,000 respectively.

The Company's divested Wet business entity in Germany had a pension plan that was established in accordance with certain German laws. Benefits were determined based upon retirement age and years of service with the Company. The plan was not funded and there were no plan assets. The Company made payments to the plan when distributions to participants were required. There was no pension expense in 2003 through the divestiture date of March 17, 2003. Pension expense for the year 2002 and 2001 were \$46,000 and \$32,000, respectively. At December 31, 2003, there was no accumulated benefit obligation.

## 13. NET INCOME (LOSS) PER SHARE

Earnings per share is calculated in accordance with SFAS No. 128, "Earnings Per Share." SFAS No. 128 requires dual presentation of basic and diluted net income (loss) per share on the face of the income statement. Basic earnings per share is computed by dividing income (loss) available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted EPS gives effect to all dilutive potential common shares outstanding during the period. The computation of diluted EPS uses the average market prices during the period. All amounts in the following table are in thousands except per share data.

	<u>Year Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>BASIC NET INCOME (LOSS) PER SHARE:</b>			
Loss available to common stockholders	\$ (28,355)	\$ (94,271)	\$ (336,735)
Weighted average common shares outstanding	44,997	42,239	36,854
Basic loss per share	<u>\$ (0.63)</u>	<u>\$ (2.23)</u>	<u>\$ (9.14)</u>
<b>DILUTED NET INCOME (LOSS) PER SHARE:</b>			
Loss available to common stockholders	\$ (28,355)	\$ (94,271)	\$ (336,735)
Weighted average common shares outstanding	44,997	42,239	36,854
Diluted potential common shares from stock options	-	-	-
Weighted average common shares and dilutive potential common shares	44,997	42,239	36,854
Diluted net loss per share	<u>\$ (0.63)</u>	<u>\$ (2.23)</u>	<u>\$ (9.14)</u>

Total stock options outstanding at December 31, 2003 of 5.4 million, at December 31, 2002 of 5.8 million, and at December 31, 2001 of 1,889,248 were excluded from the computations of diluted net income (loss) per share because of their anti-dilutive effect on earnings (loss) per share.

## 14. RELATED PARTY TRANSACTIONS

At December 31, 2003, the Company had \$576,000 of principal and accrued interest outstanding from Brad Mattson under loans issued in 2002. Mr. Mattson resigned as an officer of the Company in October 2001 and resigned as a director in November 2002. The principal balance of \$500,000 outstanding at December 31, 2003 was fully repaid by Mr. Mattson on January 7, 2004. The accrued interest of \$76,000 remains outstanding after the payment received on January 7, 2004.

During the third quarter of 2003, Diane Mattson, a shareholder, repaid in full a total of \$1.3 million for outstanding principal and accrued interest under loans issued to her in 2002. At December 31, 2003, the Company has no outstanding loan balance from Ms. Mattson.

At December 31, 2003, the Company had loans receivable from other employees of approximately \$19,000 in aggregate. The interest rates on these loans range from 5.5% to 6%. The loans are due in 2004.

On April 30, 2002, the Company issued 7.4 million shares of common stock in a private placement transaction. Of the 7.4 million shares issued, 1.3 million shares were issued to Steag Electronic Systems AG ("SES") upon conversion of \$8.1 million of outstanding promissory notes at \$6.15 per share. At December 31, 2003, SES held approximately 29.4 percent of the Company's common stock, which it obtained pursuant to the Combination Agreement in conjunction with the Company's acquisition of eleven subsidiaries constituting the STEAG Semiconductor Division. Pursuant to a Stockholder Agreement entered into in connection with that acquisition transaction, Dr. Jochen Melchior and Dr. Hans-Bernd Betz were elected to the Company's Board of Directors as designees of SES.

On November 5, 2001, the Company and SES amended the Combination Agreement and the Stockholder Agreement between them. The Amendment to the Stockholder Agreement eliminated restrictions on future dispositions of Company common stock by SES. The Amendment to the Combination Agreement provided for, among other things, the amendment of the secured promissory note previously issued to SES in connection with the acquisition transaction, extending the maturity date and capitalizing accrued interest, and provided for the issuance of a second, secured promissory note in lieu of payment of profits owed to SES attributable to two of the acquired subsidiaries, as required under the Combination Agreement. As discussed in Note 3, the Company paid SES approximately \$37.7 million on July 2, 2002, in full settlement of its obligations under these promissory notes. See Note 18.

## 15. 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 sale and service of products for this one segment.

The following is net sales information by geographic area for the year ended December 31, 2003 and 2002 (in thousands):

	<u>2003</u>	<u>2002</u>
United States	\$ 22,160	\$ 53,914
Germany	17,891	45,417
Europe - others	10,058	8,917
Japan	37,632	13,652
Taiwan	44,159	36,898
Korea	20,121	20,127
Singapore	2,480	15,051
China	19,801	9,544
	<u>\$ 174,302</u>	<u>\$ 203,520</u>

The following is net sales information by geographic area for the year ended December 31, 2001 (in thousands):

	<u>2001</u>
United States	\$ 51,148
Japan	34,190
Taiwan	29,394
Korea	17,418
Singapore	11,487
Europe	71,224
China	15,243
Other Asian countries	45
	<u>\$ 230,149</u>

The net sales above have been allocated to the geographic areas based upon the installation location of the systems.

For purposes of determining sales to significant customers, the Company includes sales to customers through its distributor (at the sales price to the distributor) and excludes the distributor as a significant customer. In 2003, two customers accounted for 11% and 19% each of net sales. In 2002, three customers accounted for 12%, 11% and 11% each of net sales. In 2001, 13% of net sales were to a single customer.

## 16. 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. As of December 31, 2003, the maximum potential amount of future payments that the Company could be required to make under these standby letters of credit is approximately \$1.1 million, representing collateral for corporate credit cards, certain equipment leases and security deposits. 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 entered into by the Company, under which the Company may agree to hold the other party harmless against losses arising from a breach of representations or under which the Company may have an indemnity obligation to the counterparty with respect to certain intellectual property matters or certain tax related matters. Customarily, payment by the Company with respect to such matters is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract, which procedures typically allow the Company to challenge the other party's claims. Further, 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 recourse against third parties for certain 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 should not have a material effect on the Company's financial position or results of operations.

## 17. COMMITMENTS AND CONTINGENCIES

The Company leases 19 facilities under operating leases, which expire at various dates through 2019, with minimum annual rental commitments as follows (in thousands):

	(In thousands)
2004 .....	\$ 5,709
2005 .....	4,729
2006 .....	4,292
2007 .....	2,564
2008 .....	2,130
Thereafter .....	15,840
	<u>\$ 35,264</u>

Rent expense was approximately \$7.6 million in 2003, \$8.8 million in 2002, and \$10.7 million in 2001. The decrease in rent expense in 2003 was primarily due to the consolidation of facilities and non-renewal of expired leases. The decrease in rent expense in 2002, compared to 2001, was due to the consolidation of facilities and non-renewal of expired leases that were acquired by the Company on January 1, 2001.

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 has approximately 15 years remaining with a combined rental cost of approximately \$1.5 million annually. 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. The sublease, aggregating to approximately \$7.2 million lease payments, is expected to cover all related costs on the administrative building during the sublease period. In the second quarter of 2002, the Company leased space in two new facilities in Malvern, Pennsylvania to house its administrative functions previously located in Exton, Pennsylvania. These leases are each for a two year term until May 2004. In July 2003, the manufacturing building at the Exton, Pennsylvania location was sublet for a period of approximately three years, until September 2006, with an option for the subtenant to renew for a total of two successive periods, the first for five years and the second for the balance of the term of the master lease. The sublease, aggregating to approximately \$2.1 million lease payments, is expected to cover all related costs on the manufacturing building during the sublease period. In determining the facilities lease loss, net of cost recovery efforts from expected sublease income, various assumptions were made, including, the time period over which the building will be vacant; expected sublease terms; and expected sublease rates. The Company has estimated that under certain circumstances the facilities lease losses could be approximately \$0.9 million for each additional year that the facilities are not leased and could aggregate approximately \$13.5 million, net of expected sublease income, under certain circumstances. The Company expects to make payments related to the above noted facilities lease losses over the next fifteen years, less any sublet amounts. Adjustments for the facilities leases will be made in future periods, if necessary, based upon the then current actual events and circumstances.

In connection with the disposition of the Wet Business, the Company agreed to assume the lease obligations with respect to the facilities used to house the manufacturing and administrative functions of the transferred Wet Business in Pliezhausen, Germany. That lease has approximately 2.5 years remaining, until August 2006, with an approximate rental cost of \$1.2 million annually. The Company has sublet the facilities to SCP on terms that cover all rent and costs payable by the Company under the primary lease. During 2003, the Company received sublease payments of approximately \$1.2 million from SCP. Under its sublease, SCP has the right upon 90 days notice to partially or completely terminate the sublease, in which case the Company would become responsible for the lease costs, net of cost recovery efforts and any sublease income.

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 our financial position, given the uncertainty of litigation, we can not 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 flow.

## **18. SUBSEQUENT EVENTS**

On February 17, 2004, the Company sold approximately 4.3 million shares of its common stock in an underwritten public offering at \$11.50 per share and received net proceeds of approximately \$46.3 million, after deducting underwriting discounts, commissions and estimated offering expenses. Also, on February 17, 2004, SES sold approximately 4.3 million shares of the Company's common stock in the same underwritten public offering. Following that sale, SES continued to hold approximately 8.9 million shares of common stock of the Company, or 17.8% of the outstanding shares.

## Report of Independent Auditors

To the Board of Directors and  
Shareholders of Mattson Technology, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of shareholders' equity and of cash flows present fairly, in all material respects, the financial position of Mattson Technology, Inc. and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit 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. The consolidated financial statements of Mattson Technology, Inc. for the year ended December 31, 2001, were audited by other independent accountants who have ceased operations. Those independent accountants expressed an unqualified opinion on those consolidated financial statements in their report dated February 27, 2002.

As discussed in Note 1 to the consolidated financial statements, effective January 1, 2002, the Company changed its method of accounting for goodwill in accordance with Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets".

As discussed above, the consolidated financial statements of Mattson Technology, Inc. for the year ended December 31, 2001 were audited by other independent accountants who have ceased operations. As described in Note 4, these financial statements have been revised to include the transitional disclosures required by Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets", which was adopted by the Company as of January 1, 2002. We audited the transitional disclosures described in Note 4. In our opinion, the transitional disclosures for 2001 in Note 4 are appropriate. However, we were not engaged to audit, review, or apply any procedures to the 2001 financial statements of the Company other than with respect to such disclosures and, accordingly, we do not express an opinion or any other form of assurance on the 2001 financial statements taken as a whole.

PricewaterhouseCoopers LLP

January 23, 2004, except for Note 18,  
which is as of February 17, 2004

## REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Stockholders of Mattson Technology, Inc.:

We have audited the accompanying consolidated balance sheets of Mattson Technology, Inc. (a Delaware corporation) and subsidiaries as of December 31, 2001 and 2000 and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2001. These financial statements and the schedule referred to below are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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 includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Mattson Technology, Inc. and subsidiaries as of December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America.

Our audits were made for the purpose of forming an opinion on the basic consolidated financial statements taken as a whole. The schedule listed in the index to consolidated financial statements is presented for purposes of complying with the Securities and Exchange Commission's rules and is not part of the basic consolidated financial statements. This schedule has been subjected to the auditing procedures applied in the audits of the basic consolidated financial statements and, in our opinion, fairly states in all material respects the financial data required to be set forth therein in relation to the basic consolidated financial statements taken as a whole.

/s/ Arthur Andersen LLP

San Jose, California  
February 27, 2002

***This audit report of Arthur Andersen LLP, our former independent public accountants, is a copy of the original report dated February 27, 2002 rendered by Arthur Andersen LLP on our consolidated financial statements included in our Form 10-K filed on April 1, 2002, and has not been reissued by Arthur Andersen LLP since that date. The consolidated balance sheets for Mattson Technology, Inc. as of December 31, 2001 and 2000, the related consolidated statements of operations, stockholders' equity and cash flows for the year ended December 31, 2000 and 1999, and the financial statement schedule referred to in the audit report of Arthur Andersen are not included in this Annual Report on Form 10-K. We are including this copy of the Arthur Andersen LLP audit report pursuant to Rule 2-02(e) of Regulation S-X under the Securities Act of 1933. See Exhibit 23.2 to this report for further discussion.***

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

### **(a)(1) Previous independent accountants**

(i) On May 21, 2002 the Company dismissed Arthur Andersen LLP ("Andersen") as its independent accountants. Andersen had served as the independent auditors of the Company since November 1, 1999.

(ii) The reports of Andersen on the financial statements of the Company for each of the two fiscal years preceding to their dismissal contained no adverse opinion or disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principle.

(iii) The decision to change independent accountants was approved by the Company's Audit Committee.

(iv) During the Company's two most recent fiscal years preceding the dismissal of Anderson, the Company had no disagreements with Andersen on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Andersen, would have caused it to make reference thereto in its report on the financial statements of the Company for such periods.

(v) During the Company's two most recent fiscal years preceding the dismissal of Anderson, the Company has had no reportable events under Item 304(a)(1)(v)(B), (C) or (D) of Regulation S-K. With reference to Item 304(a)(1)(v)(A), in its Memorandum on Internal Control in connection with the audit for 2001, Andersen noted four conditions that it considered to be reportable events. In particular, Andersen suggested that the Company needed to (i) better document the job descriptions, procedure manuals, and reporting lines within the finance organization, (ii) improve and formalize monitoring procedures regarding controller or management level review of entries posted by the staff, (iii) improve and automate procedures for month-end closings, and (iv) improve policies and procedures for tracking inventory balances. Company management did not disagree with the suggestions made by Andersen. The Company believes it has subsequently implemented corrective measures. The Audit Committee of the Board of Directors discussed these matters with Andersen, and the Company authorized Andersen to respond fully to any inquiries by PricewaterhouseCoopers LLP concerning these matters.

### **(2) New independent accountants**

The Company engaged PricewaterhouseCoopers LLP ("PwC") as its new independent accountants as of May 23, 2002. During the two most recent fiscal years and through the date of their engagement by the Company, the Company did not consult with PwC regarding issues of the type described in Item 304(a)(2) of Regulation S-K.

## **ITEM 9A. CONTROLS AND PROCEDURES**

Our management, with the participation of our chief executive officer and chief financial officer, conducted an evaluation of the effectiveness of our "disclosure controls and procedures" (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this report. 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. 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 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, our management concluded that there was no such change during the fourth quarter.

Our work to implement and improve new computerized consolidation and enterprise resource planning systems continues as an active project. 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.

## **PART III**

### **ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

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 2004 Proxy Statement under the captions "Election of Directors," and "Section 16(a) Beneficial Ownership Compliance," and is incorporated herein by reference.

### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this item will be set forth in the 2004 Proxy Statement under the caption "Executive Compensation and Other Matters," and is incorporated herein by reference.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

Information related to security ownership of certain beneficial owners and security ownership of management will be set forth in the 2004 Proxy Statement under the caption "Security Ownership of Management and Principal Stockholders," and is incorporated herein by reference. Information with respect to our securities authorized for issuance under our equity compensation plans will be set forth in the 2004 Proxy Statement under the caption "Equity Compensation Plan Information," and is incorporated herein by reference.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

The information that is required by this item will be included in the 2004 Proxy Statement under the caption "Certain Relationships and Related Transactions," 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 2004 Proxy Statement under the caption "Audit and Related Fees," and is incorporated herein by reference.

## **PART IV**

### **ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K**

#### (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 38.

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

Schedule II (a) - Valuation and Qualifying Account for the year ended December 31, 2001

Schedule II (b) - Valuation and Qualifying Account for each of the two years in the period ended December 31, 2003

#### (a) (3) Exhibits

Exhibit Number -----	Description -----	Management Contract or Compensatory Plan or Arrangement -----	Notes -----
2.1	Strategic Business Combination Agreement, dated as of June 27, 2000, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(4)
2.2	Amendment to Strategic Business Combination Agreement, dated as of December 15, 2000, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(5)
2.3	Agreement and Plan of Merger, dated as of June 27, 2000, by and among Mattson Technology, Inc., a Delaware corporation, M2C Acquisition Corporation, a Delaware corporation and wholly owned subsidiary of Mattson, and CFM Technologies, Inc., a Pennsylvania corporation.		(4)
2.4	Second Amendment to Strategic Business Combination Agreement, dated as of November 5, 2001, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(10)
2.5	Stock and Asset Purchase Agreement for Wet Products Division dated as of February 12, 2003, by and among Mattson Technology, Inc., a Delaware corporation, Mattson International, Inc., a Delaware corporation, Mattson Wet Products, Inc., a Pennsylvania corporation, Mattson Technology Finance, Inc., a Delaware corporation, and SCP Global Technologies, Inc., an Idaho corporation.		(13)
2.6	First Amendment to Stock and Asset Purchase Agreement for Wet Products Division dated as of March 17, 2003, by and among Mattson Technology, Inc., a Delaware corporation, Mattson International, Inc., a Delaware corporation, Mattson Wet Products, Inc., a Pennsylvania corporation, Mattson Technology Finance, Inc., a Delaware corporation, and SCP Global Technologies, Inc., an Idaho corporation.		(13)
2.7	Second Amendment to Stock and Asset Purchase Agreement for Wet Products Division dated as of December 5, 2003, by and among Mattson Technology, Inc., a Delaware corporation, Mattson International, Inc., a Delaware corporation, Mattson Wet Products, Inc., a Pennsylvania corporation, Mattson Technology		

Finance, Inc., a Delaware corporation, and SCP Global Technologies, Inc., a Delaware corporation.

3.1	Amended and Restated Certificate of Incorporation of Mattson Technology, Inc.		(7)
3.2	Third Amended and Restated Bylaws of Mattson Technology, Inc.		(11)
4.1	Form of Share Purchase Agreement		(8)
4.2	Share Purchase Agreement between Mattson Technology, Inc. and STEAG Electronic Systems AG dated April 4, 2002.		(9)
4.3	Form of Senior Indenture.		(15)
4.4	Form of Senior Debt security (included in Exhibit 4.3).		
4.5	Form of Subordinated Indenture.		(15)
4.6	Form of Subordinated Debt security (Included in Exhibit 4.5).		
10.2	1989 Stock Option plan, as amended	C	(11)
10.3	1994 Employee Stock Purchase Plan	C	(1)
10.4	Form of Indemnity Agreement	C	(2)
10.5	Stockholder Agreement by and among STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, Mattson Technology, Inc., a Delaware corporation, and Brad Mattson.		(6)
10.6	Amendment to Stockholder Agreement dated as of November 5, 2001, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(10)
10.7	Executive Change of Control agreement between Mattson Technology, Inc. and David Dutton, dated as of March 4, 2002.	C	(11)
10.8	Form of Executive Change of Control agreement Between Mattson Technology, Inc. and its Executive Vice Presidents and Product Division Presidents	C	(11)
10.9	Promissory Note between Mattson Technology, Inc. and Brad Mattson, dated April 29, 2002.	C	(11)
10.10	Promissory Note between Mattson Technology, Inc. and Brad Mattson, dated July 3, 2002.	C	(12)
10.11	Term Loan and Security Agreement between Mattson Technology, Inc. and Brad Mattson, dated July 3, 2002.	C	(12)
10.12	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. (14)

10.13 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. (14)

21.1 Subsidiaries of Registrant

23.1 Consent of Independent Auditors

23.2 Notice regarding Omission of Consent of Arthur Andersen LLP

24.1 Power of Attorney (See page 70 of this form 10-K)

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.

-----

(1) Incorporated by reference to the corresponding Exhibit previously filed as an Exhibit to the Registrant's Registration Statement on Form S-1 filed August 12, 1994 (33-92738), as amended.

(2) Incorporated by reference from Appendix B to the Mattson Technology, Inc. Proxy Statement filed on June 20, 1997.

(3) Incorporated by reference to Registration Statement on Form S-8 filed October 31, 1997 (333-39129).

(4) Incorporated by reference from Mattson's filing on Form S-4 (File No. 333-46568) filed on September 25, 2000.

(5) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K (File No. 000-24838) filed on December 21, 2000.

(6) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K filed on January 16, 2001.

(7) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K/A filed on January 30, 2001.

(8) Incorporated by reference from Mattson Technology, Inc. registration statement on Form S-3 filed on April 12, 2002.

(9) Incorporated by reference from Schedule 13 D/A filed by RAG Aktiengesellschaft on May 8, 2002.

(10) Incorporated by reference to Mattson Technology, Inc. annual report on Form 10-K for fiscal year 2001, filed on April 1, 2002.

(11) Incorporated by reference from Mattson Technology, Inc. quarterly report on Form 10-Q filed on August 14, 2002.

(12) Incorporated by reference from Mattson Technology, Inc. quarterly report on Form 10-Q filed on November 13, 2002.

(13) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K filed on April 1, 2003.

(14) Incorporated by reference from Mattson Technology, Inc. quarterly report on Form 10-Q filed on May 14, 2003.

(15) Previously filed as an exhibit to the registrant's Registration Statement on Form S-3 (File No. 333-111527) filed on December 23, 2003 and incorporated herein by reference.

(b) Reports on Form 8-K

Form 8-K furnished October 22, 2003 reporting under Item 7 and Item 12 the issuance of

a press release reporting financial results for the third quarter of 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)

/s/ David Dutton  
By: \_\_\_\_\_  
David Dutton  
President, Chief Executive Officer  
and Director

/s/ Ludger Viefhues  
By: \_\_\_\_\_  
Ludger Viefhues  
Executive Vice President -- Finance  
and Chief Financial Officer

March 15, 2004

KNOW ALL PERSONS BY THESE PRESENTS that each person whose signature appears below constitutes and appoints David Dutton and Ludger Viefhues, 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.

Signature -----	Title -----	Date ----
/s/ David Dutton _____ David Dutton	President, Chief Executive Officer and Director	March 15, 2004
/s/ Ludger Viefhues _____ Ludger Viefhues	Executive Vice President-- Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	March 15, 2004
/s/ Jochen Melchior _____ Dr. Jochen Melchior	Chairman of the Board and Director	March 15, 2004
/s/ Hans-Georg Betz _____ Dr. Hans-Georg Betz	Director	March 15, 2004
/s/ Shigeru Nakayama _____ Shigeru Nakayama	Director	March 15, 2004
/s/ Kenneth Smith _____ Kenneth Smith	Director	March 15, 2004
/s/ Kenneth Kannappan	Director	March 15, 2004

---

Kenneth Kannappan

/s/ William Turner

Director

March 15, 2004

---

William Turner

**REPORT OF INDEPENDENT AUDITORS ON  
FINANCIAL STATEMENT SCHEDULE**

To the Board of Directors of  
Mattson Technology, Inc.:

Our audit of the consolidated financial statements referred to in our report dated January 23, 2004, except as to Note 18, which is as of February 17, 2004 appearing in this Form 10-K also included an audit of the financial statement schedule II(b) listed in Item 15(a)(2) of this Form 10-K. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

PricewaterhouseCoopers LLP

San Jose, California  
January 23, 2004

SCHEDULE II(a)

**VALUATION AND QUALIFYING ACCOUNT**

**Allowance for Doubtful Accounts (in thousands)**

Fisal Year	Balance at Beginning of Year	Acquisition Adjustments	Additions -- Charged to Income	Deductions	Balance at End of Year
2001	\$ 501	\$ 9,178	\$ 6,850	\$ (4,056)	\$ 12,473

SCHEDULE II(b)

**VALUATION AND QUALIFYING ACCOUNT**

**Allowance for Doubtful Accounts (in thousands)**

Fisal Year	Balance at Beginning of Year	Wet Business Disposition Adjustments	Additions -- Charged to Income	Deductions	Balance at End of Year
2002	\$ 12,473	\$ -	\$ -	\$ (1,921)	\$ 10,552
2003	\$ 10,552	\$ (1,432)	\$ -	\$ (3,553)	\$ 5,567

**EXHIBIT INDEX**

The following Exhibits to this report are filed herewith or are incorporated herein by reference. Each management contract or compensatory plan or arrangement has been marked with the letter "C" to identify it as such.

Management Contract		or Compensatory Plan	
Exhibit	Description	or Arrangement	Notes
-----	-----	-----	-----
2.1	Strategic Business Combination Agreement, dated as of June 27, 2000, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(4)
2.2	Amendment to Strategic Business Combination Agreement, dated as of December 15, 2000, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(5)
2.3	Agreement and Plan of Merger, dated as of June 27, 2000, by and among Mattson Technology, Inc., a Delaware corporation, M2C Acquisition Corporation, a Delaware corporation and wholly owned subsidiary of Mattson, and CFM Technologies, Inc., a Pennsylvania corporation.		(4)
2.4	Second Amendment to Strategic Business Combination Agreement, dated as of November 5, 2001, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(10)
2.5	Stock and Asset Purchase Agreement for Wet Products Division dated as of February 12, 2003, by and among Mattson Technology, Inc., a Delaware corporation, Mattson International, Inc., a Delaware corporation, Mattson Wet Products, Inc., a Pennsylvania corporation, Mattson Technology Finance, Inc., a Delaware corporation, and SCP Global Technologies, Inc., an Idaho corporation.		(13)
2.6	First Amendment to Stock and Asset Purchase Agreement for Wet Products Division dated as of March 17, 2003, by and among Mattson Technology, Inc., a Delaware corporation, Mattson International, Inc., a Delaware corporation, Mattson Wet Products, Inc., a Pennsylvania corporation, Mattson Technology Finance, Inc., a Delaware corporation, and SCP Global		

	Technologies, Inc., an Idaho corporation.		(13)
2.7	Second Amendment to Stock and Asset Purchase Agreement for Wet Products Division dated as of December 5, 2003, by and among Mattson Technology, Inc., a Delaware corporation, Mattson International, Inc., a Delaware corporation, Mattson Wet Products, Inc., a Pennsylvania corporation, Mattson Technology Finance, Inc., a Delaware corporation, and SCP Global Technologies, Inc., a Delaware corporation.		
3.1	Amended and Restated Certificate of Incorporation of Mattson Technology, Inc.		(7)
3.2	Third Amended and Restated Bylaws of Mattson Technology, Inc.		(11)
4.1	Form of Share Purchase Agreement		(8)
4.2	Share Purchase Agreement between Mattson Technology, Inc. and STEAG Electronic Systems AG dated April 4, 2002.		(9)
4.3	Form of Senior Indenture.		(15)
4.4	Form of Senior Debt security (included in Exhibit 4.3).		
4.5	Form of Subordinated Indenture.		(15)
4.6	Form of Subordinated Debt security (Included in Exhibit 4.5).		
10.2	1989 Stock Option plan, as amended	C	(11)
10.3	1994 Employee Stock Purchase Plan	C	(1)
10.4	Form of Indemnity Agreement	C	(2)
10.5	Stockholder Agreement by and among STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, Mattson Technology, Inc., a Delaware corporation, and Brad Mattson.		(6)
10.6	Amendment to Stockholder Agreement dated as of November 5, 2001, by and between STEAG Electronic Systems AG, an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany, and Mattson Technology, Inc., a Delaware corporation.		(10)
10.7	Executive Change of Control agreement between Mattson Technology, Inc. and David Dutton, dated as of March 4, 2002.	C	(11)
10.8	Form of Executive Change of Control agreement Between Mattson Technology, Inc. and its Executive Vice Presidents and Product Division Presidents	C	(11)
10.9	Promissory Note between Mattson Technology, Inc. and Brad Mattson, dated April 29, 2002.	C	(11)

- 10.10 Promissory Note between Mattson Technology, Inc. C and Brad Mattson, dated July 3, 2002. (12)
- 10.11 Term Loan and Security Agreement between Mattson C Technology, Inc. and Brad Mattson, dated July 3, 2002. (12)
- 10.12 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. (14)
- 10.13 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. (14)
- 21.1 Subsidiaries of Registrant
- 23.1 Consent of Independent Auditors
- 23.2 Notice regarding Omission of Consent of Arthur Andersen LLP
- 24.1 Power of Attorney (See page 70 of this form 10-K)
- 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.

- 
- (1) Incorporated by reference to the corresponding Exhibit previously filed as an Exhibit to the Registrant's Registration Statement on Form S-1 filed August 12, 1994 (33-92738), as amended.
  - (2) Incorporated by reference from Appendix B to the Mattson Technology, Inc. Proxy Statement filed on June 20, 1997.
  - (3) Incorporated by reference to Registration Statement on Form S-8 filed October 31, 1997 (333-39129).
  - (4) Incorporated by reference from Mattson's filing on Form S-4 (File No. 333-46568) filed on September 25, 2000.
  - (5) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K (File No. 000-24838) filed on December 21, 2000.
  - (6) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K filed on January 16, 2001.
  - (7) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K/A filed on January 30, 2001.
  - (8) Incorporated by reference from Mattson Technology, Inc. registration statement on Form S-3 filed on April 12, 2002.
  - (9) Incorporated by reference from Schedule 13 D/A filed by RAG Aktiengesellschaft on May 8, 2002.
  - (10) Incorporated by reference to to Mattson Technology, Inc. annual report on Form 10-K for fiscal year 2001, filed on April 1, 2002.
  - (11) Incorporated by reference from Mattson Technology, Inc. quarterly report on Form 10-Q filed on August 14, 2002.
  - (12) Incorporated by reference from Mattson Technology, Inc. quarterly report on Form 10-Q filed on November 13, 2002.
  - (13) Incorporated by reference from Mattson Technology, Inc. current report on Form 8-K filed on April 1, 2003.
  - (14) Incorporated by reference from Mattson Technology, Inc. quarterly report on Form 10-Q

filed on May 14, 2003.

- (15) Previously filed as an exhibit to the registrant's Registration Statement on Form S-3 (File No. 333- 111527) filed on December 23, 2003 and incorporated herein by reference.

**MATTSON TECHNOLOGY, INC.**

**SUBSIDIARIES OF THE REGISTRANT**

Mattson International, Inc.  
Mattson Technology LLC  
Mattson Wet Products, Inc.  
Mattson Thermal Products, Inc.  
Steag CVD Systems, Ltd.  
Mattson Technology Center KK (Japan)  
Mattson International Korea Co.  
Mattson Technology of Singapore Pte. Ltd.  
Mattson International Inc. (Taiwan Branch)  
Steag Electronic Systems SE Asia Pte. Ltd. Taiwan  
Mattson Technology Holding GmbH  
Mattson International GmbH  
Mattson Thermal Products, GmbH  
Mattson Semiconductor GmbH  
Mattson International France SARL  
Mattson Technology UK Ltd. (UK)  
Mattson Technology srl Italy  
Steag Electronic Systems SE Asia Pte. Ltd. (Singapore)  
Steag Electronic Systems UK Ltd.  
Mattson Trading (Shanghai) Co., Ltd.  
Mattson Technology Cayman Holdings, Ltd.

**CONSENT OF INDEPENDENT AUDITORS**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-87715, 333-39129, 333-59859, 33-85272, 33-94972, 333-41954, 333-54010, 333-63156 and 333-100094) and the Registration Statements on Form S-3 (Nos. 333-86072 and 333-111527) of Mattson Technology, Inc. of our reports dated January 23, 2004, except as to Note 18, which is as of February 17, 2004 relating to the financial statements and financial statement schedule, which appear in this Form 10-K.

PricewaterhouseCoopers LLP

San Jose, California  
March 12, 2004

**NOTICE REGARDING OMISSION OF CONSENT OF ARTHUR ANDERSEN LLP**

The report of Arthur Andersen LLP dated February 27, 2002 relating to certain of the financial statements that appear in this Annual Report on Form 10-K, is incorporated by reference into our Registration Statements on Form S-8 (Nos. 333-87715, 333-39129, 333-59859, 33-85272, 33-94972, 333-41954, 333-54010, 333-63156 and 333-100094) and our Registration Statements on Form S-3 (Nos. 333-86072 and 333-111527). Arthur Andersen LLP has not consented to the incorporation by reference of their report on our financial statements into those registration statements. We have dispensed with the requirement to file their consent in reliance upon Rule 437a under the Securities Act of 1933. Because Arthur Andersen LLP has not consented to the incorporation by reference of their report into those registration statements, you will not be able to recover against Arthur Andersen LLP under Section 11(a) of the Securities Act of 1933, as amended.

Section 11(a) provides that if any part of a registration statement, at the time such registration statement becomes effective, contains any untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading, any person acquiring a security pursuant to such registration statement (unless such person knows of such untruth or omission) may sue, among others, every accountant who has consented to be named as having prepared or certified any part of the registration statement, or as having prepared or certified any report or valuation that is used in connection with the registration statement, with respect to the statement in such registration statement, report or valuation that purports to have been prepared or certified by the accountant.

Because we are unable to obtain Arthur Andersen's written consent to the incorporation by reference of their report on such financial statements, Rule 437a permits us to file registration statements without that written consent. Because it did not consent, Arthur Andersen does not become subject to liability under Section 11(a), as discussed above. Consequently, stockholders would be unable to sue Arthur Andersen under Section 11(a) in connection with the purchase or sale of securities. However, other persons who are subject to liability under Section 11, including the Company's officer and directors, may still rely on Arthur Andersen's original audit reports as being made by an expert for purposes of establishing a due diligence defense under Section 11(b) of the Securities Act.

**CERTIFICATIONS**

**MATTSON TECHNOLOGY, INC.  
SARBANES-OXLEY ACT SECTION 302(a) CERTIFICATION**

I, David Dutton, certify that:

1. I have reviewed this annual report on Form 10-K of Mattson Technology, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2004

/S/ DAVID DUTTON

David Dutton  
President and Chief Executive Officer

**MATTSON TECHNOLOGY, INC.**

**SARBANES-OXLEY ACT SECTION 302(a) CERTIFICATION**

I, Ludger Viefhues, certify that:

1. I have reviewed this annual report on Form 10-K of Mattson Technology, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2004

/S/ LUDGER VIEFHUES

Ludger Viefhues  
Executive Vice President-Finance and Chief  
Financial Officer

**Certification of Chief Executive Officer Pursuant to  
18 U.S.C. Section 1350,  
As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Mattson Technology, Inc. (the "Company") on Form 10-K for the period ending December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), David Dutton, as Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

March 15, 2004

/S/ DAVID DUTTON

-----  
David Dutton  
Chief Executive Officer

\*\*\*\*\*

**Certification of Chief Executive Officer Pursuant to  
18 U.S.C. Section 1350,  
As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Mattson Technology, Inc. (the "Company") on Form 10-K for the period ending December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Ludger Viefhues, as Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

March 15, 2004

/S/ LUDGER VIEFHUES

-----  
Ludger Viefhues  
Chief Financial Officer

**mattson**

**Mattson Technology, Inc**

47131 Bayside Parkway  
Fremont, California 94538

Main: +1.510.657.5900

Fax: +1.510.492.5911

[www.mattson.com](http://www.mattson.com)