



# **FORM 10-K**

## **MONOLITHIC SYSTEM TECHNOLOGY INC – MOSY**

**Filed: March 15, 2004 (period: December 31, 2003)**

Annual report which provides a comprehensive overview of the company for the past year

# Table of Contents

## Part I

- Item 1.** Business
- Item 2.** Properties
- Item 3.** Legal Proceedings
- Item 4.** Submission of Matters to a Vote of Security Holders

## Part II

- Item 5.** Market for Registrant's Common Equity and Related Stockholder Matters
- Item 6.** Selected Financial Data
- Item 7.** Management's Discussion and Analysis of Financial Condition and Results of Operations
- Item 7A.** Quantitative and Qualitative Discussion of Market Interest Rate Risk
- Item 8.** Financial Statements and Supplementary Data
- Item 9.** Changes in and Disagreements with Accountants on Accounting and Financial Disclosure
- Item 9a.** Controls and Procedures

## Part III

- Item 10.** Directors and Executive Officers of the Registrant
- Item 11.** Executive Compensation
- Item 12.** Security Ownership of Certain Beneficial Owners and Management
- Item 13.** Certain Relationships and Related Transactions
- Item 14.** Accountant Fees and Services

## Part IV

- Item 15.** Exhibits, Financial Statement Schedules and Reports on the Form 8K

### SIGNATURES

EX-21.1 (Subsidiaries of the registrant)

EX-23.1 (Consents of experts and counsel)

EX-31.1

EX-31.2

EX-32

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

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**FORM 10-K**

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

For the Fiscal Year December 31, 2003, or

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

Commission file number: 000-32929

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**MONOLITHIC SYSTEM TECHNOLOGY, INC.**

(Exact name of registrant as specified in its charter)

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

**77-0291941**  
(IRS Employer  
Identification Number)

**1020 Stewart Drive**  
**Sunnyvale, California 94085**  
(Address of principal executive offices)

**(408) 731-1800**  
(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
None	None

Securities registered pursuant to Section 12(g) of the Act:  
Common Stock, par value \$0.01 per share  
Series AA Preferred Stock, par value \$0.01 per share  
(Title of Class)

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

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

The aggregate market value of the common stock held by non-affiliates of the Registrant, as of June 30, 2003 was approximately \$141,131,000 based upon the last sale price reported for such date on the Nasdaq National Market. For purposes of this disclosure, shares of common stock held by persons who beneficially own more than 5% of the outstanding shares of common stock and shares held by officers and directors of the Registrant have been excluded because such persons may be deemed to be affiliates. This

determination is not necessarily conclusive.

As of February 23, 2004, 30,767,544 shares of the registrant's common stock, \$0.01 per value, were outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

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## TABLE OF CONTENTS

### Part I

- Item 1.      Business
- Item 2.      Properties
- Item 3.      Legal Proceedings
- Item 4.      Submission of Matters to a Vote of Security Holders

### Part II

- Item 5.      Market for Registrant’s Common Equity and Related Stockholder Matters
- Item 6.      Selected Financial Data
- Item 7.      Management’s Discussion and Analysis of Financial Condition and Results of Operations
- Item 7A.     Quantitative and Qualitative Discussion of Market Interest Rate Risk
- Item 8.      Financial Statements and Supplementary Data
- Item 9.      Changes in and Disagreements with Accountants on Accounting and Financial Disclosure
- Item 9a.     Controls and Procedures

### Part III

- Item 10.     Directors and Executive Officers of the Registrant
- Item 11.     Executive Compensation
- Item 12.     Security Ownership of Certain Beneficial Owners and Management
- Item 13.     Certain Relationships and Related Transactions
- Item 14.     Principal Accountant Fees and Services

### Part IV

- Item 15.     Exhibits, Financial Statement Schedules, and Reports on Form 8-K  
Signatures

## Part I

*This Annual Report on Form 10–K and the documents incorporated herein by reference contain forward–looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which include, without limitation, statements about the market for our technology, our strategy, competition, expected financial performance and other aspects of our business identified in this Annual Report, as well as other reports that we file from time to time with the Securities and Exchange Commission. Any statements about our business, financial results, financial condition and operations contained in this Annual Report that are not statements of historical fact may be deemed to be forward–looking statements. Without limiting the foregoing, the words “believes,” “anticipates,” “expects,” “intends,” “projects,” or similar expressions are intended to identify forward–looking statements. Our actual results could differ materially from those expressed or implied by these forward–looking statements as a result of various factors, including the risk factors described in Part I, Item 1, “Business—Risk Factors,” and elsewhere in this report. We undertake no obligation to update publicly any forward–looking statements for any reason, except as required by law, even as new information becomes available or other events occur in the future.*

MoSys®, MultiBank® and 1T–SRAM® are our trademarks. Product names, trade names and trademarks of other companies are also referred to in this report.

### **Item 1. Business**

#### **Company Overview**

We design, develop, license and market memory technologies used by the semiconductor industry and electronic product manufacturers. We have developed a series of patented semiconductor memory technologies, called 1T–SRAM technologies, that offer a combination of high density, low power consumption and high speed at performance and cost levels that other available memory technologies do not match. We license this technology to companies that incorporate, or embed, memory on complex integrated circuits. We generate revenue from intellectual property licensing, which consists of licensing and royalty revenues. We also sell memory chips based on our 1T–SRAM technologies.

Using elements of our existing memory technology as a foundation, we completed development of our first memory chips incorporating our 1T–SRAM technologies in the fourth quarter of 1998. Through the second quarter of 2001, almost all of our revenue was generated by product sales of our memory chips. Since then, however, licensing and royalty revenues have represented the majority of our revenues, a trend that we expect will continue for the foreseeable future. Our licensing revenue consists of fees paid for engineering development and engineering support services. We are entitled to receive royalties under each of our licensing agreements when our licensees manufacture or sell products that incorporate our technology.

We signed our first license agreement related to our 1T–SRAM technology at the end of the fourth quarter of 1998 and in the first quarter of 2000 recognized revenue from licensing our 1T–SRAM technology for the first time. In 2001, we introduced enhancements to the original technology with 1T–SRAM–M, a lower power version and 1T–SRAM–R, a version offering improved quality and reliability features. In 2002, we introduced 1T–SRAM–Q, which offers twice the density of our original technology.

As of December 31, 2003, we had signed license agreements related to our 1T–SRAM technologies with 41 companies. Our licensing sales cycle is lengthy. Generally, we expect the period from our initial discussion with a prospective licensee to a signed agreement to last from three to six months. Once our customer signs a license agreement, we generally will recognize revenue from fees for developing and delivering 1T–SRAM designs to the customer over a period of 6 to 18 months. If the customer subsequently uses our 1T–SRAM design in production, we would not expect to receive any royalty payments until 18 to 24 months after the commencement of the project.

To expand the range of memory technology intellectual property and services available to our customers, we acquired 100% of the outstanding stock of ATMOS Corporation, a Canada based privately held company focused on creating high–density, compiler–generated embedded memory solutions, effective August 30, 2002. In December 2002, we announced our first 1T–SRAM compiler for 0.15–micron standard logic processes available for the leading foundries. The 1T–SRAM compiler, which is a software program that allows semiconductor designers to configure memories to meet their design specifications, resulted directly from the ATMOS acquisition. This compiler broadens the potential distribution of our 1T–SRAM technologies by making them available for semiconductor design applications for which our custom memory designs may not be cost effective.

To complement our existing high–density, low–power 1T–SRAM technologies, we announced the availability of our low

power 6T-SRAM-R compilers in January 2004. The 6T-SRAM-R compilers incorporate the same technologies that deliver the quality and low-power advantages offered by our 1T-SRAM technologies for large memories and extend these benefits to small memories of less than one megabit in size, for system-on-chip, or SoC designers. Our new compilers have significant low power advantages as compared to other six-transistor embedded memories.

## **Industry Background**

### *Trends in the Semiconductor Industry*

Electronic products play an increasingly important role in our lives, as evidenced by the growth of the personal computer, wireless communications, networking equipment and consumer electronics markets. These markets are characterized by intensifying competition, rapid innovation, increasing performance requirements and continuing cost pressures. To manufacture electronic products that achieve optimal performance and cost levels, semiconductor companies must produce integrated circuits that offer higher performance, greater functionality and lower cost.

Two important measures of performance are speed and power consumption. Higher-speed integrated circuits can allow electronic products to operate faster, enabling the performance of more functions. Reducing the power consumption of integrated circuits contributes to increased battery life and reduced heat generation in electronic products. Reduced power consumption also enables integrated circuit designers to overcome costly design hurdles, such as meeting the thermal limitations of low-cost packaging materials.

In addition to offering high-performance products, semiconductor companies must produce integrated circuits that are cost effective. High-density integrated circuits require less silicon, thus reducing their size and cost. Cost reductions also can be achieved by simplifying the integrated circuit's manufacturing process and improving the manufacturing yield.

To avoid the high cost of substantial redesign, semiconductor companies typically use technology that is scalable, which means it can be readily incorporated into multiple generations of manufacturing process technologies. Process technology generations are distinguished in terms of the dimension of the integrated circuit's smallest topographical features, as measured in microns (one millionth of a meter). The semiconductor industry has continuously developed advanced process technologies that enable the reduction of silicon area on integrated circuits and consequently lower costs. The industry is predominantly using 0.25-micron, 0.18-micron and 0.15-micron manufacturing process technology today. However, current designs are now being implemented in 0.13-micron manufacturing process technology, and are now rapidly migrating to 0.09-micron manufacturing process technology.

### *Importance of Integration*

For decades, the semiconductor industry has continuously increased the value of integrated circuits by improving their density, power consumption, speed and cost. The main driver for these improvements has been the success of shrinking the size of the basic semiconductor building block, or transistor. Transistors have become small enough to make it economical to combine multiple functions, such as microprocessors, graphics, memory, analog components and digital signal processors, on a single integrated circuit, or SoC. Highly integrated circuits such as SoCs often offer advantages in density, power consumption, speed and cost that cannot be matched using separate, discrete integrated circuits. SoCs are essential for most electronic products, such as cellular phones, video game consoles, communication and networking equipment and internet appliances, to achieve increasing performance requirements at a reasonable cost.

### *Importance of Embedded Memory*

Historically, semiconductor companies implemented memory in separate integrated circuits. Rather than using separate memory chips, semiconductor companies today are embedding memory on highly integrated circuits in order to optimize performance and size. At the same time, the increasing sophistication of electronic products is driving a rapid increase in the amount of memory required. Current industry estimates are that more than half of the chip area of a SoC is comprised of embedded memory and this proportion is forecasted to increase in the future with the growth of more memory-intensive applications.

The high cost of incorporating the memory component represents a major challenge to achieving high levels of integration. As embedded memories account for an increasing percentage of the size of a highly integrated circuit, they are often the slowest or limiting function in the circuit. Not only must integrated circuits contain a larger amount of embedded memory, this memory must be dense enough to be economically attractive and must offer sufficiently high speed and low power consumption. Embedded memory has become a crucial design consideration for determining the overall cost and performance of highly integrated circuits and the growing number of electronic products in which they are incorporated.

### *Traditional SRAM*

The most common form of embedded memory today utilizes traditional static random access memory, or SRAM technology, that we refer to as traditional SRAM. This technology is in the public domain and can be used by any semiconductor company. Traditional SRAM has the following characteristics—

- it operates at the same high speeds as other functions of the integrated circuit;
- it provides a simple and familiar interface that allows for quick design into an integrated circuit with less risk that the design will not function according to specification; and
- it utilizes the standard logic manufacturing process that is both economical and the most widely available.

As memory requirements increase, however, traditional SRAM becomes relatively more expensive compared to the total cost of the integrated circuit. Specifically, traditional SRAM has the following drawbacks that can lead to higher cost—

- it requires a substantial amount of silicon area because of its low density; and
- it consumes a significant amount of power when operating at high speeds.

To overcome the density limitations of traditional SRAM, some manufacturers have utilized embedded dynamic random access memory, or embedded DRAM. While embedded DRAM is denser than traditional SRAM, it is typically ten times slower. Manufacturing embedded DRAM also requires additional process steps and results in low yields, which translate into increased manufacturing time and cost. Additionally, because of its complex interface requirements, embedded DRAM is more difficult to incorporate on integrated circuits, leading to a higher risk of failure. As integrated circuit designers have experimented with embedded DRAM, they have discovered that these limitations of embedded DRAM preclude its use in almost all applications. Therefore, traditional SRAM continues to be the most widely used technology for embedded memory. One of the major challenges for the semiconductor industry today is to find an embedded memory solution that combines high density, low power consumption, high speed and low cost.

### **Our Solution**

We have developed a series of innovative memory technologies, 1T-SRAM technologies, which provide major advantages over traditional SRAM in density, power consumption and cost, thus making it more economical for designers to incorporate large amounts of embedded memory in their designs. In addition, our 1T-SRAM technologies offer all the benefits of traditional SRAM, such as high speed, simple interface and ease of manufacturability. Its core circuitry is already production proven in millions of our memory chips and offers integrated circuit designers the following characteristics compared to traditional SRAM:

<b>Parameters</b>	<b>Typical Characteristics of 1T-SRAM technologies vs. traditional SRAM</b>
Density	Uses 50% to 80% less silicon for the same amount of memory
Cost	50 to 80% less cost for the same amount of memory
Power	Can save up to three-quarters the power when operating at the same speed
Speed	Can provide speeds equal to or greater than those offered by traditional SRAM, especially for larger memory sizes

Our 1T-SRAM technologies can achieve these advantages while utilizing standard logic manufacturing processes and providing the simple, standard SRAM interface that designers are accustomed to today.

### *High Density*

Embedded memory utilizing our 1T-SRAM technologies is typically two to three times denser than traditional SRAM. Increased density enables manufacturers of electronic products, such as cellular phones, video game consoles and digital cameras and camcorders, to incorporate additional functionality into a single integrated circuit, resulting in overall cost savings. Semiconductor designers can take advantage of the high density of our 1T-SRAM technologies and embed large quantities of high-performance memory and other components that in the past might not have been feasible.

### *Low Power Consumption*

Embedded memory utilizing our 1T-SRAM technologies can consume as little as one-quarter the power and generates less heat





than traditional SRAM when operating at the same speed. This feature facilitates longer battery life and reliable operation using lower-cost packaging.

### *High Speed*

Embedded memory utilizing our 1T-SRAM technologies typically provides speeds equal to or greater than the speeds of traditional SRAM, especially for larger memory sizes. Our 1T-SRAM memory designs can sustain random access cycle times of less than three nanoseconds. In today's 0.13-micron manufacturing process technology, our 1T-SRAM technologies can operate with a random access frequency in excess of 400 megahertz for multi-megabit memory.

### *Manufacturing Process Independence*

We have been able to implement our technology without requiring the manufacturer to make any significant changes to either standard logic or alternative manufacturing processes. 1T-SRAM's portability, or the ease with which it can be implemented in different semiconductor manufacturing facilities, has been proven operational in the fabrication of chips at Taiwan Semiconductor Manufacturing Co., Ltd., or TSMC, United Microelectronics Corporation, or UMC, and Chartered Semiconductor Manufacturing Ltd., the world's three largest independent foundries. 1T-SRAM's scalability, or the ease with which it can be implemented in different generations of manufacturing processes, has already been demonstrated in the fabrication of chips in 0.25-micron, 0.22-micron, 0.18-micron, 0.15-micron, 0.13-micron and 0.09-micron process generations. We expect our technology to continue to scale readily to future process generations. This portability and scalability provides for wide availability, inexpensive implementation and quick product time to market for our licensees.

### *Simplicity of Interface*

Our 1T-SRAM technologies' internal circuitry connects to the simple, standard SRAM interface that designers are accustomed to today. Our use of this standard high-performance interface minimizes design time, thus optimizing time to market for our licensees. This simple interface also helps minimize the risk that integrated circuit designs will not operate according to specifications.

## **Our Strategy**

Our goal is to establish our 1T-SRAM technologies as the standard for all large embedded memories in SoC applications. We intend to achieve this goal by licensing our technology on a non-exclusive and worldwide basis to foundries, integrated device manufacturers, fabless semiconductor companies and electronic product manufacturers.

We have extended the coverage of our technologies to smaller memory blocks by offering our 6T-SRAM memory compilers. Utilizing the same low-power benefits built into our 1T-SRAM technologies, our licensees can have a complete range of low-powered embedded memory solutions to meet their demanding SoC requirements.

The following are integral aspects of our strategy.

### *Target Large and Growing Markets*

We target the large and growing market for system-on-a-chip applications. We offer our 1T-SRAM technologies that offer chip designers improved performance in embedded memories thus optimizing the cost and performance of the SoC.

Although our 1T-SRAM technologies are applicable to many markets, we presently focus on the rapidly growing consumer electronics and communications electronics sectors. These sectors increasingly require embedded memory solutions with higher density, lower power consumption, higher speeds and lower cost. We will also focus over the longer term on other markets that are projected to achieve strong, long-term growth.

### *Work Closely with Semiconductor Companies and Foundries to Deliver Optimal Technology Solutions*

We intend to continue to work closely with semiconductor companies to gain broad and detailed insight into their own and their customers' current and next-generation technology requirements. This insight helps us identify trends and focus our development efforts on optimizing our technology solution, resulting in shorter product time to market and lower costs.

We also plan to qualify and license our technology with the leading foundries. Our close relationships with these foundries allow us insight into changing market requirements and access to advance manufacturing processes.

### *Extend our Technology Offerings*

Our goal is to continue to enhance our 1T-SRAM technologies and increase our share of the embedded memory market. We will continue to develop our technology in order to offer even higher-density, lower-power consumption, higher-speed and lower-cost designs for our licensees. As such, we continue to invest heavily in research to develop more advanced memory technologies and since the introduction of 1T-SRAM in 1998, we have introduced and currently offer the following improved versions of the technology:

- 1T-SRAM-R, a version that includes Transparent Error Correction™ (TEC), which automatically corrects memory errors during operation, including soft errors caused by high-energy particles, and eliminates the need for laser repair in manufacturing test. This is accomplished without adding silicon area or cost. Introduced in November 2001, our 1T-SRAM-R has now become the standard version of 1T-SRAM in most of our licensing activities.
- 1T-SRAM-M, a lower power version that is well-suited to particular applications requiring very low operating and standby power, such as cell phone handsets, digital cameras, personal digital assistants and other consumer wireless devices. We introduced our 1T-SRAM-M in April 2001.
- 1T-SRAM-Q, an extended density memory that has twice the density of the original version of our technology and up to four times the density of traditional SRAM. We introduced our 1T-SRAM-Q in December 2002.
- 6T-SRAM-R, a memory compiler built on the same technologies that deliver the quality and low-power advantages offered by our 1T-SRAM technologies for large memories are now incorporated into our 6T-SRAM-R compilers to extend these benefits to small memories, those less than one megabit in size, in customers' chip designs. The compiler, along with our 1T-SRAM technologies, offers semiconductor designers a complete range of embedded memories to meet their demanded SoC requirements.

We have developed new generations of our 1T-SRAM technologies, most recently in the 0.09-micron manufacturing process, and intend to continue to develop our technologies for future process generations.

### *Focus on Higher-Margin Licensing Model*

The licensing of our intellectual property consists of licensing and royalty revenues. These revenue sources produce higher gross margins than can be achieved from the sale of our memory chips. In particular, royalties received from our licensees have no associated cost. Therefore, we will continue to focus on the licensing of our intellectual property as the major source of our future revenue.

### **Licensing and Distribution Strategy**

We offer our technology on a non-exclusive and worldwide basis to semiconductor companies, electronic product manufacturers, foundries, intellectual property companies and design companies through product development, technology licensing and joint marketing relationships.

#### *Licensing*

We license our technology to semiconductor companies who incorporate our technology into integrated circuits that they then sell to their customers. We also license our technology to electronic product manufacturers, who then require their suppliers to adopt our technology. In addition, we engage in joint marketing activities with foundries, intellectual property companies and design companies to promote our technology to a wide base of customers. These distribution channels have broadened the acceptance and availability of our technology in the industry. As our technology becomes available through an increasing number of channels, we believe it will be less likely that customers will have to alter their procurement practices in order to acquire our technology. We intend to continue to expand significantly this base of strategic relationships to further proliferate our technology.

We form product development and licensing relationships directly with semiconductor companies and electronic product manufacturers. Generally, we require the prospective licensee to identify one or more specific projects for the use of our technology. The prospective licensee's implementation of our 1T-SRAM technologies typically includes customized development. Usually, these relationships involve both engineering work to implement our technology in the specified product and licensing the technology for manufacture and sale of the product. Although the precise terms contained in our 1T-SRAM macro development and license agreements

vary, every agreement provides for the payment of contract fees to us at the beginning of the contract and the joint development of specifications and initial product design and engineering. The agreements usually provide for payment of contract fees to us upon the achievement of specified development milestones. The agreements also often provide for the payment of additional contract fees if we provide engineering or manufacturing support services related to the manufacture of the product. Provisions in all of our license agreements require the payment of royalties to us based on the future sale or manufacture of products utilizing our 1T–SRAM technologies. Generally, our licenses grant rights on a nonexclusive, nontransferable basis, limited to the use of our technology as modified for the project covered by the license agreement or amendment. Our license agreements generally have a fixed five–year term and are subject to renewal. Each new project requires a separate agreement or an addendum to modify an existing agreement.

In addition, we also offer our technology to semiconductor companies through 1T–SRAM technology license agreements, under which we grant the licensee the additional right to create and modify 1T–SRAM designs to offer to its own customers. The contract fees associated with these arrangements require the licensee to pay us to port our technology to its manufacturing process and develop a template design that the licensee will be able to use to generate future designs. These agreements also obligate the licensee to pay contract fees to us upon the achievement of specified development milestones and may provide for the payment of additional contract fees if we provide engineering or manufacturing support services. Under these agreements we will be entitled to receive royalties based on the future sale or manufacture of products utilizing our 1T–SRAM technologies. The licenses are nonexclusive and nontransferable and authorize the licensee to modify designs for its customers from the template design that we provide under the agreement. Typically, the template design applies only to a specified manufacturing process generation. The licensee may add future process generations to the license agreement for additional contract fees.

#### *Joint Marketing Arrangement*

We have formed joint marketing relationships with dedicated foundries such as TSMC, UMC and Chartered Semiconductor Manufacturing Corporation. These foundries have cooperated with us to prove the manufacturability of integrated circuits utilizing our 1T–SRAM technologies in their particular manufacturing process. Once manufacturability has been proven, the foundries can then offer their manufacturing services to our licensees, and their integrated circuit device customers can fabricate integrated circuits incorporating our 1T–SRAM technologies.

We also have formed an alliance consisting of design service firms to enable our licensees to more rapidly incorporate 1T–SRAM technologies into their design. This Design Services Alliance (DSA) program is intended to provide our licensees with specialized support as the use of our technology in SoC designs increases. Each DSA member company has been trained to provide our licensees with design expertise and product engineering resources in order to reduce the design cycle time as well as accelerate the ramp to volume production.

#### *Proliferate Technology through a Diverse Distribution Strategy*

We license the 1T–SRAM technologies in the form of customized memory designs, standard memory designs and memory compilers. We also offer technology licenses, which allow our licensee to create our 1T–SRAM designs for its customers, to strategic semiconductor technology providers, in order to achieve a boarder distribution of our technologies. Not all of our technology relationships will result in the manufacture and sale of royalty–bearing products by our licensees, from which we expect to earn most of our revenues in the future. Therefore, to increase the number of royalty–generating license agreements for our 1T–SRAM technologies, an important element of our strategy is to offer these technologies broadly in order to establish it as an industry standard.

We have license agreements with many companies, including Agere Systems, Inc., Agilent Technologies, Analog Devices, Inc., Applied Micro Circuits Corporation, Broadcom Corporation, eSilicon Corporation, Fujitsu Limited, Hitachi, Ltd., Hudson Soft Company Limited, LG Electronics, Inc., LSI Logic Corporation, Marvell Semiconductor, Inc., Matsushita Communication Industrial Co., Ltd., Motorola, Inc., National Semiconductor Corporation, NEC Electronics Corporation, Nintendo, Philips Semiconductors, Inc., Pixelworks, Inc., Pixim, Inc., Sanyo Electric Co., Ltd., SONY Corporation, Stepmind SA, Switchcore AB, TSMC, UMC, Via Technologies, Inc., and Via Networking Technologies, Inc.

#### *Custom Memory Designs*

We offer directly to our licensees customized 1T–SRAM memory designs to meet their specific design parameters. We also offer a variety of options for optimizing the design specification in order to improve performance and cost effectiveness.

### *Standard Macro Designs*

In addition to licensing our customized 1T-SRAM designs, companies also can license standard 1T-SRAM off-the-shelf memory designs from us. These readily available standard memory designs can assist the licensee in getting its SoC quickly to market.

### *Memory Compilers*

In December 2002, we announced our first 1T-SRAM compiler for 0.15-micron standard logic processes available for the leading foundries. We offer licenses to use these compilers, which will enable our customers to automatically generate and configure memory designs utilizing our technologies directly from our website. The memory designs produced from our compilers are intended for applications requiring smaller sizes of embedded memory.

In January 2004, we introduced our 6T-SRAM-R memory compilers to offer our customers a low power alternative to traditional embedded six-transistor SRAM in applications requiring smaller memory sizes. We plan to offer future compiler products on advanced generations of manufacturing processes.

Our compilers are offered on a per use basis or under an unlimited use license for fees ranging from ten of thousands of dollars to several hundred thousands of dollars. As with all of our technologies, the licensee is obligated to pay us royalties for products manufactured or sold utilizing our technologies.

### *Technology Licenses*

We have licensed our technologies to the leading foundries; TSMC and UMC. Increasingly, these foundries are now providing design services and third-party intellectual property directly to their customers. Under our technology license agreements, both TSMC and UMC have acquired a right to offer as part of their design services, 1T-SRAM designs that they create for their customers. Our license agreements with TSMC and UMC require them to pay us licensing and development fees, as well as royalties on silicon wafers manufactured by these foundries that incorporate our licensed technology and a percentage of the design fees that they charged for delivering our technology.

We also offer and have licensed our technologies to leading integrated device manufacturers or, IDMs, under technology license agreements. Under our technology license agreement with Fujitsu Limited, which is our first IDM technology licensee, we have granted Fujitsu a worldwide non-exclusive, non-transferable right to offer its own implementation of our 1T-SRAM technologies directly to its customers along with its own design and manufacturing services. Fujitsu has agreed to pay us a license fee for our services in porting our 1T-SRAM technologies to Fujitsu's manufacturing process. Fujitsu also is obligated to pay us fees for technical support for the first year, and for each additional year thereafter if it requests such support. Further, we will be entitled to receive royalties on all integrated circuits incorporating our licensed technologies that are sold by Fujitsu and its subsidiaries.

### *Product Sales*

SRAM memory chips satisfy a market demand for high-speed memory chips used to store data in electronic products. There are several large companies that have chosen to manufacture SRAM chips using traditional technology. Like our 1T-SRAM embedded memory technology, our 1T-SRAM chips have small memory cell circuitry, requiring low power consumption and operating at high speeds, which makes them a cost effective memory chip solution for networking and data communication applications, such as routers, switches and network processors.

Such data communications applications typically require memory chips in industry standard sizes and speeds. The memory size of a chip indicates the number of memory storage bits on the chip and its speed reflects the rate at which a processing system can access the memory.

In order to appeal to manufacturers of wired data communications applications, we currently sell memory chips with memory size, speed and configuration specifications consistent with those offered by most memory chip suppliers. We sell these memory chips primarily to suppliers of previous generations of communications equipment, such as Delta Network and Electronics, Flextronics, Maxtek Technology, MCM Japan, and Motorola. As the demand for this equipment has diminished, our sales of 1T-SRAM memory chips have declined substantially. Because we lack manufacturing resources and other guaranteed sources of supply for 1T-SRAM memory chips, we intend to allocate most of our engineering resources to the development of 1T-SRAM technologies in support of our licensing business, instead of rebuilding our product sales business. Therefore, we anticipate a continued decline in our product sales volume.

## Technology

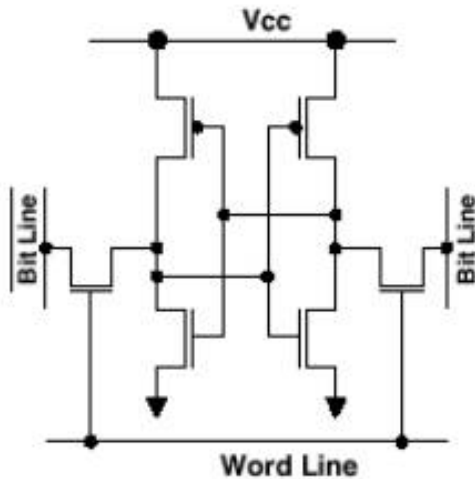
Our innovative 1T-SRAM technologies include many new and proprietary features. Development of our memory chips during the early years of our existence was critical to validating elements of the 1T-SRAM technologies we license today. These technologies combine the high-density advantages of DRAM with the high performance and utility of SRAM. Underlying this technology are several distinct pieces of our proprietary technology.

### Single-Transistor Memory Storage Cell

The high density of our 1T-SRAM technologies stems from the use of a single-transistor, or 1T, which is similar to DRAM, with a storage cell for each bit of information. Our 1T storage cell using one transistor and one capacitor represents a very significant improvement in density over the six-transistor storage cells used by traditional SRAM.

The following diagrams, drawn to scale, but not to actual size, are electrical schematics of the traditional SRAM storage cell and our 1T-SRAM storage cell. The comparison of the two diagrams illustrates the small size and reduced complexity of the 1T-SRAM storage cell. This results in significant cost savings because less silicon space is required by 1T-SRAM storage cells.

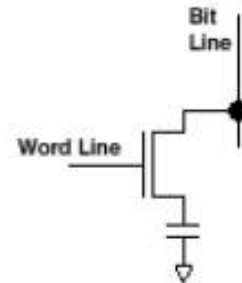
### Six Transistor SRAM Storage Cell Schematic



Six Transistor Storage Cell Area



### 1T-SRAM Storage Cell Schematic



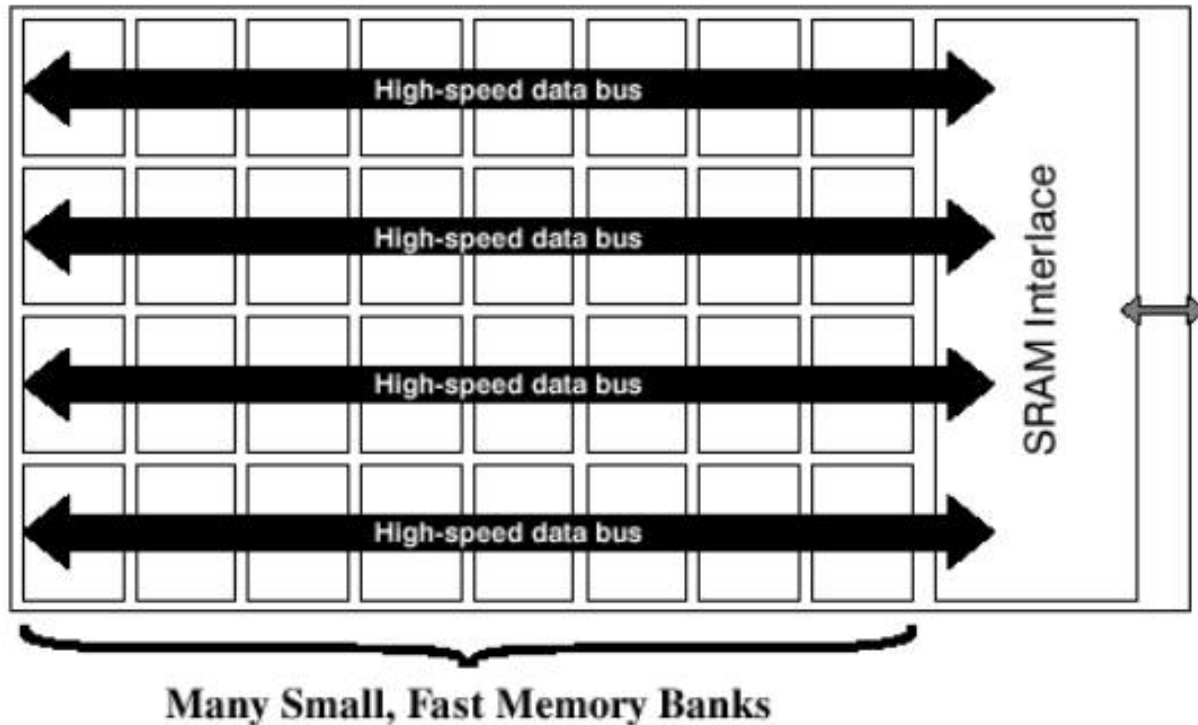
1T-SRAM Storage Cell Area



### MultiBank Technology

The high speed and low power consumption of 1T-SRAM are enabled by our MultiBank technology, as illustrated above. This technology efficiently partitions the memory into many, typically hundreds, of fast, small sub-blocks of memory, or banks, that can operate independently over high-speed data buses. Only one small bank containing the required memory data must be active for each access to the memory. Therefore, the remaining banks can stay in a low-power, standby mode, reducing the overall power consumption of the memory.

## MultiBank Technology



### *Pipelined Self-timed Access*

The easy to use standard SRAM interface of 1T-SRAM technologies is enabled by our innovative and proprietary circuit designs, generating all the necessary dynamic memory array operation timing signals transparently to user's application.

### *Refresh Management Circuitry*

Refresh operations required to ensure data is maintained to a minimum level in dynamic cells may be performed transparently to a user's application, allowing designers to fully disregard to any of the traditional requirements of dynamic cell arrays.

### *Leakage Suppression Circuitry*

Our unique patented architecture, circuits and proprietary design techniques that manage process leakage allow MoSys' 1T-SRAM technologies to be manufactured on any CMOS process, including generic ASIC processes, thus removing the need for complicated embedded memory process development.

### *Transparent Error Correction (TEC)*

We offer our 1T-SRAM technologies with TEC for higher reliability and quality. TEC automatically corrects memory errors during operation, including soft errors caused by high-energy particles, and eliminates the need for laser repair in manufacturing test. This is accomplished without adding any additional silicon area or cost. TEC is also incorporated into our 6T-SRAM-R memory compilers extending the same benefits provided in our 1T-SRAM technologies to the small memory block requirements in customers' chip designs.

### *Folded Area Capacitor (FAC)*

Using an innovative capacitor technology called Folded Area Capacitor (FAC), we can provide our licensees with a very high-density memory solution. Requiring only one additional non-critical mask during the manufacturing process, utilizing our Folded Area Capacitor, our 1T-SRAM-Q can achieve densities up to four times that of traditional SRAM and twice the density of the original version of our technology.

### *Advanced Manufacturing Processes*

We continue to implement our 1T-SRAM technologies on advanced generations of manufacturing processes. As a result, our licensees are able to implement integrated circuits incorporating 1T-SRAM embedded memories on the highest performance





manufacturing processes available. The chart below illustrates the advances we have made in implementing and verifying 1T-SRAM technologies on the latest generations of manufacturing processes. The processes with the smaller micron dimensions have higher random access speeds and typically enable larger capacity memories.

<b>Process Generation</b>	<b>0.18-micron</b>	<b>0.15-micron</b>	<b>0.13-micron</b>	<b>0.09-micron</b>
Date of 1T-SRAM Verification	January 2000	May 2000	April 2001	January 2003
Typical Memory	1-32	1-48	1-64	1-64
Capacity	megabits	megabits	megabits	megabits
Random Access Speed	100-350 MHz	100-400 MHz	100-450 MHz	100-450 MHz

## Research and Development

Our ability to compete in the future will depend on improving our technology to meet the market's increasing demand for higher performance and lower cost requirements. We have assembled a team of highly skilled engineers whose activities are focused on developing even higher-density, lower-power consumption, higher-speed and lower-cost 1T-SRAM designs. We expect to continue to focus our research and development efforts on extending our 1T-SRAM technologies and developing new memory technologies. We also intend to continue our focus on porting our technology to additional semiconductor manufacturing facilities and scaling our technology to new generations of manufacturing process technologies.

As of December 31, 2003, we employed 67 engineers, representing 73% of our employees, with specific expertise in circuit design, layout and a variety of manufacturing processes. In June 2001, we established a design center in Seoul, South Korea where nine of our engineers reside. In August 30, 2002, we completed our acquisition of ATMOS Corporation where we currently employ 18 engineers in our research and development group. For the years ended December 31, 2003, 2002 and 2001, research and development expenditures totaled approximately \$8.6 million, \$6.6 million and \$4.4 million, respectively.

## Sales and Marketing

### *Licensing*

As of December 31, 2003, we had a staff of nine sales and marketing executives managing our technology licensing activities. One is located in Sophia-Antipolis, France and is responsible for licensing activities in Europe and the Middle East. Another is located in Tokyo, Japan and is responsible for licensing activities in Japan. This group manages the negotiation of license agreements, provides technical support during the sales cycle to licensees and administers the contracts. As we have multiple sales channels through our relationships with semiconductor companies, foundries, intellectual property companies and design companies, we do not believe that we require a large internal sales force. Our marketing and promotional activities include participation in industry trade shows, distribution of collateral marketing material, publication of articles in trade journals and publicizing our licensing activities and technology achievements. We also provide presentations and working sessions with the senior technical and business staff of prospective customers.

### *Memory Chips*

A portion of our sales and marketing group is also responsible for sales and marketing of our memory chips. Their marketing activities include the creation of marketing materials and articles for trade publications. We also use 19 independent sales representatives throughout North America, Europe and Asia to promote our memory chips to their customers.

## Intellectual Property

We regard our patents, copyrights, trademarks, trade secrets and similar intellectual property as critical to our success, and rely on a combination of patent, trademark, copyright, and trade secret laws to protect our proprietary rights. As of December 31, 2003, we held 64 U.S. patents on various aspects of our technology, with expiration dates ranging from 2011 to 2023. These 64 patents include claims relating to multibank partitioning, 1T-SRAM internal operation and circuit techniques, high-speed operation techniques, 1T-SRAM refresh management techniques and the interface of embedded 1T-SRAM storage cells in logic processes. We currently have 15 pending U.S. patent applications, and have received notices of allowance with respect to five of these applications. We also hold 36 foreign patents with expiration dates ranging from 2011 to 2022, and we have 26 pending foreign patent applications. There can be no assurance that others will not independently develop similar or competing technology or design around any patents that may be issued to us, or that we will be able to enforce our patents against infringement.

The semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. While



we have not received formal notice of any infringement of the rights of any third party, questions of infringement in the semiconductor field involve highly technical and subjective analyses. Litigation may be necessary in the future to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity, and there can be no assurance that we would prevail in any future litigation. Any such litigation, whether or not determined in our favor or settled by us, would be costly and would divert the efforts and attention of our management and technical personnel from normal business operations, which would have a material adverse effect on our business, financial condition and results of operations. Adverse determinations in litigation could result in the loss of our proprietary rights, subject us to significant liabilities, require us to seek licenses from third parties or prevent us from licensing our technology, any of which could have a material adverse effect on our business, financial condition and results of operations. Moreover, the laws of certain foreign countries in which our technology is or may in the future be licensed may not protect our intellectual property rights to the same extent as the laws of the United States, thus increasing the possibility of infringement of our intellectual property.

## Competition

In order to remain competitive, we believe we must continue to provide higher-density, lower-power-consumption, higher-speed and lower-cost technology solutions to the semiconductor industry and electronic product manufacturers. We believe that the principal competitive factors in our industry are—

- density and cost;
- power consumption;
- speed;
- portability to different manufacturing processes;
- scalability to different manufacturing process generations;
- reliability and low manufacturing costs;
- interface requirements; and
- the ease with which technology can be customized for and incorporated into customers' products.

We believe that our 1T-SRAM technologies offer a high degree of overall performance improvement over traditional SRAM. In addition, we have added our 6T-SRAM-R memory compilers which incorporate many of the features built into our 1T-SRAM technologies to deliver a higher standard of quality, combined with a much lower power requirement than other existing traditional SRAM embedded memory. Semiconductor companies may satisfy their embedded memory needs through traditional SRAM and embedded DRAM. Traditional SRAM relies on publicly available process technology and circuit designs, which semiconductor companies can build internally or acquire through a license from a third party provider, without paying a royalty to us. Companies providing traditional SRAM embedded memories include Artisan Components and Virage Logic, who license their memories through the sale of compilers. Embedded DRAM is primarily offered by current or former DRAM suppliers, who utilize their own manufacturing process to compete in the semiconductor foundry business. Suppliers of embedded DRAM include substantial competitors such as Toshiba Ltd. and IBM, among others. Although each of these two embedded DRAM suppliers has experienced some success in obtaining new customers for its technology, we believe that many semiconductor companies using embedded memory may prefer to license our technology instead of implementing either of these alternatives because of 1T-SRAM's overall advantages.

Not all embedded memory applications benefit sufficiently from technological advantages offered by our 1T-SRAM technologies to justify the increased cost to the licensee, however. Our licensees and prospective licensees can meet their current needs for embedded memory using other memory solutions with different cost and performance parameters. For example, our technologies are not suitable for replacing lower-cost traditional DRAM memory chips if higher access speed is unnecessary. In addition, alternative solutions may be more cost-effective for memory block sizes of less than 1 megabit, or applications in which the embedded memory portion is less than 20% of the total chip area. To provide a technology offering for these uses, however, in January 2004 we introduced our 6T-SRAM-R memory compilers which incorporate the same quality and low-power advantages available in our 1T-SRAM technologies and extend these benefits to the small memories in customers' chip designs

Moreover, some companies assess greater uncertainty and risk in relying on our newly established 1T-SRAM technologies. As a result, our ability to compete effectively may be limited because such companies may prefer to use more established traditional memory solutions that are freely available without a license.

Customers for our 1T-SRAM memory chips can choose to purchase SRAM memory chips from a number of companies, including Cypress Semiconductor Corporation, Integrated Device Technology, Inc. and Samsung Corporation. These suppliers utilize traditional architecture and technology for their SRAM chips, which do not match the performance, low power and cost effectiveness of our 1T-SRAM memory chips for the applications needed by our current customers for these chips. However, these suppliers do have the advantage of supplying memory chips from their own wafer manufacturing plants and typically offer a broad range of memory products that includes devices other than SRAM memory chips. In addition, these companies have greater access to financial, technical and other resources than we possess and are able to compete more effectively for most of the SRAM business.

## **Manufacturing**

We have designed the circuitry of our 1T-SRAM technologies so that our licensees can manufacture it in standard logic process, as well as other widely used embedded memory processes.

For our stand-alone memory products, we implement a fabless manufacturing strategy by using relationships with independent foundries. Today, we rely exclusively upon TSMC for our stand-alone product manufacturing. We also use domestic and offshore subcontractors for assembly, testing and packaging. Assembly and test services provided by these subcontractors comply with the requirements of ISO-9000. We presently have no firm, written commitment with any semiconductor foundry for the fabrication of our memory chips. All fabrication is conducted on a purchase-order basis at an agreed price that is renegotiated from time to time.

## **Employees**

As of December 31, 2003, we had 92 full-time employees, consisting of 67 in research and development and engineering, 13 in sales and marketing, 11 in finance and administration and one in operations. We believe our future success will depend, in part, on our ability to continue to attract and retain qualified technical and management personnel, particularly highly skilled design engineers involved in new product development, for whom competition is intense. Our employees are not represented by any collective bargaining unit, and we have not experienced any work stoppage. We believe that our employee relations are good.

## **Recent Development**

On February 23, 2004, Synopsys, Inc., or Synopsys, Mountain Acquisition Sub, Inc., a wholly owned subsidiary of Synopsys, or, Acquisition Sub, and we, entered into a definitive agreement and plan of merger and reorganization, or reorganization agreement, which contemplates the acquisition by Synopsys, through Acquisition Sub, of all of our outstanding common stock in a two-step transaction comprised of a combination cash and stock exchange offer for all of the issued and outstanding shares of our common stock for consideration valued at an aggregate of \$13.50 per share, followed by our merger with Acquisition Sub. In the offer, each share of our common stock validly tendered (and not withdrawn) would be converted into a combination of \$6.75 in cash and a fraction of a share of Synopsys common stock having a value of \$6.75 based on a formula set forth in the reorganization agreement. Synopsys has the right, at any time through the date two business days prior to the expiration date of the offer (as it may be extended from time to time), to convert the offer into an all-cash tender offer, in which case each share of our common stock would be converted into \$13.50 in cash.

The reorganization agreement provides that Acquisition Sub will commence the offer as promptly as reasonably practicable after February 23, 2004. The obligation of Acquisition Sub to accept for exchange and deliver consideration for shares of our common stock validly tendered in the offer (and not withdrawn) is subject to usual and customary conditions pertaining to regulatory events, the absence of a court order barring the Merger and the related transactions and the absence of material litigation or other events giving rise to termination of the reorganization agreement, as well as the following specific conditions:

- there shall be validly tendered (and not withdrawn) a number of shares of our common stock that, together with any shares that Synopsys or Acquisition Sub already owns, represents 50% of the sum of the aggregate number of shares of our common stock issued and outstanding immediately prior to the acceptance of shares of the common stock pursuant to the offer, plus the aggregate number of shares of our common stock that can be issued upon the exercise of all vested options, warrants and other rights to acquire our common stock that are outstanding immediately prior to the acceptance of shares of our common stock pursuant to the offer (the "Minimum Condition");
- that Fu-Chieh Hsu and Wing-Yu Leung continue to be employed by the Issuer;
- no more than 25% of the engineers employed by us who have received offers of at-will employment from Synopsys or Acquisition Sub, on terms no less favorable than the terms of their employment with us on the date of the reorganization agreement, shall cease to be employed by us;
- there is no legal proceeding threatened or pending to which a governmental body is or is threatened to become a party challenging or seeking to restrain or prohibit the acquisition of or delivery of consideration in exchange for shares of common stock or seeking to prohibit or limit Synopsys' ownership rights with respect to our common stock acquired through the offer;
- the shares of Synopsys common stock to be issued



in the merger (if the All-Cash Election is not made) have been approved for listing on the NASDAQ National Market; and

- that Fu-Chieh Hsu and Wing-Yu Leung have executed noncompetition agreements and delivered them to Synopsys.

The offer will initially be scheduled to expire 20 business days following the commencement of the offer. At the election of Acquisition Sub or us, prior to such expiration, if the Minimum Condition is not met, the offer period may be extended for additional periods of 20 business days, but in no case are such extensions to continue beyond July 31, 2004.

If Acquisition Sub acquires at least a majority of our outstanding common stock pursuant to the offer, the reorganization agreement provides that Synopsys will be entitled to designate a number of directors to our board of directors sufficient to give Acquisition Sub a proportionate representation on the board (“Acquisition Sub’s Proportionate Representation”) equal to that number of directors (rounded up to the next whole number) that equals the product of the total number of directors on the board multiplied by the percentage that the aggregate number of shares of our common stock beneficially owned by Synopsys or Acquisition Sub bears to the total number of shares of our common stock issued and outstanding. Upon request by Acquisition Sub, we will increase the size of the board or secure the resignations of the number of directors necessary to provide Acquisition Sub with Acquisition Sub’s Proportionate Representation and will cause Synopsys’ designees to be so elected or appointed; provided, however, that until the merger, the board will have at least two directors who were our directors as of the date of signing of the reorganization agreement (or failing the availability of one or both of such directors, a designee of the other such director or the Board).

Following the election or appointment of Synopsys’ designees and until the effective time of the reorganization agreement, approval of a majority of the continuing directors who were our directors as of the date of signing the reorganization agreement shall be required for (a) the amendment or waiver of the reorganization agreement on behalf of the Company or the certificate or bylaws of the Company; (b) any termination of the reorganization agreement by the Company; (c) any extension affecting the performance of any obligations or acts by Synopsys or Acquisition Sub; or (d) any other consent or action by the board with respect to the reorganization agreement.

The reorganization agreement prohibits us from declaring, setting aside for payment or paying any dividend, or making any other distribution in respect of any shares of its common stock or otherwise making any payments to its stockholders in their capacity as such.

If adoption of the merger by a vote of our stockholders is required by applicable law, under the terms of the reorganization agreement, we will take all necessary actions to comply with such applicable law.

If the requirements of the offer are fulfilled, including the Minimum Condition, and if Synopsys so elects, then

- Upon consummation of the merger, our common stock will cease to be quoted on any quotation system or exchange.
- Upon consummation of the merger, our common stock will become eligible for termination of registration pursuant to Section 12(g)(4) of the Exchange Act.

Concurrently with the execution of the reorganization agreement, Fu-Chieh Hsu, Wingyu Leung, Carl Berg, who are members of our board of directors, and Clyde J. Berg, Trustee of the 1981 Kara Ann Berg Trust, who together represent approximately 29% of our outstanding stock, entered into a separate stockholder agreement with Synopsys. Each of them has agreed to tender (and not to withdraw his tender) the shares of common stock that he beneficially owns into the offer. Each stockholder agreement also provides that prior to the tender of his shares of common stock pursuant to the offer, each such stockholder is obligated to vote the shares of common stock beneficially owned by him

- in favor of the merger, the adoption of the reorganization agreement and the approval of the terms thereof and the transactions contemplated therein;
- against any action or agreement that would result in a breach in any material respect of any covenant or any other obligation or agreement of ours under the reorganization agreement or in a breach in any material respect of any representation or warranty of ours in the reorganization agreement;
- against any amendment of our certificate of incorporation and by-laws or any other action or agreement that is intended or could reasonably be expected to impede, interfere with, delay, postpone or discourage the offer or the merger or change in any manner the voting rights of our common stock. Pursuant to each stockholder agreement, each such stockholder has granted an irrevocable proxy to Synopsys to vote his shares of common stock on the matters listed above, which will expire on the earlier of the date upon which the reorganization agreement is terminated in accordance with its provisions, and the date upon which the merger becomes effective. Each stockholder retains the power to vote his shares of common stock on all other matters.

The stockholder agreements automatically terminate upon consummation of the merger, upon any amendment to the reorganization agreement without our consent that decreases the per share merger consideration or upon termination of the reorganization agreement in accordance with its terms. The reorganization agreement may be terminated by—

- mutual consent of Synopsys and us;
- either Synopsys or us if a court or governmental body issues an order permanently enjoining or making illegal the merger;
- either Synopsys or us if the offer expires without Synopsys having accepted any shares of our common stock or if the offer shall not have been accepted by July 31, 2004;
- Synopsys if our board retracts its recommendation of the transaction;
- us to accept an unsolicited, bona fide written offer by a third party to purchase all of the outstanding shares of our common stock, after the board of directors determines, consistent with its obligations under the reorganization agreement and its fiduciary duties, that such third party offer is more favorable to our stockholders than the Synopsys offer, after providing Synopsys with an opportunity to amend the offer or enter into an

alternative transaction with the Issuer and then after paying a termination fee to Synopsys of \$10 million;

- Synopsys if our representations and warranties are materially inaccurate, such that there has been a material adverse effect on the Issuer, or any of our covenants shall have been materially breached, after we have had an opportunity to cure such breach or inaccuracy, and after paying the Issuer a termination fee of \$10 million;
- us if any of Synopsys' representations and warranties are materially inaccurate or if its covenants are materially breached, which causes a material adverse effect on Synopsys' ability to consummate the merger, and after Synopsys has had an opportunity to cure such breach or inaccuracy; or
- Synopsys if a material adverse effect shall have occurred or is reasonably likely to occur with respect to us, and after paying us a termination fee of \$10 million.

During the term of each stockholder agreement, the participating stockholder has agreed, except as otherwise contemplated by the stockholder agreement, not to grant any proxies relating to, or sell, transfer, give, pledge, encumber, assign or otherwise dispose of any shares of common stock. Any additional shares of common stock acquired by such stockholder during the term of the reorganization agreement also will be subject to the stockholder agreement.

We and our board of directors believe that the combination with Synopsys will significantly enhance our ability to realize our strategic goals. With the greater engineering, sales and financial resources possessed by Synopsys, and its substantial distribution channels, we believe we will be able to more rapidly proliferate our 1T-SRAM technologies, increase the volume of our licensing activities, increase the number of design projects that we can manage, innovate more quickly, penetrate more accounts and substantially increase revenue from our intellectual property licensing activities.

## **Risk Factors**

*If any of the following risks actually occur, our business, results of operations and financial condition could suffer significantly.*

### **Our success depends upon the semiconductor market's acceptance of our 1T-SRAM technologies.**

The future prospects of our business depend on the acceptance by our target markets of our 1T-SRAM technologies for embedded memory applications and any future technology we might develop. Our technology is intended to allow our licensees to develop embedded memory integrated circuits to replace other embedded memory technology with different cost and performance parameters. Our 1T-SRAM technologies utilize fundamentally different internal circuitry that is not widely known in the semiconductor industry. Therefore, one of our principal challenges, which we might fail to meet, is to convince a substantial percentage of SOC designers to adopt our technology instead of other memory solutions which have proven effective in their products.

An important part of our strategy to gain market acceptance is to penetrate new markets by targeting market leaders as licensees of our technology. This strategy is designed to encourage other participants in those markets to follow these leaders in adopting our technology. Should a high-profile industry participant adopt our technology for one or more of its products but fail to achieve success with those products, other industry participants' perception of our technology could be harmed. Any such event could reduce the number of future licenses of our technology. Likewise, were a market leader to adopt and achieve success with a competing technology, our reputation and licensing program could be harmed.

Our embedded memory technology might not integrate as well as anticipated with other semiconductor functions in all intended applications, which would slow or prevent adoption of our technology and reduce our revenue. Detailed aspects of our technology could cause unforeseen problems in the efficient integration of our technology with other functions of particular integrated circuits. Any significant compatibility problems with our technology could reduce the attractiveness of our solution, impede its acceptance in the industry and result in a decrease in demand for our technology.

### **Our lengthy licensing cycle and our licensees' lengthy product development cycles make the operating results of our licensing business difficult to predict.**

We anticipate difficulty in accurately predicting the timing and amounts of revenue generated from licensing our 1T-SRAM technologies. The establishment of a business relationship with a potential licensee is a lengthy process, generally taking from three to nine months, and sometimes longer. Following the establishment of the relationship, the negotiation of licensing terms can be time-consuming, and a potential licensee may require an extended evaluation and testing period.

Once a license agreement has been executed, the timing and amount of licensing and royalty revenue from our licensing business will remain difficult to predict. The completion of the licensees' development projects and the commencement of production will be subject to the licensees' efforts, development risks and other factors outside our control. Our royalty revenue may depend on such factors as success of the licensees' project, the licensees' production and shipment volumes, the timing of product shipments and when the licensees report to us the manufacture or sale of products that include our 1T-SRAM technologies. All of these factors will prevent us from making predictions of revenue with any certainty and could cause us to experience substantial period-to-period





fluctuations in operating results.

None of our licensees are under any obligation to incorporate our technology in any present or future product or to pursue the manufacture or sale of any product incorporating our technology. A licensee's decision to complete a project or manufacture a product is subject to changing economic, marketing or strategic factors. The long development cycle of our licensees' products increases the risk that these factors will cause the licensee to change its plans. In the past, some of our licensees have discontinued development of products incorporating our technology. These customers' decisions were based on factors unrelated to our technology, but, as a result, it is unlikely that we will receive royalties in connection with those products. We expect that occasionally our licensees will discontinue a product line or cancel a product introduction, which could adversely affect our future operating results and business.

**If the market for system-on-a-chip integrated circuits does not expand, our business may suffer.**

Our ability to achieve sustained revenue growth and profitability in the future will depend on the continued development of the market for SoC integrated circuits. SoC integrated circuits are characterized by rapid technological change and competition from an increasing number of alternate design strategies such as combining multiple integrated circuits to create a system-on-a-package. We cannot be certain that the market for SoC integrated circuits will continue to develop or grow at a rate sufficient to support our business. If the market fails to grow or develops slower than expected, our business may suffer.

**The semiconductor industry is cyclical in nature and subject to periodic downturns, which can negatively affect our revenue.**

The semiconductor industry is cyclical and has experienced a pronounced downturn over the past few years. To respond to this downturn, many semiconductor manufacturers and their customer have slowed their research and development activities, canceled or delayed new product developments, reduced their workforces and inventories and taken a cautious approach to acquiring new equipment and technologies. As a result, our business has been adversely affected in 2003, and we believe that a continued downturn could negatively impact our future revenue and profitability. In the future, the cyclical nature of the semiconductor industry may cause our operating results to fluctuate significantly from year-to-year, which also may tend to increase the volatility of the price of our common stock.

**We might be unable to deliver our customized memory technology in the time frame demanded by our licensees, which could damage our reputation, harm our ability to attract future licensees and impact operating results.**

The majority of our licenses require us to customize our 1T-SRAM technologies within a certain delivery timetable. Not all of the factors relating to this customization are within our control. There might be factors outside our control that could influence our ability to meet the time requirements under these licenses. Any failure to meet significant license milestones could damage our reputation in the industry, harm our ability to attract new licensees, preclude our receipt of licensing fees and negatively impact our operating results.

Generating and recognizing licensing revenue under these contracts depends on our ability to successfully meet milestones for delivery of 1T-SRAM designs and services. We may fail to meet a delivery date or performance criterion, thereby resulting in a delay in revenue recognition or loss of anticipated revenue.

**Our business model relies on royalties as a key component in the licensing of our technologies, and if we fail to realize expected royalties our operating results will suffer.**

We believe that our long-term success is substantially dependent on the receipt of future royalties. Royalty payments owed to us are calculated based on factors such as our licensees' selling prices, wafer production, and other variables as provided in each license agreement. The amount of royalties we will receive depends on the licensees' business success, production volumes and other factors beyond our control. This exposes our business model to risks that we cannot minimize directly and may result in significant fluctuations in our royalty revenue and operating results from quarter-to-quarter. We recognize royalty revenue in the quarter in which we receive a royalty report from our licensee. As a result, our recognition of royalty revenue typically lags behind the quarter in which the related integrated circuit is manufactured or sold by our licensee by at least one quarter. We cannot be certain that our business strategy will be successful in expanding the number of licensees, nor can we be certain that we will receive significant royalty revenue in the future.

**We expect our revenue to be highly concentrated among a small number of licensees and customers, and our results of operations could be harmed if we lose and fail to replace this revenue.**

Our royalty revenue has been highly concentrated among a few licensees, and we expect this trend to continue for the foreseeable future. In particular, a substantial portion of our licensing and royalty revenue in 2003, 2002 and 2001 has come from the licenses for integrated circuits used by Nintendo in its GAMECUBE®. Gamecube-related revenue represented 13%, 44% and 23% of total revenue in 2003, 2002 and 2001, respectively. Moreover, Nintendo faces intense competitive pressure in the video game market, which is characterized by extreme volatility, costly new product introductions and rapidly shifting consumer preferences. Nintendo has publicly announced that sales of Gamecube units to date have been significantly less than its expectations when it launched this video



game console. We cannot assure you that Nintendo's sales of product incorporating our technology will increase beyond prior or current levels.

Furthermore, our overall revenue has been highly concentrated, with a few customers accounting for a significant percentage of our total revenue. For the year ended December 31, 2003, our three largest customers, SONY, NEC and UMC represented 17%, 14%, and 11% of total revenue, respectively. For the year ended December 31, 2002, our two largest customers, NEC and UMC represented 38% and 12% of total revenue, respectively. For the year ended December 31, 2001, our two largest customers, Cisco Systems and NEC represented 22% and 19% of total revenue, respectively. We expect that a relatively small number of licensees will continue to account for a substantial portion of our revenue for the foreseeable future.

As a result of this revenue concentration, our results of operations could be impaired by the decision of a single key licensee or customer to cease using our technology or products or by a decline in the number of products that incorporate our technology that are sold by a single licensee or customer or by a small group of licensees or customers.

**Our revenue concentration may also pose credit risks, which could negatively affect our cash flow and financial condition.**

We might also face credit risks associated with the concentration of our revenue among a small number of licensees and customers. As of December 31, 2003, five customers represented 72% of total trade receivables. As of December 31, 2002, three customers represented 85% of total trade receivables. Our failure to collect receivables from any customer that represents a large percentage of receivables on a timely basis, or at all, could adversely affect our cash flow or results of operations and might cause our stock price to fall.

**Anything that negatively affects the businesses of our licensees could negatively impact our revenue.**

The timing and level of our royalties depend on our licensees' ability to market, produce and ship products incorporating our technology. Because we expect licensing and royalty revenue to be the largest source of our future revenue, anything that negatively affects a significant licensee or group of licensees could negatively affect our results of operations and financial condition. Many issues beyond our control influence the success of our licensees, including, for example, the highly competitive environment in which they operate, the strength of the markets for their products, their engineering capabilities and their financial and other resources.

Likewise, we have no control over the product development, pricing and marketing strategies of our licensees, which directly affect sales of their products and the corresponding royalties payable to us. A decline in sales of our licensees' royalty-generating products for any reason would reduce our royalty revenue. In addition, seasonal and other fluctuations in demand for our licensees' products could cause our operating results to fluctuate, which could cause our stock price to fall.

**Our embedded memory technology is new and the occurrence of manufacturing difficulties, or low production yields could hinder market acceptance of our technology and reduce future revenue.**

Complex technology like ours may contain errors or defects when first incorporated into customer products. For example, semiconductor manufacturing yield could be adversely affected by difficulties in adapting our 1T-SRAM technologies to our licensees' product design or to the manufacturing process technology of a particular foundry or semiconductor manufacturer. Any decrease in manufacturing yields of integrated circuits utilizing our technology could impede the acceptance of our technology in the industry. The discovery of defects or problems regarding the reliability, quality or compatibility of our technology could require significant expenditures and resources to fix, significantly delay or hinder market acceptance of our technology, reduce anticipated revenues and damage our reputation.

**Our failure to continue to enhance our technology or develop new technology on a timely basis could diminish our ability to attract and retain licensees and product customers.**

The existing and potential markets for memory products and technology are characterized by ever increasing performance requirements, evolving industry standards, rapid technological change and product obsolescence. These characteristics lead to frequent new product and technology introductions and enhancements, shorter product life cycles and changes in consumer demands. In order to attain and maintain a significant position in the market, we will need to continue to enhance our technology in anticipation of these market trends.

In addition, the semiconductor industry might adopt or develop a completely different approach to utilizing memory for many applications, which could render our existing technology unmarketable or obsolete. We might not be able to successfully develop new technology, or adapt our existing technology, to comply with these innovative standards.

Our future performance depends on a number of factors, including our ability to—

- identify target markets and relevant emerging technological trends, including new standards and protocols;

- develop and maintain competitive technology by improving performance and adding innovative features that differentiate our technology from alternative technologies;
- enable the incorporation of enhanced technology in our licensees' and customers' products on a timely basis and at competitive prices; and
- respond effectively to new technological developments or new product introductions by others.

Since its introduction in 1998, we have introduced enhancements to our 1T–SRAM technology designed to meet market requirements. However, we cannot assure you that the design and introduction schedules of any additions and enhancements to our existing and future technology will be met, that this technology will achieve market acceptance or that we will be able to license this technology on terms that are favorable to us. Our failure to develop future technology that achieves market acceptance could harm our competitive position and impede our future growth.

**Our quarterly revenues may fluctuate significantly and as a result we cannot provide assurance of our future profitability.**

Our quarterly revenues have fluctuated in the past, and may in the future as a result of many factors, some of which are beyond our control. These factors would include the following:

- the length of our sales cycle;
- deferred spending decisions by customers;
- the cyclical nature of the semiconductor industry and the general economic environment;
- the timing and completion of milestones under license agreements; and
- changes in the demand for integrated circuits that incorporate our technology.

We believe that period–to–period comparisons of our revenues and operating results are not necessarily meaningful and these comparisons are not indicators of future performance. We intend to continue our investment in research and development as well as in the marketing and licensing of our technology in an effort to maximize future results. If revenue falls below our expectations in any quarter and we are not able to adjust spending in a timely manner, we may incur an operation loss. As a result, we cannot assure you that we will be profitable on a quarterly or annual basis in the future.

**We rely on semiconductor foundries to assist us in attracting potential licensees, and a loss or failure of these relationships could inhibit our growth and reduce our revenue.**

Part of our marketing strategy relies upon our relationships and agreements with semiconductor foundries. These foundries have existing relationships, and continually seek new relationships, with companies in the markets we target, and have agreed to utilize these relationships to introduce our technology to potential licensees. If we fail to maintain our current relationships with these foundries, we might fail to achieve anticipated growth.

**Royalty amounts owed to us might be difficult to verify, and we might find it difficult, expensive and time–consuming to enforce our license agreements.**

The standard terms of our license agreements require our licensees to document the manufacture and sale of products that incorporate our technology and report this data to us after the end of each quarter. Though our standard license terms give us the right to audit the books and records of any licensee to attempt to verify the information provided to us in these reports, an audit of a licensee's records can be expensive and time consuming, and potentially detrimental to the business relationship. A failure to fully enforce the royalty provisions of our license agreements could cause our revenue to decrease and impede our ability to maintain profitability.

**We might not be able to protect and enforce our intellectual property rights, which could impair our ability to compete and reduce the value of our technology.**

Our technology is complex and is intended for use in complicated integrated circuits. A very large number of new and existing products utilize embedded memory, and a large number of companies manufacture and market these products. Because of these factors, policing the unauthorized use of our intellectual property is difficult and expensive. We cannot be certain that we will be able

to detect unauthorized use of our technology or prevent other parties from designing and marketing unauthorized products based on our technology. Although we are not aware of any past or present infringement of our patents, copyrights or trademarks, or any violation of our trade secrets, confidentiality procedures or licensing agreements, we cannot assure you that the steps taken by us to protect our proprietary information will be adequate to prevent misappropriation of our technology. Our inability to protect adequately our intellectual property would reduce significantly the barriers of entry for directly competing technologies and could reduce the value of our technology. Furthermore, we might initiate claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. Litigation by us could result in significant expense and divert the efforts of our technical and management personnel, whether or not such litigation results in a determination favorable to us.

**Our existing patents might not provide us with sufficient protection of our intellectual property, and our patent applications might not result in the issuance of patents, either of which could reduce the value of our core technology and harm our business.**

We rely on a combination of patents, trademarks, copyrights, trade secret laws and confidentiality procedures to protect our intellectual property rights. As of December 31, 2003, we held 64 patents in the United States, which expire at various times from 2011 to 2022, and 36 corresponding foreign patents. In addition, as of December 31, 2003, we had 15 patent applications pending in the United States and 26 pending foreign applications, and had received notice of allowance of five patent applications pending in the United States. We cannot be sure that any patents will issue from any of our pending applications or that any claims allowed from pending applications will be of sufficient scope or strength, or issued in all countries where our products can be sold, to provide meaningful protection or any commercial advantage to us. Also, competitors might be able to design around our patents. Failure of our patents or patent applications to provide meaningful protection might allow others to utilize our technology without any compensation to us and impair our ability to increase our licensing revenue.

**Any claim that our products or technology infringe third-party intellectual property rights could increase our costs of operation and distract management and could result in expensive settlement costs or the discontinuance of our technology licensing or product offerings.**

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights or positions, which has resulted in often protracted and expensive litigation. We are not aware of any currently pending intellectual property litigation or threatened claim against us. However, our licensees or we might, from time to time, receive notice of claims that we have infringed patents or other intellectual property rights owned by others. Litigation against us could result in significant expense and divert the efforts of our technical and management personnel, whether or not the litigation results in a determination adverse to us. In the event of an adverse result in any such litigation, we could be required to pay substantial damages, cease the licensing of certain technology or the sale of infringing products, and expend significant resources to develop non-infringing technology or obtain licenses for the infringing technology. We cannot assure you that we would be successful in such development or that such licenses would be available on reasonable terms, or at all.

**The discovery of defects in our technology could expose us to liability for damages.**

The discovery of a defect in our 1T-SRAM technology could lead our licensees to seek damages from us. Our standard license terms include provisions waiving implied warranties regarding our technology and limiting our liability to our licensees. We also maintain insurance coverage that is intended to protect us against potential liability for defects in our technology. We cannot be certain, however, that the waivers or limitations of liability contained in our license contracts will be enforceable, that insurance coverage will continue to be available on reasonable terms or in amounts sufficient to cover one or more large claims or that our insurer will not disclaim coverage as to any future claim. The successful assertion of one or more large claims that exceed available insurance coverage or changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could cause our expenses to rise significantly and consequently harm our profitability.

**Our failure to compete effectively in the market for embedded memory technology could reduce our revenue.**

There exists significant competition in the market for embedded memory technologies. Our licensees and prospective licensees can meet their need for embedded memory by using traditional memory solutions with different cost and performance parameters, which they may internally develop or acquire from third party vendors. If alternative technologies are developed that provide comparable system performance at lower cost than our 1T-SRAM technologies or do not require the payment of comparable royalties, or if the industry generally demonstrates a preference for applications for which our 1T-SRAM technologies do not offer significant advantages, our ability to realize revenue from our 1T-SRAM technologies could be impaired.

We might be challenged by competitive developers of alternative technologies who are more established, benefit from greater market recognition and have substantially greater financial, development, manufacturing and marketing resources than we have. These advantages might permit these developers to respond more quickly to new or emerging technologies and changes in licensee requirements. We cannot assure you that future competition will not have a material adverse effect on the adoption of our technology and our market penetration.

**Our failure to manage the growth of our business could reduce our potential revenue and threaten our future profitability.**

The size of our company has increased substantially over the past three years, as we grew from 43 employees in January 2001 to 92 employees in December 2003. The efficient management of our planned expansion of the development, licensing and marketing of our technology, including through the acquisition of other companies will require us to continue to—

- implement and manage new marketing channels to penetrate different and broader markets for our 1T–SRAM technologies;
- manage an increasing number of complex relationships with licensees and co–marketers and their customers and other third parties;
- improve our operating systems, procedures and financial controls on a timely basis;
- hire additional key management and technical personnel; and
- expand, train and manage our workforce and, in particular, our development, sales, marketing and support organizations.

We cannot assure you that we will adequately manage our growth or meet the foregoing objectives. A failure to do so could jeopardize our future revenues and cause our stock price to fall.

**Any acquisitions we make, such as our acquisition of ATMOS Corporation, could disrupt our business and harm our financial condition.**

As part of our growth strategy, we might consider opportunities to acquire other businesses or technologies that would complement our current offerings, expand the breadth of our markets or enhance our technical capabilities. ATMOS Corporation is our only acquisition to date. Acquisitions present a number of potential challenges that could, if not overcome, disrupt our business operations, increase our operating costs and reduce the value to us of the acquired company, including—

- integration of the acquired employees, operations, technologies and products with our existing business and products;
- focusing management’s time and attention on our core business;
- retention of business relationships with suppliers and customers of the acquired company;
- entering markets in which we lack prior experience;
- retention of key employees of the acquired company; and
- amortization of intangible assets, write–offs, stock–based compensation and other charges relating to the acquired business and our acquisition costs.

**If we fail to retain key personnel, our business and growth could be negatively affected.**

Our business has been dependent to a significant degree upon the services of a small number of executive officers and technical employees, including Dr. Fu–Chieh Hsu, our Chairman of the Board, President and Chief Executive Officer, and Dr. Wingyu Leung, our Executive Vice President and Chief Technical Officer. The loss of their services could negatively impact our technology development efforts and our ability to perform our existing agreements and obtain new customers. We generally have not entered into employment or non–competition agreements with any of our employees and do not maintain key–man life insurance on the lives of any of our key personnel.

**Our failure to successfully address the potential difficulties associated with our international operations could increase our costs of operation and negatively impact our revenue.**

We are subject to many difficulties posed by doing business internationally, including—

- foreign currency exchange fluctuations;
- unanticipated changes in local regulation;

- potentially adverse tax consequences, such as withholding taxes;
- difficulties regarding timing and availability of export and import licenses;
- political and economic instability; and
- reduced or limited protection of our intellectual property.

Because we anticipate that licenses to companies that operate primarily outside the United States will account for a substantial portion of our licensing revenue in future periods, the occurrence of any of these circumstances could significantly increase our costs of operation, delay the timing of our revenue and harm our profitability.

**Provisions of our certificate of incorporation and bylaws or Delaware law might delay or prevent a change of control transaction and depress the market price of our stock.**

Various provisions of our certificate of incorporation and bylaws might have the effect of making it more difficult for a third party to acquire, or discouraging a third party from attempting to acquire, control of our company. These provisions could limit the price that certain investors might be willing to pay in the future for shares of our common stock. Certain of these provisions eliminate cumulative voting in the election of directors, limit the right of stockholders to call special meetings and establish specific procedures for director nominations by stockholders and the submission of other proposals for consideration at stockholder meetings.

We are also subject to provisions of Delaware law which could delay or make more difficult a merger, tender offer or proxy contest involving our company. In particular, Section 203 of the Delaware General Corporation Law prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years unless specific conditions are met. Any of these provisions could have the effect of delaying, deferring or preventing a change in control, including without limitation, discouraging a proxy contest or making more difficult the acquisition of a substantial block of our common stock.

Our board of directors may issue up to 20,000,000 shares of preferred stock without stockholder approval on such terms as the board might determine. The rights of the holders of common stock will be subject to, and might be adversely affected by, the rights of the holders of any preferred stock that might be issued in the future.

**Our stockholder rights plan could prevent stockholders from receiving a premium over the market price for their shares from a potential acquiror.**

We have adopted a stockholder rights plan, which entitles our stockholders to rights to acquire additional shares of our common stock generally when a third party acquires 15% of our common stock or commences or announces its intent to commence a tender offer for at least 15% of our common stock. This plan could delay, deter or prevent an investor from acquiring us in a transaction that could otherwise result in stockholders receiving a premium over the market price for their shares of common stock.

**A limited number of stockholders have the ability to influence the outcome of director elections and other matters requiring stockholder approval.**

Our executive officers, directors and their affiliates or non-affiliate related entities, in the aggregate, beneficially own approximately 29% of our common stock. These stockholders acting together have the ability to exert substantial influence over all matters requiring the approval of our stockholders, including the election and removal of directors and any proposed acquisition, consolidation or sale of all or substantially all of our assets. In addition, they could dictate the management of our business and affairs. This concentration of ownership could have the effect of delaying, deferring or preventing a change in control, or impeding an acquisition, consolidation, takeover or other business combination, which might otherwise involve the payment of a premium for your shares of our common stock.

**Potential volatility of the price of our common stock could negatively affect your investment.**

We cannot assure you that there will continue to be an active trading market for our common stock. Recently, the stock market, as well as our common stock, has experienced significant price and volume fluctuations. Market prices of securities of technology companies have been highly volatile and frequently reach levels that bear no relationship to the operating performance of such companies. These market prices generally are not sustainable and are subject to wide variations. If our common stock trades to unsustainably high levels, it is likely that the market price of our common stock will thereafter experience a material decline.

In the past, securities class action litigation has often been brought against a company following periods of volatility in the market price of its securities. We could be the target of similar litigation in the future. Securities litigation could cause us to incur substantial costs, divert management's attention and resources, harm our reputation in the industry and the securities markets and



reduce our profitability.

**The price of our stock could decrease as a result of shares being sold in the market by directors, officers and other significant stockholders.**

Sales of a substantial number of shares of common stock in the public market could adversely affect the market price of the common stock prevailing from time to time. The number of shares of our common stock available for sale in the public market is limited by restrictions under the Securities Act of 1933, as amended, or the Securities Act, but taking into account sales of stock made in accordance with the provisions of Rules 144(k), 144 and 701, substantially all the shares of common stock currently outstanding are eligible for sale in the public market.

***Risks Relating to the Offer and the Merger***

**If the offer and merger are not completed our stock price may decline, we will have incurred significant costs, we may be liable for termination and other fees and our business may be harmed.**

If the offer and merger are not completed, we may be subject to a number of substantial risks, including the following:

- The price of our common stock may decline, including to the extent the current price of our common stock reflects the price of the offer;
- We may be required to pay Synopsys a termination fee of \$10 million if the reorganization agreement is terminated under certain circumstances;
- We will be required to pay significant costs related to the offer and the merger, including legal, accounting and financial advisory fees, although we are entitled to reimbursement of up to \$750,000 for fees and expenses incurred in connection with the offer and merger upon termination of the reorganization agreement under certain circumstances; and
- Our reputation and relationships with our customers, suppliers, distributors, licensors and employees may be harmed.

**Our business and prospects may have been adversely impacted by the offer and merger.**

The negotiation and announcement of the offer and merger, and the uncertainty regarding our business pending the completion of the offer and merger, may have a number of negative affects on our business, including the following:

- Our management will have been diverted from day-to-day business operations, possibly leading to a loss of revenues and market position;
- Our current and potential customers may have delayed or cancelled purchasing decisions in response to the offer and merger, resulting in a material decline in our revenues;
- Our business partners, including suppliers, distributors and licensors, may have adversely changed or terminated their relationships with us in response to the offer and the merger; and
- Our employees may experience uncertainty about their future role with us, harming our ability to attract and retain key management, sales and technical personnel.

**The offer and merger may be delayed, modified or terminated because of potential antitrust review by governmental authorities.**

Governmental authorities could delay the completion of the offer and merger by requesting extensive information regarding its impact on competition. By alleging that the offer and merger are anti-competitive, they could seek to prevent the offer and merger, modify the terms of the offer and merger, or impose restrictive operating, divestiture or other conditions on the combined company. We believe that the completion of the offer and the merger will not violate any antitrust laws, however, any of these outcomes could cause harm to us and Synopsys, substantial delay in completing the offer and merger, if it is completed at all, and harm to the combined company if the offer and merger is nevertheless completed.

**The offer and merger may not be completed.**

The completion of the offer and the merger are subject to certain conditions pursuant to the reorganization agreement which may not be satisfied or waived.

Synopsys' obligation to accept shares in the offer are subject to certain conditions. If the conditions to the completion of the offer are not satisfied, Synopsys may terminate the offer and the transaction will not close. The conditions to the completion of the offer by Synopsys include the following:

- that an amount of shares have been tendered that represents more than 50% of the outstanding shares of our common stock (taking into account shares owned by Synopsys and its subsidiaries and outstanding options to purchase shares of our common stock);
- that Fu-Chieh Hsu and Wing-Yu Leung continue to be employed by us; and
- that no more than 25% of the engineers employed by us who have received offers of at-will employment from Synopsys will cease to be employed by us.

The closing of the merger is subject to the satisfaction of certain conditions, including the following:

- that, if such a vote is required, the reorganization agreement has been duly adopted by the required vote of our stockholders;
- that no temporary restraining order, injunction or other order preventing consummation of the merger has been issued and remains in effect and there are no other applicable legal restrictions that would make the merger illegal;
- that the registration statement filed by Synopsys shall have been declared effective by the SEC;
- that the shares of Synopsys common stock to be issued in the offer (if the all-cash election is not made) have been approved for listing with The Nasdaq National Market; and
- that Synopsys has accepted all validly tendered shares in the offer.

If the reorganization agreement is terminated, the offer and the merger will not be completed. The reorganization agreement may be terminated under certain circumstances, including the following:

- by the mutual consent of us and Synopsys;
- by us or Synopsys if a court or governmental body issues an order permanently enjoining or making illegal the merger;
- by us or Synopsys if the offer expires without Synopsys accepting any shares of our common stock or if the offer has not been accepted by July 31, 2004;
- by Synopsys if our board retracts its recommendation of the offer and the merger;
- by us to accept an unsolicited, bona fide written offer by a third party to purchase all of the outstanding shares of our common stock after our board concludes that such offer is more favorable to our stockholders than the offer and the merger;
- by Synopsys if our representations and warranties are materially inaccurate resulting in a material adverse effect on us or if our covenants are materially breached and not cured and after paying us a termination fee of \$10 million;

- by us if Synopsys' representations and warranties are materially inaccurate or if its covenants are materially breached resulting in a material adverse effect on Synopsys' ability to complete the merger and such breach has not been cured; and
- by Synopsys if a material adverse effect with respect to us has occurred or is reasonably likely to occur and after paying us a termination fee of \$10 million.

**Synopsys may not realize the benefits it expects from the offer and merger if the integration is not successful, and the stock price of any shares of common stock of Synopsys that you receive in the offer may decline accordingly.**

Synopsys may not realize the benefits it expects from the offer and merger if Synopsys' operations and our operations are not successfully integrated. Among other integration challenges, the combined company must effectively do the following:

- Integrate our technology and products into Synopsys' portfolio of intellectual property for system-on-chips and EDA design flow;
- Integrate our revenue model within Synopsys' revenue model;
- Coordinate Synopsys' and our sales forces, build sales momentum, and minimize the disruption to our business and revenues caused by the offer and merger;
- Communicate the capabilities of the combined company and cross-sell related products to Synopsys' and our customers;
- Recruit and retain key personnel, including Dr. Fu-Chieh Hsu and Dr. Wing-Yu Leung;
- Incorporate our technical knowledge into Synopsys' engineering organization;
- Maintain and build key alliances on attractive terms with partners and suppliers;
- Create and effectively implement uniform standards, controls, procedures, policies and information systems;
- Manage intense demands for management time and attention caused by the integration efforts; and
- Manage unanticipated expenses, liabilities and delays.

Any failure to integrate Synopsys' operations and our operations successfully could have a material adverse effect on the business, prospects and results of operations of the combined company.

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

Our principal administrative, sales, marketing, support and research and development functions are located in a leased facility in Sunnyvale, California. We currently occupy approximately 19,500 square feet of space in the Sunnyvale facility, the lease for which extends through June 2005. We hold an option to extend our lease for three additional years. We have leased approximately 19,000 square feet of space in Ontario, Canada for our research and development facility. The lease expires at the end of April 2008. We have leased approximately 1,400 square feet of space in Seoul, South Korea for our engineering design center. The lease expires at the end of April 2005. Additionally, we have leased approximately 900 square feet of space in Tokyo, Japan and 140 square feet of space in Sophia-Antipolis, France for our sales and marketing offices. These leases expire at the end of January 2005 and March 2005, respectively. We believe that our existing facilities are adequate to meet our current needs.

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

From time to time we may be subject to legal proceedings and claims in the ordinary course of business. These claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources. We are not aware of any legal proceedings or claims that we believe could harm our business or cause our revenues or stock price to fall.

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

No matter was submitted to a vote of stockholders during the fourth quarter of the fiscal year covered by this report.

## Part II

### *Item 5. Market for Registrant's Common Equity and Related Stockholder Matters*

Our common stock is quoted on the NASDAQ National Market under the symbol MOSY. The following table sets forth the range of high and low sales prices of our common stock for each period indicated.

<u>Quarter ending</u>	<u>High</u>	<u>Low</u>
December 31, 2003	\$ 9.05	\$ 6.64
September 30, 2003	\$ 13.12	\$ 8.10
June 30, 2003	\$ 9.40	\$ 5.70
March 31, 2003	\$ 12.64	\$ 5.35
December 31, 2002	\$ 15.38	\$ 6.99
September 30, 2002	\$ 10.95	\$ 6.94
June 30, 2002	\$ 15.05	\$ 8.26
March 31, 2002	\$ 22.77	\$ 10.04

We had 90 shareholders of record as of February 23, 2004. We have not declared or paid any cash dividends on its common stock and presently intends to retain its future earnings, if any, to fund the development and growth of its business and, therefore, do not anticipate paying any cash dividends in the foreseeable future.

#### *Equity Compensation Plan Information*

#### *Other Information*

The Securities and Exchange Commission declared the Company's first registration statement, filed on Form S-1 under the Securities Act of 1933 (File No. 333-43122) relating to the Company's initial public offering (IPO) of its common stock, effective on June 27, 2001. The Company realized approximately \$51.6 million after offering expenses. To date, the Company has not used any of the net proceeds of the IPO except to acquire short-term and long-term investments and cash equivalents. Following the completion of the Company's IPO, all series of the Company's issued and outstanding preferred stock, par value \$0.01, converted automatically into 12,731,446 shares of its common stock with a par value of \$0.01 per share.

## Item 6. Selected Financial Data

The following selected financial data presented below are derived from our consolidated financial statements. The selected financial data should be read in conjunction with our financial statements and notes related to those statements, and with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included herein.

	Year ended December 31,				
	2003	2002	2001	2000	1999
(in thousands, except per share data)					
<b>Consolidated Statements of Income Data:</b>					
Net revenue:					
Product	\$ 1,904	\$ 2,924	\$ 12,991	\$ 12,893	\$ 15,356
Licensing	10,418	10,523	6,053	1,440	—
Royalty	6,911	14,344	3,446	10	—
	<u>19,233</u>	<u>27,791</u>	<u>22,490</u>	<u>14,343</u>	<u>15,356</u>
Cost of net revenue:					
Product	1,217	1,668	5,776	5,388	10,062
Licensing	1,970	1,730	633	517	—
	<u>3,187</u>	<u>3,398</u>	<u>6,409</u>	<u>5,905</u>	<u>10,062</u>
Gross profit	16,046	24,393	16,081	8,438	5,294
Operating expenses:					
Research and development	8,593	6,586	4,420	3,341	3,110
Selling, general and administrative	6,121	4,950	4,686	3,523	2,388
Stock-based compensation charge*	459	656	1,435	1,085	107
Total operating expenses	<u>15,173</u>	<u>12,192</u>	<u>10,541</u>	<u>7,949</u>	<u>5,605</u>
Income (loss) from operations	873	12,201	5,540	489	(311)
Interest and other income	<u>1,914</u>	<u>1,539</u>	<u>1,818</u>	<u>1,149</u>	<u>520</u>
Income before income taxes	2,787	13,740	7,358	1,638	209
Provision for income taxes	<u>(279)</u>	<u>(1,373)</u>	<u>(367)</u>	<u>(308)</u>	<u>(67)</u>
Net income	\$ 2,508	\$ 12,367	\$ 6,991	\$ 1,330	\$ 142
Net income per share—basic	\$ 0.08	\$ 0.41	\$ 0.35	\$ 0.13	\$ 0.01
—diluted	\$ 0.08	\$ 0.40	\$ 0.25	\$ 0.05	\$ 0.01
Shares used in computing net income per share					
—basic	30,504	29,902	19,709	10,013	9,727
—diluted	<u>30,998</u>	<u>31,275</u>	<u>28,390</u>	<u>25,624</u>	<u>23,320</u>

\* Allocation of stock-based compensation to operating expenses:

Research and development	\$ 148	\$ 340	\$ 781	\$ 574	\$ 56
Selling, general and administrative	<u>311</u>	<u>316</u>	<u>654</u>	<u>511</u>	<u>51</u>
	\$ 459	\$ 656	\$ 1,435	\$ 1,085	\$ 107

	December 31,				
	2003	2002	2001	2000	1999
<b>Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments	\$ 41,365	\$ 68,433	\$ 84,293	\$ 23,397	\$ 12,720
Working capital	44,426	71,213	82,343	20,733	11,908
Total assets	106,892	103,090	89,596	29,798	16,481
Deferred revenue	506	1,779	3,418	5,973	2,045
Mandatorily redeemable convertible preferred stock	—	—	—	35,591	30,391
Stockholders' equity (deficit)	103,511	98,697	84,104	(13,852)	(17,666)

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

*This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the accompanying consolidated financial statements and notes included in this report.*

#### ***Overview***

We design, develop, license and market memory technologies used by the semiconductor industry and electronic product manufacturers. We have developed a patented semiconductor memory technology, called 1T-SRAM, that offers a combination of high density, low power consumption and high speed at performance and cost levels that other available memory technologies do not match. We license this technology to companies that incorporate, or embed, memory on complex integrated circuits, such as SoCs. We also sell memory chips based on our 1T-SRAM technologies.

Using elements of our existing memory technology as a foundation, we completed development of our first memory chips incorporating our 1T-SRAM technologies in the fourth quarter of 1998. We signed our first license agreement related to our 1T-SRAM technologies at the end of the fourth quarter of 1998 and recognized licensing revenue from our 1T-SRAM technologies for the first time in the first quarter of 2000. In 2001 and 2002, we introduced improved and enhanced versions of our technology, 1T-SRAM-R, 1T-STRAM-M, and 1T-SRAM-Q.

We generate most of our revenue from intellectual property licensing consisting of both licensing revenue and royalties. Our licensing revenue consists of fees paid for engineering development and engineering support services. Royalty revenues are earned under each of our licensing agreements when our licensees manufacture or sell products that incorporate any of our 1T-SRAM technologies and report the results to us.

As of December 31, 2003, we had signed license agreements related to our 1T-SRAM technologies with 41 companies, 10 of which have paid us royalties to date. Generally, we expect our total sales cycle, or the period from our initial discussion with a prospective licensee to our receipt of royalties from the licensee's use of our 1T-SRAM technologies, to run from 18 to 24 months.

Effective August 30, 2002, we purchased 100% of the outstanding stock of ATMOS Corporation, a semiconductor memory company focused on creating high-density, compiler-generated embedded memory solutions for SoC applications. The total purchase price for the acquisition was approximately \$12.4 million including direct transaction costs of \$406,000. The total fair value of the consideration paid to shareholders of ATMOS was \$12.0 million, and consisted of \$11.7 million in cash and 26,843 shares of our common stock that we issued to certain ATMOS employees. The results of operations of ATMOS have been included in the Company's financial statements from the date of acquisition.

#### ***Sources of Revenue***

We generate three types of revenue: license fees, royalties and product sales. Prior to 2001, we derived almost all our revenue from the sale of memory chips. Since the beginning of 2001, product revenue as a percentage of our total revenue has declined significantly, while license fees and royalties have grown substantially as a percentage of total revenue. In the third quarter of 2001, for the first time, combined license and royalty revenue exceeded product revenue. We expect this trend to continue for the foreseeable future and anticipate further declines in product revenue in 2004.

*Licensing.* Our license agreements involve long sales cycles, which makes it difficult to predict when the agreements will be

signed and when, if ever, we will recognize revenues under the agreements. In addition, our intellectual property licensing revenues fluctuate from period to period, and, it is difficult for us to predict the timing and magnitude of such revenue from quarter-to-quarter. Moreover, we believe that the amount of licensing revenues for any period is not necessarily indicative of results in any future period. Our future revenue results are subject to a number of factors, particularly those described in Part I, "Business—Risk Factors".

Our licensing revenue consists of fees for providing circuit design, layout and design verification and granting a license to a customer that is embedding our memory technology into its product. For some customers, we also provide engineering support services to assist in the commencement of production of products utilizing the licensed 1T-SRAM technologies. License fees generally range from one hundred thousand dollars to several million dollars per contract, depending on the scope and complexity of the development project, the licensee's rights and the royalties expected to be received under the agreement. The licensee generally pays the license fees in installments at the beginning of the license and upon the attainment of specified milestones. All license agreements entered into to date require us to meet performance specifications. For agreements involving performance specifications that we have not met and for which we lack the historical experience to reasonably estimate the costs, we defer recognition of revenue until the licensee manufactures products that meet the contract performance specifications and recognize revenue under the completed contract accounting method. Fees collected prior to revenue recognition are recorded as deferred contract revenue. However, if the agreement involves performance specifications that we have significant experience in meeting and the cost of contract completion can be reasonably estimated, we recognize revenue over the period in which the contract services are performed under the percentage of completion accounting method. We use our labor costs incurred to measure progress towards completion. If the amount of revenue recognized under the percentage of completion method exceeds the amount of billings to a customer, then under the percentage of completion accounting method, we account for the excess amount as an unbilled contract receivable. We recognized revenue in excess of our billings for the first time in the second quarter of 2002. Our total unbilled contract receivable was \$1,106,000 and \$693,000 as of December 31, 2003 and December 31, 2002, respectively.

Because our license agreements are associated with lengthy and complicated engineering development projects, the completion of development and commencement of production may be difficult for us to predict. Additionally, from time to time, a licensee may cancel a project during the development phase. Such a cancellation is not within our control and is often caused by changes in market conditions or the licensee's business. Cancellations of this nature are an aspect of our licensing business, and most of our newer contracts allow us to retain all payments that we have received or are entitled to collect for items and services provided before the cancellation occurs. We will consider a project to have been canceled even in the absence of specific notice from our licensee, if there has been no activity under the contract for a significant period, and we believe that completion of the contract is unlikely. In this event, we recognize revenue in the amount of cash received, if we have performed a sufficient portion of the development services. If a cancelled contract had been entered into before the establishment of technological feasibility, the costs associated with the contract would have been expensed prior to the recognition of revenue. In that case, there would be no costs associated with that revenue recognition, and gross margin would increase for the corresponding period. In 2003, we recognized \$759,000 of licensing revenue from cancelled projects compared to \$804,000 in the corresponding period of 2002.

*Royalties.* Each license agreement provides for royalty payments at a stated rate. We negotiate royalty rates by taking into account such factors as the amount of license fees to be paid, the anticipated volume of the licensee's sales of products utilizing our technologies and the cost savings to be achieved by the licensee through the use of our technology. Our license agreements require the licensee to report the manufacture or sale of products that include our technology after the end of the quarter in which the sale or manufacture occurs. We recognize royalties from reports provided by the licensee that are received in the quarter immediately following the quarter during which the licensee has sold or manufactured products containing our technology.

As with our licensing revenues, the timing and level of royalties are difficult to predict. They depend on the licensee's ability to market, produce and sell products incorporating our technology. Many of the products currently subject to licenses from us are consumer products, such as electronic game consoles, for which demand can be seasonal and generally highest in the fourth quarter. We would report royalties from products sold in the fourth quarter in the first quarter of the following year. Furthermore, if a licensee holds excess inventory of products using our licensed technology, we are unlikely to report additional royalty revenue attributable to that product until the quarter after the licensee restarts production. For a discussion of factors that could contribute to the fluctuation of our revenues, see Part I "Business—Risk Factors". Our lengthy licensing cycle and our licensees' lengthy development cycles will make the operating results of our licensing business difficult to predict," and "Anything that negatively affects the business of our licensees could negatively impact our revenue."

*Product sales.* Product sales are typically on a purchase-order basis, with shipment of product occurring from one to six months later. Allowances for sales returns or warranty liabilities are recorded based upon historical experiences and any specific known pending customer returns. Our products are manufactured, assembled and tested prior to shipment by independent, third-party contractors. We contract for manufacturing services on a purchase-order basis and have no long-term commitments for the supply of

any of our memory chip products.

Our memory chips are subject to competitive pricing pressure that might result in fluctuating gross profits, which we have experienced in the past. Prior to 1999, we sold most of our memory chips to the personal computer market, which is seasonal, and experienced the strongest demand for these products in the fourth quarter each year. From late 1998 to date, our memory chip sales have consisted primarily of 1T-SRAM chips sold to customers in the communications equipment business, and we have not seen the effect of seasonal demand in the market.

The semiconductor industry has experienced a difficult economic environment and downturn during the past several years. Most of our memory chip sales are made to communications equipment manufacturers, which also have experienced a sharp economic downturn since 2001. Our product revenues for 2003 were only 65% of our product revenues for 2002. As a result of these downturns and our continued focus on our high margin intellectual property licensing business as the major source of our revenue, we expect continued decline in product revenue in 2004.

### ***Critical Accounting Policies***

*Use of estimates.* Our discussion and analysis of our financial condition and results of operation are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make certain estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an ongoing basis we make these estimates based on our historical experience and on assumptions that we consider reasonable under the circumstances. Actual results may differ from these estimates, and reported results could differ under different assumptions or conditions.

We believe that the following accounting policies are affected by estimates and judgments in the following manner:

#### *Revenue.*

*License.* If a licensing contract involves performance specifications that we have significant experience in meeting and the cost of contract completion can be reasonably estimated, we recognize the revenue over the period in which the contract services are performed using the percentage of completion method. The percentage of completion method includes judgmental elements, such as determining that we have the experience to meet the design specifications and estimation of the total contract costs. We follow this method because we can obtain reasonably dependable estimates of the costs to perform the contracted services. Labor costs for the development of the licensee's design are estimated at the beginning of the contract. As these costs are incurred, they are used as a measure of progress towards completion. We have the ability to reasonably estimate labor cost on a contract to contract basis from our experience in developing prior licensee's designs. During the contract performance period we review estimates of cost to complete the contracts as the contract progresses to completion and will revise our estimates of revenue and gross profit under the contract if we revise the estimations of the cost to complete. Our policy is to reflect any revision in the contract gross profit estimate in reported income in the period in which the facts giving rise to the revision become known. For contracts involving design specifications that the Company has not previously met, the Company defers the recognition of revenue until the design meets the contractual design specifications and expenses the cost of services as incurred. When the Company has experience in meeting design specifications but does not have significant experience to reasonably estimate the cost of services to meet a design specification, the Company defers both the recognition of revenue and the cost. For these arrangements, the Company recognizes revenue using the completed contract method. Under the completed contract method, we recognize revenue when we have knowledge that the customer has successfully verified our design.

Under our support and maintenance arrangements, we provide unspecified upgrades, design rule changes and technical support. No other upgrades, products or other post-contract support are provided. These arrangements are renewable annually by the customer. Support and maintenance revenue is recognized at its fair value ratably over the period during which the obligation exists, typically 12 months. The fair value of any support and maintenance obligation is established based on the specified renewal rate for such support and maintenance. When we provide a combination of products and services to customers, in addition to the considerations noted above, we evaluate the arrangements under EITF 00-21, *Revenue Arrangements with Multiple Deliverables*, which is effective for transactions entered into after June 30, 2003. EITF 00-21 addresses certain aspects of accounting for arrangements under which we will perform multiple revenue generating activities. Application of EITF 00-21 did not have a material effect on our consolidated financial position or results of operations.

*Product.* Revenue from product sales is recognized upon shipment provided that persuasive evidence of a sales arrangement exists, the price is fixed or determinable, title has transferred, collection of resulting receivables is reasonably assured, there are no customer acceptance requirements and there are no remaining significant obligations. For each of the periods presented, there were no formal acceptance provisions with our end customers.

*Royalty.* Licensing contracts provide also for royalty payments at a stated rate and require licensees to report the manufacture or sale of products that include the Company's technology after the end of the quarter in which the sale or manufacture occurs. The Company recognizes royalties in the quarter in which the Company receives the licensee's report. The Company entered a termination agreement in 2003 with one of its licensees and recognized \$713,000 of royalty revenue from the terminated contract in



2003. There was no royalty revenue from terminated contracts in 2002.

*Inventory.* We state inventories at the lower of cost or market, determined using the first-in, first-out method. Our policy is to write down our inventory for estimated obsolescence or unmarketable inventory to the extent the cost exceeds the estimated market value. We estimate fair market value based on our historical sales for the last six months and current market conditions. If actual market conditions are less favorable than those assumed in our estimates, additional inventory write-downs may be required. Our policy is to reflect any write-down of inventory in reported income for the period in which the facts giving rise to the inventory write-down become known. If previously reserved inventory is sold, the reserve is reversed.

*Goodwill.* We review goodwill, recorded from the acquisition of ATMOS Corp. on August 2002, for impairment annually and whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable in accordance with the Statement of Financial Accounting Standards (“SFAS”) No. 142, “Goodwill and Other Intangible Assets.” The

provisions of SFAS No. 142 require that a two-step impairment test be performed on goodwill. In the first step, we compare the fair value of each reporting unit to its carrying value. Using the guidance in SFAS No. 142, we consider there to be only one reporting unit at the entity level. For step one, we determine the fair value of our reporting unit using the market approach. Under the market approach, we estimate the fair value based on the market value of the reporting unit at the entity level. If the fair value of the reporting unit exceeds the carrying value of net assets assigned to the reporting unit, goodwill is not impaired and we are not required to perform further testing. If the carrying value of the net assets assigned to the reporting unit exceeds the fair value of the reporting unit, then we must perform the second step in order to determine the implied fair value of the reporting unit's goodwill and compare it to the carrying value of the reporting unit's goodwill. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then we must record an impairment loss equal to the difference. We performed the annual impairment test during the third quarter of 2003, and the test did not indicate impairment of goodwill as of September 30, 2003. As of December 31, 2003, we found no indicators of potential impairment.

*Tax valuation allowance.* When we prepare our consolidated financial statements, we estimate our income tax liability for each of the various jurisdictions where we conduct business. This requires us to estimate our actual current tax exposure and to assess temporary differences that result from differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which we show on our consolidated balance sheet under the category of other current assets. The net deferred tax assets are reduced by a valuation allowance if, based upon weighted available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. When we establish a valuation allowance or increase this allowance in an accounting period, we must record a tax expense in our consolidated statement of income unless the increase is attributable to stock based compensation deductions which has been recorded directly to equity. We must make significant judgments to determine our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance to be recorded against our net deferred tax asset. As of December 31, 2003, we had a valuation allowance of approximately \$8.2 million of which approximately \$6.2 million was attributable to Canadian net operating losses and \$670,000 was attributable to stock option deductions.

## Results of Operations

The following discussion compares the historical results of operations based on U.S. generally accepted accounting principles for the years ended December 31, 2003, 2002 and 2001. These results include ATMOS's results of operations from August 20, 2002, the date on which we acquired all of the outstanding stock of ATMOS. As a result, many of the fluctuations in the historical operating results of MoSys in fiscal 2003 as compared to fiscal 2002 and fiscal 2001 are due to the acquisition of ATMOS. Results of operations as a percentage of net revenue were as follows:

	Year ended December 31,		
	2003	2002	2001
Net revenue:			
Product	9.9 %	10.5 %	57.8 %
Licensing	54.2	37.9	26.9
Royalty	35.9	51.6	15.3
	100.0	100.0	100.0
Cost of net revenue:			
Product	6.3	6.0	25.7
Licensing	10.3	6.2	2.8
	16.6	12.2	28.5
Gross profit	83.4	87.8	71.5
Operating expenses:			
Research and development	44.7	23.7	19.7
Selling, general and administrative	31.8	17.8	20.8
Stock-based compensation expense	2.4	2.4	6.4
Total operating expenses	78.9	43.9	46.9
Income from operations	4.5	43.9	24.6
Interest and other income	10.0	5.5	8.1
Provision for income taxes	(1.5)	(4.9)	(1.6)

Net income

13.0% 44.5% 31.1%

*Years Ended December 31, 2003, 2002 and 2001*

*Revenue.* In 2003, total revenue decreased to \$19.2 million from \$27.8 million representing a 31% decline over 2002. The decline was mainly attributable to a significant decrease in royalty revenue, which declined to \$6.9 million in 2003 from \$14.3 million in 2002. Gamecube-related revenue represented 13% of our total revenue in 2003, a decrease from 44% of our total revenue in 2002 as Nintendo reduced its purchases of chips incorporating our licensed technology for its Gamecube consoles. Royalty revenues from other licensees increased in 2003 compared to 2002, however, mainly due to increased sales of royalty-bearing products first shipped in 2002. Licensing revenue also decreased slightly to \$10.4 million in 2003 from \$10.5 million in 2002 as we earned licensing revenue from our new projects started in 2003 offset by the decrease in licensing revenue earned from the older projects phased out in 2003. During the second quarter of 2003, we collected \$1.0 million in cash from Conexant for the termination of its October 2000 license agreement with us. This payment consisted of current and past due royalty payments totaling \$713,000, and a contract termination fee of \$287,000, which we included in other income.

In 2002, total revenue increased to \$27.8 million from \$22.5 million representing a 24% increase over 2001. The increase was primarily due to the significant growth in our revenues from licensing and royalty activities, which increased to \$24.9 million from \$9.5 million in 2001, a 162% increase. Royalty revenue increased from \$3.4 million in 2001 to \$14.3 million in 2002. Royalties earned from the sale of Gamecube chips incorporating our 1T-SRAM technology represented a significant portion, 44%, of our total revenue in 2002. That represented an increase from 23% of total revenue in 2001. Royalty revenues from other licensees also increased in 2002 as we simultaneously increased and diversified our licensees and development projects during that year. In 2001, most of the licensing and royalty revenues consisted of fees for engineering services associated with NEC's development of chips for the Nintendo Gamecube video game console and royalties earned from the subsequent production of Gamecube chips incorporating our 1T-SRAM technology. We also earned licensing revenue from development projects with a number of other licensees.

During the years ended December 31, 2003, 2002 and 2001, our product sales totaled \$1.9 million, \$2.9 million and \$13.0 million, respectively. Sales of our memory chips have declined steadily as we shifted our primary focus from product sales to the licensing of our 1T-SRAM technologies after 1999. In addition, our product sales fell in 2003 due to significant downturns in the semiconductor industry and the communications equipment business, which is the primary market for our memory chips. We expect continued decline in product revenue in 2004 due to our focus on the licensing of our intellectual property as the major source of our revenue, which typically produces higher gross margins than can be achieved from product revenue.

*Gross Profit.* Gross profit decreased to \$16.0 million in 2003 from \$24.4 million in 2002 primarily due to the significant decline in our royalty revenue, which has no associated costs. Primarily for this reason, our gross profit as a percentage of total revenue decreased to 83% in 2003 from 88% in 2002. Licensing gross profit declined to 81% in 2003 from 84% in 2002 primarily because we recognized revenue under some lower margin license projects in 2003.

In 2002, gross profit increased to \$24.4 million because of the significant increase in licensing and royalty revenue. Gross profit as a percentage of total revenue increased to 88% in 2002 from 72% in 2001 due to the significantly higher proportion of licensing and royalty revenues, which have much higher gross profit margins than product revenues. In 2002, licensing gross profit as a percentage of licensing revenue declined to 84% compared to 90% in 2001, however, because our licensing revenue from contracts accounted for under the completed contract method declined to 25% of licensing revenue in 2002 from 69% of licensing revenue in 2001. Most of those contracts were entered into before technical feasibility was established, and therefore, the costs associated with them were expensed as research and development expenses before the period in which revenue was recognized. In 2002, we recognized revenue on the last of the remaining completed contracts entered before technical feasibility was established.

In 2001, gross profit increased to \$16.1 million from \$8.4 million in 2000 due to strong growth in licensing and royalty revenues, which contributed \$8.9 million to the total gross profit for the year. Gross profit as a percentage of total revenue increased to 72% in 2001 from 59% in 2000 due to the significantly higher proportion of licensing and royalty revenues.

In 2003, product gross margin as a percentage of product revenue decreased to 36% compared to 43% in 2002. The decline resulted primarily from lower average selling prices for our memory chips in 2003. In addition, in 2003 our fixed manufacturing overhead costs were spread over a reduced number of our memory chips shipped in 2003 compared to 2002. Product gross margin as a percentage of product revenue declined to 43% in 2002 compared to 56% in 2001. That decline also was attributable to allocating our fixed

manufacturing overhead costs over a significantly reduced number of our memory chips shipped in 2002 compared to 2001.

*Research and Development.* Our research and development expenses include development and design of variations of the 1T–SRAM technologies for use in different manufacturing processes used by licensees and the development and testing of prototypes to prove the technological feasibility of embedding our memory designs in the licensees’ products. Research and development expenses increased to \$8.6 million in 2003 from \$6.6 million in 2002 because we had increased the engineering staff from our acquisition of ATMOS and to support our memory compiler development. ATMOS’s research and development expenses represented approximately \$2.6 million in 2003. We anticipate a similar level of research and development expenses for the foreseeable future.

In 2002, research and development expense increased to \$6.6 million from \$4.4 million in 2001 due to additions to the engineering staff from additional hiring and our acquisition of ATMOS at the end of August 2002. The ATMOS research and development expenses represented approximately \$867,000 in 2002. Our research and development expenses increased in 2001 to \$4.4 million due to additions to the engineering staff, and expanded engineering support of our licensing activities, including the establishment of the engineering design center in Seoul, Korea in June 2001.

*Selling, General and Administrative.* Selling, general and administrative expenses increased to \$6.1 million in 2003 from \$5.0 million in 2002 due primarily to increased sales and marketing activities, including the establishment of a sales office in Japan in January 2003 and higher professional fees. Selling, general and administrative expenses increased to \$5.0 million in 2002 from \$4.7 million in 2001 as increases in administrative, sales and marketing staff expenses were partially offset by lower commissions on product sales. In 2001, selling, general and administrative expense increased to \$4.7 million. The increase in 2001 reflected the addition of administrative, sales and marketing staff and the expansion of intellectual property marketing activities.

*Interest and Other Income.* Interest income reflects interest earned on cash, cash equivalents, short–term and long–term investments. Interest income was \$1.4 million, \$1.5 million and \$1.8 million in 2003, 2002, and 2001, respectively. The fluctuation in interest income levels corresponds to differences in average cash and investment balances for the periods and the applicable corresponding interest rates, which declined each year in 2003, 2002 and 2001. Additionally, in 2003, other income included the \$287,000 contract termination fee from Conexant and \$241,000 of Canadian research and development incentive tax credits. There was no other income recorded in 2002 and 2001. We incurred no interest expense in 2003, 2002, and 2001.

*Deferred stock–based compensation cost to employees.* During the years ended December 31, 2003, 2002 and 2001, we recorded deferred compensation cost of approximately \$0, \$314,000 and \$1.5 million, respectively, which cost is being amortized in future periods. The 2002 deferred compensation cost represented the shares of common stock issued to certain employees of ATMOS that were subject to vesting requirements related to the acquisition of ATMOS, which cost is being amortized over the vesting period of 36 months using the graded vesting method. The deferred compensation cost received during the year ended 2001 represented the excess of the fair market value of our common stock over the great price during the period in which the option were granted.

During the years ended December 31, 2003, 2002 and 2001, we recorded stock compensation expenses of \$459,000, \$656,000 and \$1.4 million, respectively, of which \$211,000, \$582,000 and \$1.4 million, respectively, was attributable to the excess of the fair market value of our common stock over the price at which we granted stock options to employees. Stock compensation expenses in 2003 and 2002 also included \$227,000 and \$74,000, respectively, for amortization of deferred compensation cost attributable to the fair market value of shares of our common stock issued to certain employees of ATMOS. In addition, we incurred \$21,000 of stock compensation expense in 2003 due to modification of our 2000 employee stock option plan related to a former member of our board of directors.

Deferred compensation expense is being amortized using the graded vesting method, in accordance with SFAS No. 123 and FASB Interpretation No. 28, over the vesting period of each respective option, generally four years. The accelerated amortization results in expensing approximately 52% of the total award in the first year, 27% in the second year, 15% in the third year and 6% in the fourth year.

*Provision for Income Taxes.* Provisions for income taxes of approximately \$279,000, \$1.4 million, and \$367,000 were recorded in 2003, 2002 and 2001, respectively. The effective income tax rate was 10% for 2003 and 2002 and 5% for 2001. As of December 31, 2003, we had net operating loss carryforwards of approximately \$3.6 million for federal tax purposes, approximately \$2.6 million for state tax purposes and approximately \$13.5 million for Canadian tax purposes that we expect to be available to reduce future income tax liabilities to the extent permitted under federal, Canadian and applicable state income tax laws. The federal net operating losses are subject to an annual limitation of approximately \$2.6 million pursuant to Section 382 of the Internal Revenue Code. The net operating loss carryforwards expire from 2005 to 2023. In 2004, we anticipate that our effective income tax rate will be less than the federal statutory tax rate but higher than the 2003 effective income tax rate.

## **Liquidity and Capital Resources**

As of December 31, 2003, we had cash and cash equivalents of \$22.0 million, short–term investments of \$19.3 million and long–term investments of \$44.5 million resulting in a total balance of cash, equivalents, and investments of \$85.8 million. As of the same date, the Company had total working capital of \$44.4 million. In July 2001, the Company completed the sale of a total of 5,750,000 shares of common stock in its initial public offering. The Company realized total net proceeds of approximately \$51.6 million upon the close of the IPO, which proceeds have not been used to fund our operations to date. Our primary capital requirements are to fund working



needs. We believe that our current focus on licensing and royalty revenues with reduced levels of memory chip sales has generally enabled us to steadily improve our cash position.

Net cash provided by operating activities was \$4.7 million, \$7.9 million, and \$8.4 million for the years ended 2003, 2002, and 2001, respectively. In 2003, net cash provided by operating activities was principally represented by our net profit of \$2.5 million plus a non-cash charge of \$2.0 million for depreciation and amortization, although deferred revenue associated with cash receipts in excess of recognized revenue declined by \$1.3 million.

In 2002, net cash provided by operating activities resulted primarily from net income of \$12.4 million plus a non-cash charge of depreciation and amortization of \$1.3 million. Prepaid expenses and other assets increased by \$2.9 million as we recorded deferred tax assets of \$2.4 million from the realization of tax benefits through the utilization of net operating loss carryforwards. In addition, deferred revenue declined by \$1.6 million and accounts payable declined by \$1.3 million. In 2001, net cash provided by operating activities was \$8.4 million, consisting principally of net profit of \$7.0 million plus a non-cash charge of \$1.4 million for stock based compensation. In addition, we reduced accounts receivable by \$1.2 million but decreased deferred revenue by \$2.6 million. The reduction in deferred revenue in 2001 resulted from the recognition of licensing and prepaid royalty revenues in excess of additional license fees collected from our customers.

Net cash used in investing activities was approximately \$10.8 million, \$29.9 million, and \$38.4 million for the years ended 2003, 2002, and 2001, respectively. Aside from investing in short-term and long-term marketable securities in all three years, we purchased \$493,000 of property and equipment in 2003, consisting principally of engineering design software. In 2002, we purchased \$1.4 million of property and equipment consisting of principally of engineering design software and \$12.0 million for the acquisition of ATMOS. In 2001, investing activities mainly consisted of investing in short-term marketable securities of \$36.9 million, net and engineering design software purchases.

Net cash provided by financing activities were \$1.8 million, \$1.0 million, and \$54.0 million for the years ended 2003, 2002, and 2001. Cash received upon the issuance of common stock in connection with the exercise of options and warrants totaled \$1.9 million in 2003, \$909,000 in 2002 and \$2.0 million in 2001. Also in 2001, we received total net proceeds of \$51.6 million upon the close of our IPO.

Our future liquidity and capital requirements are expected to vary from quarter to quarter, depending on numerous factors, including—

- level and timing of licensing, royalty and memory chip sales revenues;
- cost, timing and success of technology development efforts;
- market acceptance of our existing and future technologies and products;
- competing technological and market developments;
- cost of maintaining and enforcing patent claims and intellectual property rights;
- variations in manufacturing yields, materials costs and other manufacturing risks; and
- costs of acquiring other businesses and integrating the acquired operations.

In the event Synopsys does not consummate its acquisition of our company as contemplated by the reorganization agreement, we expect that our existing capital and cash generated from operations, if any, will be sufficient to meet our capital requirements for the foreseeable future. We expect that a licensing business such as ours generally will require less cash to support operations after multiple licensees begin to ship products and pay royalties. However, we cannot be certain that we will not require additional financing at some point in time. Should our cash resources prove inadequate, we might need to raise additional funding through public or private financing. There can be no assurance that such additional funding will be available to us on favorable terms, if at all. The failure to raise capital when needed could have a material, adverse effect on our business and financial condition.

#### **Lease Commitments and Off Balance Sheet Financing**

The impact that our contractual obligations as of December 31, 2003 are expected to have on our liquidity and cash flow in future periods is as follows:

	Payment Due by Period				
	Total	Less than 1 year	1-3 years	4-5 years	Over 5 years
Operating Lease Obligations	\$ 3,009	\$ 1,325	\$ 1,183	\$ 501	\$ —
Capital Lease Obligations	28	14	14	—	—

The Company did not have any unconditional purchase obligations as of December 31, 2003.

### Recent Accounting Pronouncements

See Note 1 of the Consolidated Financial Statements for a full description of recent accounting pronouncements including the respective expected dates of adoption and effects on results of operations and financial condition.

### *Item 7A. Quantitative and Qualitative Discussion of Market Interest Rate Risk*

Our investment portfolio consists of money market funds, corporate-backed debt obligations and mortgage-backed government obligations generally due within one year. Our primary objective with investment portfolio is to invest available cash while preserving principal and meeting liquidity needs. In accordance with our investment policy, we place investments with high credit quality issuers and limit the amount of credit exposure to any one issuer. These securities, which approximate \$80.9 million as of December 31, 2003, and have an average interest rate of approximately 1.68%, are subject to interest rate risks. However, based on the investment portfolio contents and our ability to hold these investments until maturity, we believe that if a significant change in interest rates were to occur, it would not have a material effect on our financial condition.

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

Reference is made to the financial statements listed under the heading (a) (1) Financial Statements and Report of Ernst & Young LLP of Item 15, which financial statements are incorporated by reference in response to this Item 8.



## Quarterly Results of Operations

The following tables set forth unaudited results of operations data for the eight quarters ended December 31, 2003. This unaudited information has been prepared on a basis consistent with our audited financial statements appearing elsewhere in this report and, in the opinion of our management, includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the information for the periods presented. The unaudited quarterly information should be read in conjunction with the financial statements and notes included elsewhere in this report.

	<u>Dec. 31,</u> <u>2003</u>	<u>Sep. 30,</u> <u>2003</u>	<u>June 30,</u> <u>2003</u>	<u>Mar. 31,</u> <u>2003</u>	<u>Dec. 31,</u> <u>2002</u>	<u>Sep. 30,</u> <u>2002</u>	<u>June 30,</u> <u>2002</u>	<u>Mar. 31,</u> <u>2002</u>
Net revenue:								
Product	\$ 334	\$ 511	\$ 515	\$ 544	\$ 599	\$ 784	\$ 648	\$ 893
Licensing	1,929	1,780	2,196	4,513	3,263	2,756	2,620	1,884
Royalty	1,088	1,208	1,759	2,856	3,993	3,471	3,262	3,618
	<u>3,351</u>	<u>3,499</u>	<u>4,470</u>	<u>7,913</u>	<u>7,855</u>	<u>7,011</u>	<u>6,530</u>	<u>6,395</u>
Cost of net revenue:								
Product	259	260	291	407	373	465	383	447
Licensing	426	588	341	615	631	448	339	312
	<u>685</u>	<u>848</u>	<u>632</u>	<u>1,022</u>	<u>1,004</u>	<u>913</u>	<u>722</u>	<u>759</u>
Gross profit	2,666	2,651	3,838	6,891	6,851	6,098	5,808	5,636
Research and development	2,087	2,093	2,168	2,245	2,099	1,666	1,490	1,331
Selling, general and administrative	1,463	1,396	1,592	1,670	1,513	1,258	1,187	992
Stock-based compensation charge	<u>38</u>	<u>190</u>	<u>105</u>	<u>126</u>	<u>171</u>	<u>121</u>	<u>156</u>	<u>208</u>
Total operating expenses	3,588	3,679	3,865	4,041	3,783	3,045	2,833	2,531
Income (loss) from operations	(922)	(1,028)	(27)	2,850	3,068	3,053	2,975	3,105
Interest and other income	461	311	652	490	347	392	433	367
Benefit (provision) for income taxes	<u>46</u>	<u>468</u>	<u>(125)</u>	<u>(668)</u>	<u>691</u>	<u>(689)</u>	<u>(681)</u>	<u>(694)</u>
Net income (loss)	\$ (415)	\$ (249)	\$ 500	\$ 2,672	\$ 4,106	\$ 2,756	\$ 2,727	\$ 2,778
Net income (loss) per share:								
Basic	\$ (0.01)	\$ (0.01)	\$ 0.02	\$ 0.09	\$ 0.14	\$ 0.09	\$ 0.09	\$ 0.09
Diluted	\$ (0.01)	\$ (0.01)	\$ 0.02	\$ 0.09	\$ 0.13	\$ 0.09	\$ 0.09	\$ 0.09
Shares used in computing net income (loss) per share:								
Basic	<u>30,704</u>	<u>30,614</u>	<u>30,395</u>	<u>30,302</u>	<u>30,213</u>	<u>30,090</u>	<u>29,690</u>	<u>29,570</u>
Diluted	<u>30,704</u>	<u>30,614</u>	<u>30,848</u>	<u>30,539</u>	<u>31,309</u>	<u>30,686</u>	<u>31,318</u>	<u>31,742</u>

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

Not applicable.

#### Item 9a. Controls and Procedures

(a) Evaluation of disclosure controls and procedures

Under the supervision and with the participation of our management, including our principle executive officer and principal financial officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, as of the end of the year covered by this report. Based on this evaluation, our principal executive officer and principal financial officer concluded as of December 31, 2003 that our disclosure controls and procedures were effective such that the information relating to us, including our consolidated subsidiaries, required to be disclosed in our reports filed with the Securities and Exchange Commission (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to MoSys' management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.



(b) Changes in internal controls

There have been no significant changes in the Company's internal controls or in other factors, which could significantly affect internal controls subsequent to the date the Company carried out its evaluation.

### Part III

#### Item 10. Directors and Executive Officers of the Registrant

##### Directors and Executive Officers

The names of the Company's Directors and Executive Officers as of December 31, 2003 and certain information about them are set forth below:

Name	Age	Position(s) with the Company
Fu-Chieh Hsu	47	Chairman of the Board, President and Chief Executive Officer
Wingyu Leung	49	Executive Vice President, Chief Technical Officer and Director
Mark-Eric Jones	48	Vice President and General Manager— Intellectual Property
Mark Voll	49	Vice President, Finance & Administration, Chief Financial Officer and Secretary
Andre Hassan	44	Vice President and General Manager— Discrete Products
Carl E. Berg(1) (2)	66	Director
Wei Yen(1) (2)	49	Director

(1) Member of Audit Committee

(2) Member of Compensation Committee.

*Fu-Chieh Hsu.* Dr. Hsu has served as our Chairman of the Board since September 1991 and as its President and Chief Executive Officer since April 1992. Dr. Hsu also served as our Chief Financial Officer from April 1992 until May 1996. Prior to joining us, Dr. Hsu was the President and Chairman of the Board of Myson Technology, Inc., a developer of high performance semiconductor products, from August 1990 to August 1991. From May 1985 to August 1990, Dr. Hsu served as Vice President and Chief Technology Officer of Integrated Device Technology, Inc., a developer of high performance semiconductor products and modules. Dr. Hsu holds a B.S. in electrical engineering from National Taiwan University and a M.S. and Ph.D. in electrical engineering from the University of California at Berkeley.

*Wingyu Leung.* Dr. Leung has served as our Executive Vice President, Engineering, and Chief Technical Officer and as a member of our board of directors since April 1992. Dr. Leung also served as our Secretary from April 1992 until May 1996 and again from May 1997 until August 2000. Prior to joining us, Dr. Leung served as a technology consultant to several high technology companies, including Rambus, Inc., a developer of a high-speed chip-to-chip interface technology. Prior to that time, Dr. Leung served as a member of the technical staff of Rambus, and as a senior engineering manager at Integrated Device Technology, Inc., where he managed and participated in circuit design activities. Dr. Leung holds a B.S. in electrical engineering from the University of Maryland, a M.S. in electrical engineering from the University of Illinois, and a Ph.D. in electrical engineering and computer science from the University of California at Berkeley.

*Mark-Eric Jones.* Mr. Jones has served as our Vice President and General Manager—Intellectual Property since October 1998. Prior to joining our company, Mr. Jones served as Director, Intellectual Property Division of Mentor Graphics Corporation, a developer of EDA tools and provider of intellectual property from January 1996 to September 1998. Mr. Jones founded 3SOFT, Inc., a developer of intellectual property and served as its President and Chief Executive Officer from May 1976 to January 1996. Mr. Jones holds a M.A. from Trinity College, University of Cambridge, United Kingdom.

*Mark Voll.* Mr. Voll has served as our Vice President of Finance and Administration and Chief Financial Officer since June 2002. Mr. Voll previously held the same position with MoSys from March 1998 to June 2000. From June 2000 to May 2002 Mr. Voll served as the Chief Financial Officer for Axis Systems, Inc., a developer of semiconductor verification tools. Mr. Voll holds a B. S. in business administration from Providence College.

*Andre Hassan.* Mr. Hassan has served as our Vice President and General Manager—Discrete Products since July 2001. Prior to this, Mr. Hassan was General Manager—Discrete Products from January 1999 to June 2001. Mr. Hassan was Director of Marketing from

February 1996 to December 1998. Prior to joining our company, Mr. Hassan served as Strategic Marketing Manager for S3, Inc., a developer of semiconductor multimedia products from June 1994 to January 1996. Mr. Hassan holds a B.S. in electrical engineering from Worcester Polytechnic Institute.

*Carl E. Berg.* Mr. Berg has served as a member of our board of directors since September 1992. Since 1997, Mr. Berg has been the Chairman of the Board and Chief Executive Officer of Mission West Properties, Inc., a real estate investment trust. Mr. Berg has been actively engaged in the ownership, development and management of industrial real estate and in venture capital investment for over 30 years. He currently serves as a member of the board of directors of Mission West Properties, Inc., Valence Technology, Inc., a developer of advanced rechargeable battery technology, FOCUS Enhancements, Inc., a developer of video scan conversion products, and Systems Integrated Research Plc, a provider of educational software. Mr. Berg holds a B.A. in business from the University of New Mexico.

*Wei Yen.* Dr. Yen has served as a member of our board of directors since August 2000. In 2000, Dr. Yen co-founded RouteFree Inc., an audio/video network company, and iKuni, an artificial intelligence company, and has served each company as its Chairman of the Board since its formation. In 1997, he co-founded ArtX Incorporated and served as its Chairman of the Board until 2000, when it was acquired by ATI Technologies. In 1995, he co-founded Navio Communications and served as its Chief Executive Officer until 1997 when it merged with Network Computers Incorporated, now Liberate Technologies. From 1988 to 1995, Dr. Yen was a Senior Vice President at Silicon Graphics, Inc., where he oversaw all five product divisions and two subsidiaries. Dr. Yen was President of Mips Technologies from 1992 to 1993. He currently serves as a director of the Acer Groups. Dr. Yen received his Ph.D. in electrical engineering from Purdue University.

### **Committees of the Board of Directors and Meetings**

Our board of directors has standing Audit and Compensation Committees. Carl E. Berg and Wei Yen are the current members of both the Audit Committee and the Compensation Committee, as the vacancy created by Paul Russo's resignation as a director in August 2003 has not been filled to date. Mr. Berg is the Audit Committee's financial expert, but that status does not impose on him duties, liabilities or obligations that are greater than the duties, liabilities or obligations otherwise imposed on him as a member of the Audit Committee and the board of directors. Fu-Chieh Hsu participates in all Compensation Committee discussions and decisions regarding salaries and incentive compensation for all of our employees and consultants, except that he is excluded from discussions regarding his own salary and incentive compensation.

We do not have a nominating committee. The board does not believe that a nominating committee is necessary because all the independent directors currently serve on the Audit and Compensation Committees, and any additional committee of independent directors would consist of the same individuals. In the event the Synopsys acquisition does not occur, the board intends to fill the vacancy left by Mr. Russo's resignation and to review and approve nominations for election to the board of directors at the next annual meeting of stockholders solely by resolution of the independent directors on the board.

During the fiscal year ended December 31, 2003, including telephonic meetings, there were four meetings of the board of directors, four meetings of the Audit Committee and four meetings of the Compensation Committee. Every director attended at least 75% of the meetings of the Board and each committee held during the period for which he was a director during the fiscal year ended December 31, 2003. In addition, the members of the board of directors, the Compensation Committee and the Audit Committee acted at times by unanimous written consent pursuant to Delaware law.

### **Audit Committee Report**

The Audit Committee reviews, acts on and reports to the board of directors with respect to various auditing and accounting matters. Management has primary responsibility for MoSys' financial statements and the overall reporting process, including MoSys' system of internal controls. The independent auditors audit the financial statements prepared by management, express an opinion as to whether those financial statements fairly present the financial position, results of operations and cash flows of MoSys in conformity with accounting principles generally accepted in the United States and discuss with the Audit Committee any issues they believe should be raised with us. The Audit Committee's responsibilities under the Audit Committee charter adopted by the board of directors effective August 15, 2000 and amended as of February 22, 2004, include the selection or dismissal of the independent auditors, review of the scope of the annual audits, and approval of fees to be paid to the independent auditors. The Audit Committee also monitors the performance of the independent auditors, and reviews the audit report on the consolidated financial statements following completion of the audit and the accounting practices of MoSys with respect to internal accounting and financial controls.

The Audit Committee Charter as amended to date can be found through our website [www.mosys.com](http://www.mosys.com). The Audit Committee has delegated authority to Mr. Berg to pre-approve non-audit services provided by our independent auditors.

During the fiscal year ended December 31, 2003, Messrs. Berg and Yen served on the Audit Committee for the entire year. Paul Russo served on the Audit Committee until the end of August 2003. The Company believes that Messrs. Berg and Yen are independent within the meaning of the National Association of Securities Dealers, Inc.'s listing standards.

The Audit Committee has reviewed and discussed the audited financial statements of the Company for fiscal year 2003 with management and Ernst & Young LLP ("E&Y"), MoSys' independent auditors. The Committee discussed with E&Y matters required

to be discussed by Statement on Auditing Standards No. 61 (Communication with Audit Committees). E&Y provided the Audit Committee the written disclosures required by Independence Standards Board Standard No. 1 (Independence Discussions with Audit Committees). The Audit Committee has discussed E&Y's independence with members of that firm. The Audit Committee received written confirmations from management with respect to the non-audit services provided by E&Y and has considered whether the provision of such services is compatible with maintaining the auditor's independence. The Audit Committee has determined that the rendering of such services by E&Y is compatible with maintaining the auditors' independence.

Based on the discussions with E&Y concerning the audit, the independence discussions and the financial statement review, and such other matters deemed relevant and appropriate by the Audit Committee, the Audit Committee recommended to the board of directors that MoSys financial statements for the fiscal year ended December 31, 2003 be included in its 2003 Annual Report on Form 10-K filed with the Securities and Exchange Commission.

The Audit Committee of the Board of Directors:

Carl E. Berg  
Wei Yen

### Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our directors, executive officers and persons who own more than 10% of a registered class of the Company's equity securities to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of ours. Directors, executive officers and greater than 10% holders are required by SEC regulation to furnish us with copies of all Section 16(a) reports they file. Based solely on our review of Forms 3 and 4 received during 2003 and Forms 5 (or any written representations) received with respect to fiscal year 2003, we believe that all directors, executive officers and 10% stockholders complied with all applicable Section 16(a) filing requirements during 2003.

### Code of Ethics

We adopted a code of ethics that applies to all of our employees. The code of ethics is designed to deter wrongdoing and to promote, among other things, honest and ethical conduct, full, fair, accurate, timely, and understandable disclosures in reports and documents submitted to the Securities and Exchange Commission and other public communications, compliance with applicable governmental laws, rules and regulations, the prompt internal reporting of violations of the code to an appropriate person or persons identified in the code and accountability for adherence to such code.

The code of ethics is available on our website [www.mosys.com](http://www.mosys.com). If we make any substantive amendments to the code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to our Chief Executive Officer, Chief Financial Officer or Corporate Controller, or persons performing similar functions, where such amendment or waiver is required to be disclosed under applicable SEC rules, we intend to disclose the nature of such amendment or waiver on our website.

### Item 11. Executive Compensation

#### Summary Compensation Table

The following Summary Compensation Table sets forth summary information as to compensation received by our Chief Executive Officer and each of the four other most highly compensated persons who were serving as executive officers of the Company as of December 31, 2003.

Name	Year	Annual Compensation		Long-term Compensation
		Salary(\$)	Bonus(\$)	Securities Underlying Options
Fu-Chieh Hsu Chairman of the Board, President and Chief Executive Officer	2003	\$ 279,108	\$ 72,663	113,621
	2002	266,167	73,979	81,691
	2001	238,000	57,040	60,000
Wingyu Leung Executive Vice President, Chief Technical Officer and Director	2003	232,950	58,130	92,897
	2002	221,833	65,123	67,353
	2001	198,000	57,040	50,000
Mark-Eric Jones Vice President and General Manager—Intellectual Property	2003	206,792	29,065	61,448
	2002	197,000	36,273	48,676
	2001	184,000	35,650	40,000

Andre Hassan	2003	171,871	29,065	61,448
General Manager—Discrete Products	2002	160,250	34,417	48,676
	2001	148,875	35,650	40,000
Mark Voll*	2003	178,238	2,085	26,710
Vice President, Finance & Administration, Chief Financial Officer and Secretary	2002	87,500	—	200,000

\* Mr. Voll became an executive officer in June 2002.

### **Option Grants in Last Fiscal Year**

The following table provides information regarding the grant of stock options during fiscal year 2003 to the named executive

officers.

	Number of securities underlying options granted (1)	% of total options granted to employees in 2003 (2)	Exercise Price (3)	Expiration Date	Potential realizable value at assumed annual rates of stock price appreciation for option term (4)	
					5%	10%
Fu-Chieh Hsu	53,621	5.03%	\$ 6.89	4/16/2013	\$ 232,344	\$ 588,806
	60,000	5.63%	9.81	9/2/2013	370,167	938,077
Wingyu Leung	42,897	4.03%	6.89	4/16/2013	185,876	471,047
	50,000	4.69%	9.81	9/2/2013	308,473	781,731
Mark-Eric Jones	21,448	2.01%	6.89	4/16/2013	92,936	235,518
	40,000	3.75%	9.81	9/2/2013	246,778	625,385
Andre Hassan	21,448	2.01%	6.89	4/16/2013	92,936	235,518
	40,000	3.75%	9.81	9/2/2013	246,778	625,385
Mark Voll	1,710	0.16%	6.89	4/16/2013	7,410	18,777
	25,000	2.35%	9.81	9/2/2013	154,236	390,865

(1) Options are incentive stock options to the extent qualified and nonstatutory options otherwise. All of the options have a 10-year term and generally terminate if not exercised with 90 days following the executive's employment with the Company or the expiration date, whichever occurs earlier. Each of the named executive officers in the table received an option grant under the 2000 Employee Stock Option Plan on September 2, 2003. Those options vest as to 25% of the shares subject to each option on the first anniversary of the grant date and 1/36<sup>th</sup> of the shares subject to each option vest monthly thereafter. In addition, on April 16, 2003 each of such named executive officers received additional options under the 2000 Employee Stock Option Plan as bonuses for the Company's performance as measured against certain pre-established performance goals for each officer. The bonus stock options were immediately vested as to 50% of the shares of Common Stock on the grant date. The remaining option shares vest ratably each month over the two-year period following the grant date, subject to continued service.

(2) The percentage of total options granted is based upon options to purchase an aggregate of 1,065,624 shares of Common Stock granted during the fiscal year ended December 31, 2003 to Company employees, including the named executive officers and outside Directors.

(3) All options were granted at an exercise price equal to the fair market value of the Company's Common Stock on the grant date. Fair market value for the two groups of option grants was equal to the closing price on the NASDAQ National Market on April 16, 2003 and September 2, 2003, respectively.

(4) Potential realizable value has been calculated by assuming that the market price of the Common Stock appreciates 5% and 10% each year from the date of grant of the options until the expiration of the options. These assumed annual rates of appreciation were used in compliance with the rules of the SEC and are not intended to forecast future price appreciation of the Common Stock. The actual value realized from the options could be substantially higher or lower than the values reported above, depending upon the future appreciation or depreciation of the Common Stock during the option period and the timing of the exercise of the options. Unless the executive officer remains employed until he vests in the option shares and the market price of the Common Stock appreciates over the option term, no value will be realized from the option grants made to the executive officers.

#### Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Values

The following table provides information regarding the aggregate exercises of options by each of the named executive officers. In addition, this table includes the number of shares covered by both exercisable and unexercisable stock options as of December 31, 2003, and the value of "in-the-money" options, which values represent the positive spread between the exercise price of any such options and the fiscal year-end value of the Company's Common Stock.

	Shares acquired on exercise	Value Realized (1)	Number of Securities Underlying Unexercised Options At December 31, 2003		Value of in-the-Money Options At December 31, 2003 (3)	
			Exercisable (2)	Unexercisable	Exercisable	Unexercisable
Fu-Chieh Hsu	—	\$ —	287,088	143,224	\$ 1,078,250	\$ 34,598
Wingyu Leung	30,000	183,300	201,337	118,913	607,263	27,916
Mark-Eric Jones	97,500	752,345	291,126	90,498	1,526,786	14,907
Andre Hassan	50,000	508,500	191,355	89,769	808,417	14,491
Mark Voll	—	—	76,140	150,570	1,915	958





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Value based on the fair market value of Common Stock on the date of exercise less the option exercise price.

(2) Pursuant to the option agreements for option grants made under the Company's 1996 Stock Plan, the option holders were entitled to elect to exercise all or any part of their vested and unvested options at any time. Any shares of Common Stock received by the optionee on exercise of unvested options become subject to the Company's right of repurchase pursuant to a restricted stock purchase agreement. The number of shares so obtained that are subject to the Company's right of repurchase decreases over time in accordance with the vesting schedule applicable to the unvested options exercised. Accordingly, all options granted to the named executive officers under the 1996 plan are deemed to be exercisable for the purpose of the following table, even though Messrs. Hsu, Leung, Jones and Hassan had 4,687, 4,167, 3,750, and 3,021 unvested shares, respectively, subject to repurchase at December 31, 2003.

(3) Value based on the fair market value of Common Stock of \$8.57 on December 31, 2003, less the option exercise price.

### **Employment Contracts, Termination of Employment and Change-in-Control Agreements**

We currently have confidentiality and invention assignment agreements in place with the named executive officers. We do not, however, have any compensatory plan or arrangement with the named executive officers that is activated upon the resignation, termination or retirement of any of these executive officers, upon a change in control of our company, or upon a change in the named executive officer's responsibilities following a change in control.

### **Compensation of Directors**

In 2003, members of our board of directors did not receive compensation for their services as directors. In August 2000, we granted options to purchase 10,000 shares of common stock to Mr. Berg for the years beginning in each March of 1997 through 2002 under our 1996 Stock Option Plan. We granted options to purchase 10,000 shares of common stock in each of five consecutive years to Dr. Yen for the years beginning in each August from 2000 through 2004. All of these options vest during each year at a rate of approximately 833 shares each month.

Our 2000 Employee Stock Option Plan provides that options will be granted to non-employee directors pursuant to an automatic, nondiscretionary grant mechanism. Each non-employee director receives automatically a grant of an option to purchase 10,000 shares of common stock each year at an exercise price set at the fair market value of the Common Stock on the date of grant. These options vest at a rate of approximately 833 shares each month. Pursuant to this provision the Company granted options in 2003 to Mr. Berg to purchase 10,000 shares of Common Stock, which options begin vesting in March 2005, and 10,000 shares of common stock to Dr. Yen, which options begin vesting in August 2006. No additional options will be granted to non-employee directors for service during any year in which the director has already been granted options in a like or greater number.

### **Compensation Committee Interlocks and Insider Participation**

The Compensation Committee of the board of directors is responsible for determining salaries, incentives and other forms of compensation for directors, officers and other employees, and administers our incentive compensation and benefit plans. During 2003, none of our executive officers served as a member of the board of directors or compensation committee of any entity that had one or more of its executive officers serving as a member of our board of directors or Compensation Committee. Neither Mr. Berg nor Mr. Yen was an officer or employee of ours during 2003, or at any other time.

### **Report on Executive Compensation by the Compensation Committee of the Board of Directors**

The Compensation Committee currently is comprised of independent members of the board of directors. The board of directors has delegated to the Compensation Committee responsibility for reviewing, recommending and approving our compensation policies and benefits programs. The Compensation Committee also has the principal responsibility for the administration of our stock plans, including approving stock option grants to executive officers.

### **Compensation Philosophy**

Our executive compensation policy is designed to attract and retain qualified executive personnel by providing executives with a competitive total compensation package based in large part on the executive's contribution to our financial and operational success, the executive's personal performance and increases in stockholder value as measured by our stock price.

### **Compensation Program**

The compensation package for our executive officers comprises the following three components:

*Base Salary.* The Compensation Committee determines the base salary of each executive based on the executive's scope of responsibility, past accomplishments and experience and personal performance, internal comparability considerations and data regarding the prevailing compensation levels for comparable positions in relevant competing executive labor markets. The Compensation Committee may give different weight to each of these factors for each executive, as it deems appropriate. In selecting comparable companies for the purpose of setting competitive compensation for executives, the Compensation Committee considers

many factors not directly associated with stock price performance, such as geographic location, annual revenue and profitability, organizational structure, development stage and market capitalization.

*Annual Incentive Compensation.* In 2003 and prior years, each of the executive officers could earn annual bonuses set at a percentage of his or her base salary on the basis of MoSys' performance as measured against certain pre-established performance measures, principally revenues, and the attainment of individual objectives set for each officer, other than the CEO, based upon the CEO's recommendations. The Compensation Committee established the performance objectives for the CEO. Based on performance against their objectives certain executive officers did receive bonus payments in 2003.

*Stock Options.* The Compensation Committee believes that granting stock options to executives and other key employees on an ongoing basis gives them a strong incentive to maximize stockholder value and aligns their interests with those of other stockholders. The Compensation Committee determines stock option grants under the 2000 Employee Stock Option Plan to all MoSys executive officers and employees. In determining the size of stock option grants under the annual bonus program for officers, the Compensation Committee takes into account the executive's current position with and responsibilities in setting the annual target grant. The percentage of the target grant awarded to the officer depends upon MoSys' performance against specified revenue, net income and

intellectual property licensing revenue objectives for each half of the fiscal year. Generally, each stock option grant allows the executive to purchase shares of the common stock at a price per share equal to the market price on the date the option is granted, but the Compensation Committee has the power to grant options at a lower price if considered appropriate under the circumstances. Each stock option grant generally becomes exercisable, or vests, in installments over time, contingent upon the executive's continued employment with MoSys.

In 2003, the Compensation Committee approved stock bonus grants under the 2000 Employee Stock Option Plan to certain executive officers based upon MoSys' performance as measured against certain pre-established performance goals for each officer during the second half of 2002. Those options vest 50% immediately and the remaining 50% vests monthly over two years. The exercise price was equal to the fair market value of the common stock on the grant date. The Compensation Committee has determined that executive officers, including the CEO, will not be eligible to receive bonus option grants with respect to MoSys' performance during fiscal 2003.

*Compensation of Chief Executive Officer.* In 2003, the compensation for Fu-Chieh Hsu, the CEO, was comprised of the three components described above, and is reviewed annually. In setting Dr. Hsu's compensation package for fiscal year 2003, the Compensation Committee intended to provide a base salary competitive with that paid to other chief executive officers in competing executive labor markets, and to make a significant portion of the total compensation package contingent upon MoSys' financial and operational performance. During the fiscal year, Dr. Hsu received a base salary of \$279,108. Dr. Hsu was awarded a total cash bonus of approximately \$72,663 based primarily on the achievement of financial and operational targets.

*Compliance with Internal Revenue Code Section 162(m).* Section 162(m) of the Internal Revenue Code generally disallows a tax deduction to publicly-held companies for compensation paid to certain executive officers, to the extent that compensation paid to the officer exceeds \$1 million during MoSys' taxable year. The compensation paid to MoSys' executive officers for the year ended December 31, 2003 did not exceed the \$1 million limit per officer. In addition, the MoSys employee stock option plans and executive incentive option grants have been structured so that any compensation deemed paid to an executive officer in connection with the exercise of his or her outstanding options with an exercise price per share equal to the fair market value per share of the common stock on the grant date will qualify as performance-based compensation that will not be subject to the \$1 million limitation. The Compensation Committee does not expect to take any action at this time to modify cash compensation payable to the executive officers to avoid the application of Section 162(m).

The Compensation Committee of the Board of Directors:

Carl E. Berg  
Wei Yen

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

The following table sets forth certain information as of February 23, 2004, concerning the ownership of common stock by (i) each stockholder of known by us to be the beneficial owner of more than 5% of the outstanding shares of Common Stock, (ii) each current member of the board of directors, (iii) each executive officer named in the Summary Compensation Table appearing under "Executive Compensation," above and (iv) all current directors and executive officers as a group.

Beneficial ownership is determined in accordance with Rule 13d-3 of the Securities Exchange Act of 1934, as amended, and includes all shares over which the beneficial owner exercises voting or investment power. Options and warrants to purchase common stock that are presently exercisable or exercisable within 60 days of February 23, 2004 and are included in the total number of shares beneficially owned for the person holding those options or warrants are considered outstanding for the purpose of calculating percentage ownership of the particular holder. We have relied on information supplied by its officers, directors and certain stockholders and on information contained in filings with the SEC. Except as otherwise indicated, and subject to community property laws where applicable, we believe, based on information provided by these persons, that the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them.

Name (1)	Number of Shares Beneficially Owned	Shares Issuable on Exercise of Outstanding Options Within 60 days of February 23, 2004	Percent of Outstanding Shares (2)
Wasatch Advisors, Inc. 150 Social Hall Avenue, Salt Lake City, UT 84111	3,137,034	—	10.2%
Wellington Management Company, LLP ('WMC') (3) 75 State St., Boston, MA 02109	2,804,500	—	9.1%
William Blair & Company, LLC 222 W. Adams Street, Chicago, IL 60606	2,413,407	—	7.8%
1981 Kara Ann Berg Trust, Clyde J. Berg, Trustee (4) 10050 Bandle Drive, Cupertino, CA 94014	2,304,830	—	7.5%
Putnam Investments (5) One Post Office Square, Boston, MA 02109	1,842,443	—	6.0%
<b>Current Directors</b>			
Fu-Chieh Hsu (6)	3,747,114	307,114	12.1%
Wingyu Leung (7)	3,108,704	218,024	10.0%
Carl E. Berg (8)	200,829	70,833	*
Wei Yen	285,926	35,926	*
<b>Named Executive Officers who are not Directors</b>			
Mark-Eric Jones	303,302	303,302	1.0%
Andre Hassan	210,299	202,948	*
Mark Voll	132,950	92,950	*
All current directors and executive officers as a group (7 persons)	7,989,124	1,231,097	25.0%

\* Represents holdings of less than one percent.

(1) Unless indicated otherwise, the address of each person listed in the table is c/o Monolithic System Technology, Inc., 1020 Stewart Drive, Sunnyvale, California 94085.

(2) The percentage of beneficial ownership is based on 30,767,544 shares of common stock outstanding as of February 23, 2004 and excluding all shares of common stock issuable upon the exercise of outstanding options other than the shares so issuable upon the exercise of options held and exercisable within 60 days of February 23, 2004 by the named person.

(3) According to a Schedule 13G filed with the Securities and Exchange Commission on February 12, 2004 by Wellington Management Company, LLP ("WMC"), in its capacity as an investment advisor. WMC has reported that the 2,804,500 shares are owned of record by its clients. WMC has reported that it has shared power to vote or direct the vote of 1,519,100 shares and shared power to dispose or direct the disposition of 2,804,500 shares.

(4) Clyde J. Berg is Carl E. Berg's brother, and Carl Berg's adult daughter is the sole beneficiary of this trust. These shares were shares distributed by West Coast Venture Capital Limited, L.P. ("West Coast") in connection with the liquidation of West Coast, effective June 2002. Mr. Berg disclaims beneficial ownership of all these shares.

(5) According to a Schedule 13G filed with the Securities and Exchange Commission on February 13, 2004 by Putnam, LLC d/b/a Putnam Investments ("PI"), on behalf of itself and Marsh & McLennan Companies, Inc. ("MMC"), Putnam Investment Management, LLC ("PIM") and The Putnam Advisory Company, LLC ("PAC"). PI, which is a wholly-owned subsidiary of MMC, wholly owns two registered investment advisers: (a) PIM, which is the investment advisor to the Putnam family of mutual funds, and (b) PAC, which is the investment advisor to Putnam's institutional clients. According to the Schedule 13G: (i) PI has shared voting power over 1,087,783 shares and shared dispositive power over 1,842,443 shares, (ii) PIM has shared dispositive power over 588,050 shares, and (iii) PAC has shared voting power over 1,087,783 shares and shared dispositive power over 1,254,393 shares.

(6) Includes 480,000 shares of common stock held by Dr. Hsu as trustee for trusts established for the benefit of Dr. Hsu's children and 40,000 shares of common stock held directly by such children.

(7) Includes 600,000 shares of common stock held by Dr. Leung as trustee of trusts established for the benefit of Dr. Leung's children.

(8) Includes 124,998 shares held by Berg & Berg Enterprises, LLC, of which Mr. Berg is the sole manager. These shares were distributed by West Coast in connection with its liquidation, effective June 2002. Mr. Berg disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest in them. Also includes 4,998 shares owned by Mr. Berg's wife. Mr. Berg disclaims beneficial ownership of these shares.

## Equity Compensation Plan Information

The following table provides information as of December 31, 2003 regarding equity compensation plans approved by the Company's security holders. The Company does not have any equity compensation plans that have not been approved by our security holders.

<b>Plan Category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights</b>	<b>Weighted-average exercise price of outstanding options, warrants and rights</b>	<b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</b>
Equity compensation plans approved by security holders	4,372,000	\$ 7.92	4,010,000(1)

(1) Consists of 3,712,000 shares of Common Stock available for future issuance under the 2000 Employee Stock Option Plan and 298,000 shares of Common Stock available for future issuance under the 2000 Employee Stock Purchase Plan, in each case as of December 31, 2003. In addition, the 2000 Employee Stock Option Plan provides for an annual increase in the number of shares reserved under the plan on January 1 of each year, equal to the lesser of 500,000 shares, two percent of the Company's outstanding shares of Common Stock on such date or a lesser amount determined by the Board of Directors. The 2000 Employee Stock Purchase Plan provides for an annual increase in the number of shares reserved under the plan on January 1 of each year, equal to the lesser of 100,000 shares, one percent of the outstanding shares of Common Stock on such date or a lesser amount determined by the Board of Directors.

### Item 13. Certain Relationships and Related Transactions

Since January 1, 2003, we have not entered into any material transaction with any of our directors, executive officers or holders of more than 5% of the common stock, or with any persons in which directors, named executive officers or such stockholders have direct or indirect material interests.

### Item 14. Accountant Fees and Services

The Audit Committee meets with Ernst & Young LLP ("E&Y") several times a year. At such times, the Audit Committee reviews both audit and non-audit services performed by E&Y as well as the fees charged for such services. The Audit Committee has delegated its authority to the chairman of the Audit Committee to preapprove requests for non-audit services. Among other things, the Audit Committee or the chairman of the Committee examines the effect that performance of non-audit services may have upon the independence of the auditors.

#### Fees Incurred by the Company for Ernst & Young LLP

The following table shows the fees paid or accrued (in thousands) by us for the audit and other services provided by Ernst & Young LLP for fiscal 2003 and 2002. During the fiscal year ended December 31, 2003 and 2002, no fees were billed by E&Y for information technology consulting.

	<b>2003</b>	<b>2002</b>
Audit Fees (1)	\$ 387	\$ 206
Audit-Related Fees (2)	42	105
Tax Fees (3)	43	83
<b>Total</b>	<b>\$ 472</b>	<b>\$ 394</b>

(1) Audit fees represent fees for professional services provided in connection with the audit of our financial statements and review of our quarterly financial statements.

(2) Audit-related fees consisted primarily of accounting consultations for 2003. For 2002, audit-related fees include fees in connection with the acquisition of ATMOS and other accounting related consultations.

(3) Tax fees consisted primarily of income tax compliance and related tax services.

## Part IV

### *Item 15. Exhibits, Financial Statement Schedules and Reports on the Form 8K*

(a) The following documents are filed as part of this report:

(1) Financial Statements and Report of Ernst & Young LLP Independent Auditors, which are set forth in the index to Consolidated Financial Statements on pages F-1 through F-30 of this report.

[Report of Ernst & Young LLP Independent Auditors](#)

[Consolidated Balance Sheets](#)

[Consolidated Statements of Income](#)

[Consolidated Statements of Stockholders' Equity](#)

[Consolidated Statements of Cash Flows](#)

[Notes to Consolidated Financial Statements](#)

- (2) Financial Statement Schedule—Schedule II—Valuation and Qualifying Accounts
- (3) Exhibits
- 2.1 \* Merger Agreement regarding the Registrant's reincorporation in Delaware
- 2.2 \*\*\* Share Purchase Agreement for the shares for ATMOS Corporation
- 2.3 # Agreement and Plan of Reorganization, dated February 23, 2004, among Synopsys, Inc., Mountain Acquisition Sub, Inc., a wholly owned subsidiary of Synopsys, Inc., and Monolithic System Technology, Inc.
- 2.4 ## Form of Stockholder Agreement, dated February 23, 2004, among Synopsys, Inc., Mountain Acquisition Sub, Inc., a wholly owned subsidiary of Synopsys, Inc., and the stockholder of Monolithic System Technology, Inc.
- 3.1 Not currently in use
- 3.2 Not currently in use
- 3.3 \* Restated Certificate of Incorporation of the Registrant
- 3.4 \* Bylaws of the Registrant
- 4.1 \* Specimen common stock certificate
- 4.2 \* Third Amended and Restated Investor Rights Agreement dated September 27, 1997
- 4.3 \* Rights Agreement
- 10.1 \* Form of Indemnity Agreement between the Registrant and each of its directors and executive officers
- 10.2 \* 1992 Stock Option Plan and form of Option Agreement thereunder
- 10.3 \* 1996 Stock Plan and form of Option Agreement thereunder
- 10.4 \* Form of Restricted Stock Purchase Agreement
- 10.5 \* 2000 Employee Stock Option Plan and form of Option Agreement thereunder
- 10.6 \* 2000 Employee Stock Purchase Plan and form of Subscription Agreement thereunder
- 10.7 \* Standard Industrial Lease, dated September 24, 1996, between the Registrant and McCandless Properties
- 10.8 \* First Amendment to Lease, dated June 30, 2000, between the Registrant and McCandless Properties
- 10.9 \* Agreement between Nintendo Co., Ltd. and the Registrant dated August 31, 1999
- 10.10 †\* License Agreement between NEC Corporation and the Registrant dated January 31, 1999



10.11	†*	License Agreement between NEC Corporation and the Registrant dated December 17, 1999
10.12	*	Employment Agreement between Registrant and F. Judson Mitchell dated July 17, 2000
21.1		List of subsidiaries
23.1		Consent of Ernst & Young LLP Independent Auditors
24.1	**	Power of Attorney
31.1		Rule 13a–14 certification
31.2		Rule 13a–14 certification
32		Section 1350 certification

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- \* Incorporated by reference to the same–numbered exhibit to the Company’s Registration Statement on Form S–1, as amended, originally filed August 4, 2000, declared effective June 27, 2001 (Commission file No. 333–43122).
  - † Portions of this exhibit have been omitted pursuant to Order Granting Confidential Treatment Under the Securities Act of 1933 dated June 27, 2001 (Commission File No. 333–43122—CF#10183).
  - \*\* Set forth on page 44 of this report.
  - \*\*\* Incorporated by reference to the same–numbered exhibit to the Company’s report on Form 8–K/A filed on November 13, 2002.
  - # Incorporated by reference to Exhibit 2.1 of the Current Report on Form 8–K filed by Synopsys, Inc. on February 26, 2004, (Commission File No. 000–19807).
  - ## Incorporated by reference to Exhibit 2.2 of the Current Report on Form 8–K filed by Synopsys, Inc. on February 26, 2004. (Commission File No. 000–19807).

(b) Reports on Form 8–K

On November 13, 2003, we filed a report on Form 8–K regarding our results of operations and financial condition for the third quarter of 2003.



<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Carl E. Berg</u> Carl E. Berg	Director	March 12 , 2004
<u>/s/ Wei Yen</u> Wei Yen	Director	March 12 , 2004

45

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**MONOLITHIC SYSTEM TECHNOLOGY, INC.  
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

[Report of Ernst & Young LLP Independent Auditors](#)  
[Consolidated Balance Sheets](#)  
[Consolidated Statements of Income](#)  
[Consolidated Statements of Stockholders' Equity](#)  
[Consolidated Statements of Cash Flows](#)  
[Notes to Consolidated Financial Statements](#)  
[Schedule II Valuation and Qualifying Accounts](#)

i

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## REPORT OF INDEPENDENT AUDITORS

The Board of Directors and Stockholders of  
Monolithic System Technology, Inc.

We have audited the accompanying consolidated balance sheets of Monolithic System Technology, Inc. as of December 31, 2003 and 2002, and the related consolidated statements of income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2003. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule 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. Those standards require that we plan and perform the audits 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 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 consolidated financial position of Monolithic System Technology, Inc. at December 31, 2003 and 2002, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

ERNST & YOUNG LLP

San Jose, California  
January 26, 2004

**MONOLITHIC SYSTEM TECHNOLOGY, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
(In thousands, except per share data)

	December 31,	
	2003	2002
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 22,033	\$ 26,321
Short-term investments	19,332	42,112
Accounts receivable	1,027	943
Unbilled contract receivable	1,106	693
Inventories	474	1,037
Prepaid expenses and other current assets	3,822	4,475
Total current assets	47,794	75,581
Long-term investments	44,462	11,400
Property and equipment, net	1,796	3,352
Goodwill	12,326	12,326
Other assets	514	431
Total assets	\$ 106,892	\$ 103,090
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 116	\$ 132
Accrued expenses and other liabilities	2,733	2,368
Deferred revenue	506	1,779
Current portion of capital lease obligations	13	89
Total current liabilities	3,368	4,368
Long-term portion of capital lease obligations	13	25
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 20,000 shares authorized; none issued and outstanding at December 31, 2003 and December 31, 2002	—	—
Common stock, \$0.01 par value; 120,000 shares authorized; 30,724 shares and 30,230 shares issued and outstanding at December 31, 2003 and December 31, 2002	307	302
Additional paid-in capital	99,719	97,796
Deferred stock-based compensation	(626)	(1,064)
Accumulated other comprehensive income	56	116
Retained earnings	4,055	1,547
Total stockholders' equity	103,511	98,697
Total liabilities and stockholders' equity	\$ 106,892	\$ 103,090

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

**MONOLITHIC SYSTEM TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF INCOME**  
(In thousands, except per share data)

	Year Ended December 31,		
	2003	2002	2001
Net revenue:			
Product	\$ 1,904	\$ 2,924	\$ 12,991
Licensing	10,418	10,523	6,053
Royalty	6,911	14,344	3,446
	<u>19,233</u>	<u>27,791</u>	<u>22,490</u>
Cost of net revenue:			
Product	1,217	1,668	5,776
Licensing	1,970	1,730	633
	<u>3,187</u>	<u>3,398</u>	<u>6,409</u>
Gross profit	16,046	24,393	16,081
Operating expenses:			
Research and development	8,593	6,586	4,420
Selling, general and administrative	6,121	4,950	4,686
Stock-based compensation expense	459	656	1,435
Total operating expenses	<u>15,173</u>	<u>12,192</u>	<u>10,541</u>
Income from operations	873	12,201	5,540
Interest and other income	1,914	1,539	1,818
Income before provision for income taxes	2,787	13,740	7,358
Provision for income taxes	<u>(279)</u>	<u>(1,373)</u>	<u>(367)</u>
Net income	\$ 2,508	\$ 12,367	\$ 6,991
Net income per share:			
Basic	\$ 0.08	\$ 0.41	\$ 0.35
Diluted	\$ 0.08	\$ 0.40	\$ 0.25
Shares used in computing net income per share:			
Basic	30,504	29,902	19,709
Diluted	30,998	31,275	28,390
Allocation of stock-based compensation to operating expenses:			
Research and development	\$ 148	\$ 340	\$ 781
Selling, general and administrative	311	316	654
	<u>\$ 459</u>	<u>\$ 656</u>	<u>\$ 1,435</u>

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

**MONOLITHIC SYSTEM TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)**  
(In thousands)

	Common Stock		Additional Paid-In Capital	Notes Receivable from Stockholders	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income	Retained Earnings (Accumulated Deficit)	Total
	Shares	Amount						
Balance at December 31, 2000	10,352	103	6,342	(408)	(2,078)	—	(17,811)	(13,852)
Issuance of Common Stock in initial public offering, net of issuance costs	5,750	58	51,496	—	—	—	—	51,554
Conversion of preferred stock into common stock	12,731	127	35,464	—	—	—	—	35,591
Issuance of Common Stock upon exercise of options	310	3	784	—	—	—	—	787
Issuance of Common Stock upon exercise of warrants	349	4	1,423	(277)	—	—	—	1,150
Repayment of note issued to stockholder	—	—	—	432	—	—	—	432
Deferred stock-based compensation	—	—	1,464	—	(1,464)	—	—	—
Amortization of deferred stock-based compensation and other change in employee status	—	—	(701)	—	2,136	—	—	1,435
Other comprehensive income — unrealized gain on available-for-sale investments	—	—	—	—	—	16	—	16
Net income	—	—	—	—	—	—	6,991	6,991
Comprehensive income	—	—	—	—	—	—	—	7,007
Balance at December 31, 2001	29,492	295	96,272	(253)	(1,406)	16	(10,820)	84,104
Issuance of Common Stock upon exercise of options	159	2	498	—	—	—	—	500
Issuance of Common Stock for Employee Stock Purchase Plan	47	—	409	—	—	—	—	409
Issuance of Common Stock for acquisition of ATMOS	62	—	622	—	(314)	—	—	308
Issuance of Common Stock upon exercise of cashless warrants	470	5	(5)	—	—	—	—	—
Repayment of note issued to stockholder	—	—	—	253	—	—	—	253
Amortization of deferred stock-based compensation and other change in employee status	—	—	—	—	656	—	—	656
Other comprehensive income — unrealized gain on available-for-sale investments	—	—	—	—	—	100	—	100
Net income	—	—	—	—	—	—	12,367	12,367
Comprehensive income	—	—	—	—	—	—	—	12,467
Balance at December 31, 2002	30,230	302	97,796	—	(1,064)	116	1,547	98,697
Issuance of Common Stock upon exercise of options	439	5	1,460	—	—	—	—	1,465
Issuance of Common Stock for Employee Stock Purchase Plan	55	—	442	—	—	—	—	442
Amortization of deferred stock-based compensation and other change in employee status	—	—	21	—	438	—	—	459
Other comprehensive income — unrealized loss on available-for-sale investments	—	—	—	—	—	(60)	—	(60)

Net income	—	—	—	—	—	—	2,508	<u>2,508</u>
Comprehensive income								2,448
Balance at December 31, 2003	<u>30,724</u>	<u>\$ 307</u>	<u>\$ 99,719</u>	<u>\$ —</u>	<u>\$ (626)</u>	<u>\$ 56</u>	<u>\$ 4,055</u>	<u>\$ 103,511</u>

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



**MONOLITHIC SYSTEM TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	Year Ended December 31,		
	2003	2002	2001
<b>Cash flows from operating activities:</b>			
Net income	\$ 2,508	\$ 12,367	\$ 6,991
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	2,049	1,315	811
Amortization of deferred stock-based compensation	459	656	1,435
Interest income on notes receivable from stockholder	—	(8)	(38)
Changes in current assets and liabilities:			
Accounts receivable	(84)	(600)	1,203
Unbilled contract receivable	(413)	(693)	—
Inventories	563	656	452
Prepaid expenses and other assets	570	(2,917)	161
Deferred revenue	(1,273)	(1,639)	(2,555)
Accounts payable	(16)	(1,292)	(661)
Accrued liabilities	365	40	649
Net cash provided by operating activities	<u>4,728</u>	<u>7,885</u>	<u>8,448</u>
<b>Cash flows from investing activities:</b>			
Purchase of property and equipment	(493)	(1,356)	(1,529)
Purchase of available-for-sale investments	(236,032)	(207,804)	(44,414)
Proceeds from maturity of short-term investments	258,752	202,722	7,500
Purchase of long-term investments	(33,062)	(11,400)	—
Acquisition of business and related expenses, net of cash acquired	—	(12,049)	—
Net cash used in investing activities	<u>(10,835)</u>	<u>(29,887)</u>	<u>(38,443)</u>
<b>Cash flows from financing activities:</b>			
Payment of capital lease obligations	(88)	(210)	—
Repayment of notes receivable from stockholder	—	261	432
Proceeds from issuance of common stock	1,907	909	787
Proceeds from exercise of common stock warrants	—	—	1,188
Net proceeds from initial public offering of common stock	—	—	51,554
Net cash provided by financing activities	<u>1,819</u>	<u>960</u>	<u>53,961</u>
Net increase (decrease) in cash and cash equivalents	(4,288)	(21,042)	23,966
Cash and cash equivalents at beginning of period	26,321	47,363	23,397
Cash and cash equivalents at end of period	<u>\$ 22,033</u>	<u>\$ 26,321</u>	<u>\$ 47,363</u>
<b>Supplemental disclosure:</b>			
Cash paid for income taxes	\$ 394	\$ 3,255	\$ 110
Conversion of preferred stock to common stock	\$ —	\$ —	\$ 35,591
Deferred compensation from common shares related to ATMOS acquisition subject to vesting requirements	\$ —	\$ 314	\$ —
Cashless warrant exercises	\$ —	\$ 5	\$ —

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

**MONOLITHIC SYSTEM TECHNOLOGY, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**Note 1—The Company and Summary of Significant Accounting Policies:**

*The Company*

Monolithic System Technology, Inc. (the “Company”) was incorporated in California on September 16, 1991 to design, develop and market high performance semiconductor memory products and technologies used by the semiconductor industry and electronic product manufacturers. On September 12, 2000, the stockholders approved the Company’s reincorporation in Delaware.

The Company has developed an innovative embedded–memory technology, called 1T–SRAM, which the Company licenses on a non–exclusive and worldwide basis to semiconductor companies and electronic product manufacturers. From its inception in 1991 through 1998, the Company focused primarily on the sale of stand–alone memory products. In the fourth quarter of 1998, the Company changed the emphasis of its business model to focus primarily on the licensing of its 1T–SRAM technologies and completed this transition in 2002 when a majority of our revenues were derived from licensing and royalty of our 1T–SRAM technologies.

*Basis of Presentation*

The consolidated financial statements include the accounts of the Company and its wholly–owned subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation. The Company reports financial results on a calendar fiscal year. Certain amounts reported in previous years have been reclassified to conform the 2003 presentation.

*Use of estimates*

The preparation of financial statements in accordance 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, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates.

*Revenue Recognition*

*Licensing*

Licensing revenue consists of fees paid for engineering development and engineering support services. All contracts we have entered into to date require that the Company develop a design that meets a licensee’s specifications. For contracts involving design specifications that the Company has not previously met, the Company defers the recognition of revenue until the design meets the contractual design specifications and expenses the cost of services as incurred. When the Company has experience in meeting design specifications but does not have significant experience to reasonably estimate the cost of services to meet a design specification, the Company defers both the recognition of revenue and the cost. For these arrangements, the Company recognizes revenue using the completed contract method. However, if the Company has significant experience in meeting the design specification involved in the contract and the cost of services under the contract can be reasonably estimated, then the Company recognizes revenue over the period in which the contract services are performed. For these arrangements, the Company recognizes revenue using the percentage of completion method. Labor costs for the development of the licensee’s design are estimated at the beginning of the contract. As these costs are incurred, they are used as a measure of progress towards completion. The Company has the ability to reasonably estimate labor cost on a contract–by–contract basis based on its experience in developing prior licensees’ designs.

Under our support and maintenance arrangements, we provide unspecified upgrades, design rule changes and technical support. No other upgrades, products or other post–contract support are provided. These arrangements are renewable annually by the customer. Support and maintenance revenue is recognized at its fair value ratably over the period during which the obligation exists, typically 12 months. The fair value of any support and maintenance obligation is established based on the specified renewal rate for such support and maintenance. When we provide a combination of products and services to customers, in addition to the considerations noted above, we evaluate the arrangements under EITF 00–21, *Revenue Arrangements with Multiple Deliverables*, which is effective for transactions entered into after June 30, 2003. EITF 00–21 addresses certain aspects of accounting for arrangements under which we will perform multiple revenue generating activities. Application of EITF 00–21 did not have a material effect on our consolidated financial position or results of operations.

From time to time, a licensee may cancel a project during the development phase. The cancellation is not within the Company’s control and is often caused by changes in market conditions or the licensee’s business. Generally, the Company’s contracts allow it to retain all payments that the Company has received or is entitled to collect for items and services provided before the cancellation occurs. The Company will consider a project to have been canceled even in the absence of specific notice from its licensee if there has

been no activity under the contract for a significant period, and the Company believes that completion of the contract is unlikely. In this event, the Company recognizes revenue in the amount of cash received, if it has performed a sufficient portion of the development services. In 2003, 2002, and 2001 the Company recognized \$759,000, \$804,000, and \$617,000 of licensing revenue from cancelled projects, respectively.

### *Product*

Revenue from product sales is recognized upon shipment provided that persuasive evidence of a sales arrangement exists, the price is fixed or determinable, title has transferred, collection of resulting receivables is reasonably assured, there are no customer acceptance requirements and there are no remaining significant obligations. For each of the periods presented, there were no formal acceptance provisions with our end customers.

### *Royalty*

Licensing contracts provide also for royalty payments at a stated rate and require licensees to report the manufacture or sale of products that include the Company's technology after the end of the quarter in which the sale or manufacture occurs. The Company recognizes royalties in the quarter in which the Company receives the licensee's report. The Company entered a termination agreement in 2003 with one of its licensees and recognized \$713,000 of royalty revenue from the terminated contract in 2003. There was no royalty revenue from terminated contracts in 2002 and 2001.

### *Inventory*

We state inventories at the lower of cost or market, determined using the first-in, first-out method. Our policy is to write down our inventory for estimated obsolescence or unmarketable inventory to the extent the cost exceeds the estimated market value. We base the estimate on our assumptions about historical and forecasted sales and market conditions. If actual market conditions are less favorable than those assumed in our estimates, additional inventory write-downs might be required. Our policy is to reflect any revaluation of inventory in reported income for the period in which the facts giving rise to the inventory revaluation become known.

### *Goodwill*

We review goodwill, recorded from the acquisition of ATMOS Corp. on August 2002, for impairment annually and whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable in accordance with the Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets." The provisions of SFAS No. 142 require that a two-step impairment test be performed on goodwill. In the first step, we compare the fair value of each reporting unit to its carrying value. Using the guidance in SFAS No. 142, we consider there to be only one reporting unit at the entity level. For step one, we determine the fair value of our reporting unit using the market approach. Under the market approach, we estimate the fair value based on the market value of the reporting unit at the entity level. If the fair value of the reporting unit exceeds the carrying value of net assets to the reporting unit, goodwill is not impaired and we are not required to perform further testing. If the carrying value of the net assets to the reporting unit exceeds the fair value of the reporting unit, then we must perform the second step in order to determine the implied fair value of the reporting unit's goodwill and compare it to the carrying value of the reporting unit's goodwill. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then we must record an impairment loss equal to the difference. We performed the annual impairment test during the third quarter of 2003, and the test did not indicate impairment of goodwill as of September 30, 2003. In addition, every quarter we assess whether there are indicators of potential impairment. As of December 31, 2003, we found no indicators of potential impairment.

### *Foreign Currency Translation*

The Company has foreign offices located in Canada, Korea, Japan and France, which are operated by subsidiaries of the Company. The functional currency of the Company's foreign entities is the U.S. dollar. Accordingly, the financial statements of these entities, which are maintained in the local currency, are remeasured into U.S. dollars in accordance with Statement of Financial Accounting Standards No. 52, "Foreign Currency Translation." Exchange gains or losses from remeasurement of monetary assets and liabilities that are not denominated in U.S. dollar were not material for any period presented and are included in the consolidated income statements.

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

The Company accounts for investments in accordance with Statement of Financial Accounting Standards No. 115 "Accounting for Certain Investments in Debt and Equity Securities". Management determines the appropriate classification of debt securities at the time of purchase. The Company's short-term and long-term investments are carried at fair value, based on quoted market prices, with the unrealized holding gains and losses reported in stockholders' equity. Realized gains and losses and declines in the value judged to be other-than-temporary are included in interest income. The cost of securities sold is based on the specific identification method.

The Company invests its excess cash in money market accounts and debt instruments and considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents. Investments with original maturities greater than three months and remaining maturities less than one year are classified as short-term investments. Investments with remaining maturities greater than one year are classified as long-term investments.



### ***Property and equipment***

Property and equipment are stated at cost. Depreciation is generally computed using the straight-line method over the estimated useful lives of the assets, generally three years.

### ***Valuation of long-lived assets***

Long-lived assets, such as property, plant and equipment, are evaluated for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. An impairment loss is recognized when estimated undiscounted future cash flows expected to result from the use of the asset plus net proceeds expected from disposition of the asset (if any) are less than the carrying value of the asset. When impairment is identified, the carrying amount of the asset is reduced to its estimated fair value.

## *Cost of revenue*

### *Product*

Cost of product revenue consists primarily of costs associated with the manufacture, assembly and testing of our memory chip products by independent, third-party contractors.

### *Licensing*

Cost of licensing revenue consists primarily of engineering costs directly related to engineering development projects specified in agreements we have with licensees of our 1T-SRAM technologies. These projects typically include customization of 1T-SRAM circuitry to enable embedding our memory on a licensee's integrated circuit and may include engineering support to assist in the commencement of production of a licensee's products. We recognize costs of licensing revenue in the following manner:

- If licensing revenue is recognized using the percentage of completion method, the associated cost of licensing revenue is recognized in the period in which we incur the engineering expense.
- If licensing revenue is recognized using the completed contract method, and to the extent that the amount of engineering cost does not exceed the amount of the related licensing revenue, this cost is deferred on a contract-by-contract basis from the time we have established technological feasibility of the product to be developed under the license. Technological feasibility is established when we have completed all activities necessary to demonstrate that the licensee's product can be produced to meet the performance specifications when incorporating our technology. Deferred costs are charged to cost of licensing revenue when the related revenue is recognized.
- For contracts entered into prior to establishing technological feasibility, we do not defer related development costs, but rather expense them in the period in which they are incurred. Consequently, upon completion of these contracts, we recognize the related revenues without any corresponding costs.

## Royalty

There are no reported costs associated with royalty revenue.

## Shipping and handling

Costs related to shipping and handling have been included in costs of sales for all periods presented. These costs are not material.

## Advertising

Advertising costs are expensed as incurred and are not material.

## Unbilled contract receivable

Under the percentage of completion method, if the amount of revenue recognized exceeds the amount of billings to a customer; the excess amount is carried as an unbilled contract receivable. We recorded \$1.1 million and \$693,000 of unbilled contract receivable as of December 31, 2003 and December 31, 2002, respectively.

## Research and development

We generally record engineering cost as research and development expense in the period incurred.

## Stock-based compensation

The Company accounts for stock-based compensation arrangements in accordance with the provisions of APB No. 25 ("APB No. 25"), "Accounting for Stock Issued to Employees" and complies with the disclosure provisions of Statement of Financial Accounting Standard No. 123 ("SFAS No. 123"), "Accounting for Stock-Based Compensation." Under APB No. 25, compensation cost is, in general, recognized based on the excess, if any, of the fair market value of the Company's stock on the date of grant over the amount an employee must pay to acquire the stock. Equity instruments issued to non-employees are accounted for in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force 96-18. Deferred stock-based compensation is being amortized using the graded vesting method in accordance with Financial Accounting Standards Board Interpretation No. 28 ("FIN No. 28") over the vesting period of each respective option, which is generally four years. Under the graded vesting method, each option grant is separated into portions based on its vesting terms, which results in acceleration of amortization expense for the overall award compared to the straight line method.

## SFAS No. 123 pro forma disclosures

Had compensation cost for the Company's option plans been determined based on the fair value at the grant dates, as prescribed in SFAS 123, the Company's net income (loss) would have been as follows (in thousands, except per share amounts):

	Years Ended December 31,		
	2003	2002	2001
Net income (loss):			
As reported	\$ 2,508	\$ 12,367	\$ 6,991
Stock-based compensation expense reported in consolidated statements of income	211	582	1,435
Total stock-based compensation expense determined under fair value based method for all awards, net of related tax effects	(4,537)	(3,229)	(1,948)
Pro forma	\$ (1,818)	\$ 9,720	\$ 6,478
Earnings (losses) per share:			
Basic—as reported	\$ 0.08	\$ 0.41	\$ 0.35
Basic—pro forma	\$ (0.06)	\$ 0.33	\$ 0.33
Diluted—as reported	\$ 0.08	\$ 0.40	\$ 0.25
Diluted—pro forma	\$ (0.06)	\$ 0.31	\$ 0.23



The fair value of each grant is estimated on the date of grant using the Black–Scholes method with the following assumptions used for grants during the applicable periods:

<b>Employee stock options</b>	<b>Years ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
Expected life (in years)	5.0	5.0	5.0
Risk-free interest rate	2.1%–3.6 %	2.7%–4.7 %	3.2%–4.8 %
Volatility	0.8	0.7	0.6
Dividend yield	0 %	0 %	0 %

<b>Employee stock purchase plan shares</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Expected life (in years)	1.0	1.0	—
Risk-free interest rate	1.1%–1.4 %	1.8%–2.3 %	—
Volatility	0.7	0.8	—
Dividend yield	0 %	0 %	—

The Company selected the Black–Scholes option valuation model, which is one of the permitted methods to estimate the fair market value of options under SFAS No. 123. The Black–Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company’s employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimated, in the opinion of management, the existing models do not necessarily provide a reliable single measure of the fair value of employee stock options. The weighted average fair value of options granted during 2003, 2002 and 2001 was \$4.97, \$4.30 and \$3.14 respectively. The weighted average estimated fair value of shares granted under the employee stock purchase plan during 2003 and 2002 was \$4.21 and \$4.26, respectively.

### ***Net income per share***

Basic net income per share is computed by dividing net income for the period by the weighted–average number of shares of common stock outstanding during the period. Diluted net income per share is computed by dividing the net income for the period by the weighted average number of common and potential common equivalent shares outstanding during the period. Potential common shares are composed of incremental shares of common stock issuable upon the exercise of stock options and warrants and common stock issuable upon conversion of redeemable convertible preferred stock.

### ***Income taxes***

The Company accounts for deferred income taxes under the liability approach whereby the expected future tax consequences of temporary differences between the book and tax basis of assets and liabilities are recognized as deferred tax assets and liabilities. A valuation allowance is established for any deferred tax assets for which realization is uncertain.

### ***Comprehensive income***

Statement of Financial Accounting Standards No. 130 “Reporting Comprehensive Income” (“SFAS No. 130”) requires the Company to display comprehensive income and its components as part of the financial statements. The Company’s only component of comprehensive income is unrealized gains and losses on available for sale securities. Accumulated other comprehensive income, as of December 31, 2003 and 2002 was \$56,000 and \$116,000, respectively.

The changes in other comprehensive income (loss), net of taxes, were as follows, for the years ended December 31, 2003, 2002, and 2001:

	<b>2003</b>	<b>2002</b>	<b>2001</b>
Net income	\$ 2,508	\$ 12,367	\$ 6,991
Net unrealized gain (loss) on available–for–sale securities:			
Change in net unrealized gains (losses)	(60)	100	16
Comprehensive income	\$ 2,448	\$ 12,467	\$ 7,007



### ***Segment reporting***

Financial Accounting Standards Board Statement No. 131, “Disclosure about Segments of an Enterprise and Related Information” (“SFAS No. 131”) requires that companies report separately in the financial statements certain financial and descriptive information about operating segments profit or loss, certain specific revenue and expense items and segment assets. The Company operates in one segment, using one measurement of profitability for its business. The Company has sales outside the United States that are described in Note 10. The majority of long-lived assets are maintained in the United States.

### ***Recent accounting pronouncements***

In November 2002, the EITF reached a consensus on Issue No. 00–21, “Revenue Arrangements with Multiple Deliverables” (“EITF Issue No. 00–21”). EITF Issue No. 00–21 provides guidance on how to account for arrangements that involve the delivery or performance of multiple products, services and/or rights to use assets. The provisions of EITF Issue No. 00–21 were applied to revenue arrangements entered into after June 30, 2003. Although the provisions in this consensus apply to many of our license development contracts, the adoption of EITF Issue No. 00–21 did not have a material effect on the Company’s financial position, results of operations, or cash flows for the year ended December 31, 2003.

In November 2002, the Financial Accounting Standards Board (FASB) issued FASB Interpretation No. 45, “Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others” (“FIN No. 45”). FIN No. 45 requires that upon issuance of a guarantee, a guarantor must recognize a liability for the fair value of an obligation assumed under a guarantee. FIN No. 45 also requires additional disclosures by a guarantor in its interim and annual financial statements about the obligations associated with guarantees issued. The recognition provisions of FIN No. 45 are effective for any guarantees issued or modified after December 31, 2002. The disclosure requirements are effective for financial statements of interim or annual periods ending after December 15, 2002. The adoption of FIN No. 45 did not have a material effect on the Company’s financial position, results of operations, or cash flows. See Note 7, “Guarantees”.

In January 2003, the FASB issued Interpretation No. 46, “Consolidation of Variable Interest Entities” (“FIN No. 46”). FIN No. 46, which was also revised by the FASB in December 2003, requires consolidation of variable interest entities (VIE) by the entity’s primary beneficiary if the entity’s equity investors do not have characteristics of a controlling financial interest or sufficient equity at risk. FIN No. 46 is effective immediately for all new VIEs created or acquired after January 31, 2003. As amended by FASB Staff Position No. FIN No. 46–6, FIN No. 46 is effective for variable interests in a VIE created or acquired before February 1, 2003 at the end of the first interim or annual period ending after December 15, 2003. FIN No. 46 requires certain disclosures in financial statements issued after January 31, 2003, if it is reasonably possible that the Company will consolidate or disclose information about VIEs when FIN No. 46 becomes effective. The Company has not invested in any VIEs created after January 31, 2003.

In April 2003, the FASB issued Statement of Financial Accounting Standards No. 149, “Amendment of Statement 133 on Derivative Instruments and Hedging Activities” (“SFAS No. 149”) which amends and clarifies accounting for derivative instruments and hedging activities under SFAS No. 133, “Accounting for Derivative Instruments and Hedging Activities” (“SFAS No. 133”). SFAS No. 149 provides guidance relating to decisions made (a) as part of the Derivatives Implementation Group process, (b) in connection with other FASB projects dealing with financial instruments and (c) regarding implementation issues raised in the application of the definition of a derivative and the characteristics of a derivative that contains financing components. SFAS No. 149 is effective for contracts entered into or modified and for hedging relationships designated after June 30, 2003. The adoption of SFAS No. 149 did not have a material impact on the Company’s financial condition or results of operations for the year ended December 31, 2003, as the Company has not entered into any derivative instruments.

In May 2003, the FASB issued SFAS No. 150, “Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity” (“SFAS No. 150”) which requires freestanding financial instruments such as mandatorily redeemable shares, forward purchase contracts and written put options to be reported as liabilities by their issuers as well as related new disclosure requirements. The provisions of SFAS No. 150 are effective for instruments entered into or modified after May 31, 2003 and pre-existing instruments as of the beginning of the first interim period that commences after June 15, 2003. The adoption of SFAS No. 150 did not have a material impact on the Company’s financial condition or results of operations for the year ended December 31, 2003.

## Note 2—Acquisition

### *Acquisition of ATMOS Corporation*

On August 30, 2002, the Company completed the acquisition of 100% of the outstanding stock of ATMOS Corporation. ATMOS is a semiconductor memory company that focuses on creating high-density, compiler-generated embedded memory solution for System-on-a-Chip (“SoC”) applications. The total purchase price for the acquisition was approximately \$12.4 million, including direct transaction costs of \$406,000. The consideration paid to ATMOS shareholders consisted of a combination of \$11.7 million in cash and 26,843 shares of common stock issued to certain ATMOS employees, with a combined total fair value of \$12.0 million. Under the purchase method of accounting the common stock was valued at \$11.47 per share using the Company’s average stock price for a five-day period consisting of two days before, the day of and two days after June 10, 2002, the announcement date on which the number of shares to be issued was fixed. The Company loaned \$500,000 to ATMOS under a promissory note due on July 31, 2002, which became non-refundable upon completion of the acquisition, and has been included in the cash portion of the purchase price. ATMOS now operates as a wholly owned subsidiary of the Company and its financial statements for the year ended December 31, 2002 include the results of operations and financial condition of ATMOS from the date of acquisition.

In addition, the Company issued 34,900 shares of common stock subject to a vesting period and paid cash of \$153,000 to ATMOS continuing employees in exchange for their outstanding stock of ATMOS. The shares and cash are subject to forfeiture in the event that the employees cease to be employed by MoSys and consequently are being accounted for as compensation rather than acquisition cost. The Company recorded approximately \$314,000 of unearned compensation related to the shares subject to vesting period, which will be amortized over the vesting period of 36 months using the graded vesting method. The cash will cease to be restricted on the first anniversary of the closing date; therefore, it was amortized over 12 months.

As part of the closing agreement, the Company and Virage Logic Corporation agreed to a mutual release with respect to claims relating to the Company’s acquisition of ATMOS in addition to potential claims under certain agreements and transactions between ATMOS and Virage Logic.

The acquisition has been accounted for as a purchase and accordingly, the accompanying financial statements include the results of operations of ATMOS subsequent to the acquisition date. The purchase price has been allocated to the tangible assets acquired based on management’s estimate of their fair values, and to the intangible assets acquired based on their estimated fair values as determined by an independent appraisal. The purchase price allocation is as follows (in thousands):

Tangible assets acquired:	
Cash	\$ 84
Prepays and other assets	390
Fixed Assets	1,643
Total tangible assets	2,117
Total liabilities acquired	2,002
Intangible assets acquired:	
Net tangible assets acquired	115
Goodwill	12,326
Total purchase price allocation	<u>\$ 12,441</u>

Goodwill is reviewed annually for impairment based on estimated future undiscounted cash flows attributable to goodwill, or more frequently, if impairment indicators arise. In the event such cash flows are not expected to be sufficient to recover the recorded value of goodwill, it is written down to its estimated fair value. We performed the annual impairment test during the third quarter of 2003, and the test did not indicate impairment of goodwill as of September 30, 2003. As of December 31, 2003, we found no indicators of potential impairment and therefore, no such charges have been recorded for the period ended December 31, 2003 related to the ATMOS acquisition. For income tax purposes, the entire amount of goodwill is deductible and amortized over 15 years.

At the closing of the acquisition, an escrow account was established to satisfy any unidentified claims against ATMOS. The amount held in escrow, net of claims recovered by the Company, was released to the ATMOS shareholders in October of 2003.

### *Unaudited Pro Forma Information*

The following unaudited pro forma information presents the consolidated results of operations of the Company, as if the acquisition of ATMOS had occurred at the beginning of the periods presented. The pro forma 2002 and 2001 result of operations combine the consolidated results of operations of the Company for the 12 months ended December 31, 2002 and 2001 with the historical results of

operations of ATMOS for the 12 months ended December 31, 2002 and 2001, respectively. The pro forma adjustments in 2001 and 2002 include \$153,000 of cash compensation paid subject to forfeiture and \$196,000 of stock compensation expenses associated with shares issued subject to forfeiture. Unearned compensation of \$314,000 is amortized using the graded method over the vesting period of three years, which results in the amortization of approximately 62% in the first year. The unaudited pro forma information does not purport to be indicative of what would have occurred had the acquisition been made as of the beginning of the periods presented or of results which may occur in the future.

	<u>Year ended December 31,</u>	
	<u>2002</u>	<u>2001</u>
	(In thousands, except per share amounts)	
Revenues	\$ 27,893	\$ 22,808
Net income	8,120	680
Net income per share:		
Basic	<u>\$ 0.27</u>	<u>\$ 0.03</u>
Diluted	<u>\$ 0.26</u>	<u>\$ 0.02</u>
Shares used in computing net income per share:		
Basic	29,963	19,771
Diluted	31,423	28,640

**Note 3—Details of Balance Sheet Components and Consolidated Statements of Income:**

	<u>December 31,</u>	
	<u>2003</u>	<u>2002</u>
	(in thousands)	
<b>Inventories:</b>		
Work-in-progress	\$ 195	\$ 477
Finished goods	<u>279</u>	<u>560</u>
	<u>\$ 474</u>	<u>\$ 1,037</u>
<b>Prepaid expenses and other current costs:</b>		
Deferred costs of revenue	\$ 3	\$ 506
Deferred tax assets	1,654	2,415
Prepaid expenses and other assets	<u>2,165</u>	<u>1,554</u>
	<u>\$ 3,822</u>	<u>\$ 4,475</u>
<b>Property and equipment:</b>		
Equipment, furniture and fixtures	\$ 6,219	\$ 6,148
Acquired Software	4,501	4,121
	10,720	10,269
Less: Accumulated depreciation	<u>(8,924)</u>	<u>(6,917)</u>
	<u>\$ 1,796</u>	<u>\$ 3,352</u>
<b>Accrued expenses and other liabilities:</b>		
Accrued wages and employee benefits	\$ 831	\$ 857
Professional fees	326	266
Deferred rent	175	230
Income taxes payable	188	695
Withholding tax payable	1,052	—
Other	<u>161</u>	<u>320</u>
	<u>\$ 2,733</u>	<u>\$ 2,368</u>

Depreciation expense for the years ended December 31, 2003, 2002 and 2001 were \$1.7 million, \$1.0 million and \$507,000, respectively.



**Interest and other income**

	<u>2003</u>	<u>2002</u>	<u>2001</u>
	(in thousands)		
Interest Income	1,350	1,539	1,818
Other Income	564	—	—
<b>Total</b>	<b><u>1,914</u></b>	<b><u>1,539</u></b>	<b><u>1,818</u></b>

In 2003, other income included the \$287,000 contract termination fee from Conexant. The Company did not incur interest expense in 2003, 2002, or 2001.



#### Note 4: Fair Value of Financial Instruments

The estimated fair values of financial instruments outstanding at fiscal year-ends were as follows:

	2003			
	Adjusted Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
	(in thousands)			
Cash	\$ 4,883	\$ —	\$ —	\$ 4,883
Cash Equivalents:				
Commercial and US government agencies paper	17,150	—	—	17,150
<b>Total cash and cash equivalents</b>	<b>\$ 22,033</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 22,033</b>
Short-term investments:				
US government debt securities	\$ 3,700	\$ —	\$ —	\$ 3,700
Corporate notes	6,760	22	—	6,782
Market auction preferred securities	8,850	—	—	8,850
<b>Total short-term investments</b>	<b>\$ 19,310</b>	<b>\$ 22</b>	<b>\$ —</b>	<b>\$ 19,332</b>
Long-term investments:				
US government debt securities	\$ 39,707	\$ 27	\$ —	\$ 39,734
Corporate notes	4,721	7	—	4,728
<b>Total long-term investments</b>	<b>\$ 44,428</b>	<b>\$ 34</b>	<b>\$ —</b>	<b>\$ 44,462</b>

	2002			
	Adjusted Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
	(in thousands)			
Cash	\$ 3,407	\$ —	\$ —	\$ 3,407
Cash Equivalents:				
Commercial and US government agencies paper	22,914	—	—	22,914
<b>Total cash and cash equivalents</b>	<b>\$ 26,321</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 26,321</b>
Short-term investments:				
US government debt securities	\$ 22,132	\$ 46	\$ —	\$ 22,178
Corporate notes	13,399	26	—	13,425
Market auction preferred securities	2,500	—	—	2,500
Foreign debt securities	4,008	1	—	4,009
<b>Total short-term investments</b>	<b>\$ 42,039</b>	<b>\$ 73</b>	<b>\$ —</b>	<b>\$ 42,112</b>
Long-term investments:				
US government debt securities	\$ 6,500	\$ 51	\$ —	\$ 6,551
Corporate notes	4,857	—	8	4,849
<b>Total long-term investments</b>	<b>\$ 11,357</b>	<b>\$ 51</b>	<b>\$ 8</b>	<b>\$ 11,400</b>

The following table shows the fair value and net carrying amount of cash equivalents and short-term and long-term investments based on the following two maturity groups as of December 31, 2003:

	<u>Adjusted Cost</u>	<u>Gross Unrealized Gain</u>	<u>Estimated Fair Value</u>
Due within 1 year	\$ 36,460	\$ 22	\$ 36,482
Due 1-2 years	44,428	34	44,462
Total	<u>\$ 80,888</u>	<u>\$ 56</u>	<u>\$ 80,944</u>

There were no realized gains or losses for 2003, 2002 and 2001.

**Note 5—Income Taxes:**

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

	<u>Year Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>Current portion:</b>			
U.S. federal	\$ (634)	\$ 3,567	\$ 261
State	2	121	106
Foreign	150	100	—
	<u>(482)</u>	<u>3,788</u>	<u>367</u>
<b>Deferred</b>			
U.S. federal	761	(2,415)	—
State	—	—	—
Foreign	—	—	—
	<u>761</u>	<u>(2,415)</u>	<u>—</u>
Total	<u>\$ 279</u>	<u>\$ 1,373</u>	<u>\$ 367</u>

Deferred tax assets consist of the following (in thousands):

	<u>December 31,</u>	
	<u>2003</u>	<u>2002</u>
<b>Deferred tax assets:</b>		
Federal and state loss carryforwards	\$ 1,357	\$ 923
Inventory	460	238
Reserves and accruals	279	409
Deferred revenue	311	373
Depreciation and amortization	(499)	265
Deferred compensation	257	260
Research and development credit carryforwards	1,164	646
Foreign tax credits	387	—
Canadian net operating loss	6,173	—
	9,889	3,114
Less: Valuation allowance	(8,235)	(699)
Net deferred tax assets	<u>\$ 1,654</u>	<u>\$ 2,415</u>

The valuation allowance increased by \$7.5 million and decreased by \$4.1 million, during the years ended December 31, 2003 and 2002, respectively. Of the total increase of \$7.5 million, \$6.2 million is attributable to Canadian net operating losses and approximately \$670,000 is attributable to stock option deductions.

As of December 31, 2003, the Company had net operating loss carryforwards of approximately \$3.6 million for federal income tax purposes and approximately \$2.6 million for state income tax purposes. These losses are available to reduce taxable income and expire beginning 2005 through 2023. The Company also had federal research and development tax credit carryforwards of approximately \$790,000, which will expire beginning in 2008, and California research and development credits of approximately \$380,000 which do not have an expiration date. The Company had foreign tax credits available for federal income tax purposes of approximately \$387,000 which will begin to expire in 2008. The Company had Canadian net operating loss carryforwards of \$13.5 million, which will begin to expire in 2005. Because of certain changes in the ownership of the Company in December 1996, there is an annual limitation of approximately \$2.6 million on the use of federal net operating loss carryforwards and on the use of federal research and development credits pursuant to Section 382 of the Internal Revenue Code.

The Company's U.S. income tax return for 2001 is under examination. Management believes that adequate amounts have been provided for any adjustments that may ultimately result from this examination.

A reconciliation of income taxes provided at the federal statutory rate (35% in 2003, 2002 and 2001) to actual income tax expense follows:

	Year Ended December 31,		
	2003	2002	2001
	(in thousands)		
Income tax provision computed at federal statutory rate	\$ 976	\$ 4,809	\$ 2,575
State income tax (net of federal benefit)	2	608	69
Foreign income tax at rate different from US statutory rate	(15)	100	—
Utilization of previously reserved NOL's	(834)	(932)	(2,575)
Utilization of tax credits	—	(200)	—
Change in valuation allowance	73	(3,197)	—
Alternative minimum taxes	—	—	298
Tax benefit from extraterritorial income exclusion	(206)	—	—
Other	283	185	—
	<u>\$ 279</u>	<u>\$ 1,373</u>	<u>\$ 367</u>

The domestic and foreign components of earnings before taxes were as follows for the years ended December 31, 2003, 2002 and 2001:

	2003	2002	2001
	(in thousands)		
U.S.	\$ 2,316	\$ 13,549	\$ 7,358
Non-U.S.	471	191	—
	<u>\$ 2,787</u>	<u>\$ 13,740</u>	<u>\$ 7,358</u>

#### Note 6—Net Income Per Share:

Basic net income per share is computed by dividing net income for the period by the weighted-average number of shares of common stock outstanding during the period. Diluted net income per share is computed by dividing the net income available to common stockholders for the period by the weighted average number of common and potential common equivalent shares outstanding during the period. Potential common equivalent shares are composed of incremental shares of common stock issuable upon the exercise of stock options and warrants. For the twelve months ending December 31, 2003, outstanding employee stock options of 2.1 million shares were not included in the calculation of diluted net income per share as they were anti-dilutive. The following table sets forth the computation of basic and diluted net income per share for the periods indicated (in thousands, except per share amounts):

	Year Ended December 31,		
	2003	2002	2001

Numerator:

Net income	\$	2,508	\$	12,367	\$	6,991
Denominator:						
Shares used in computing net income per share:						
Basic		30,504		29,902		19,709
Employee stock options and unvested common stock outstanding		494		1,083		1,581
Warrants		—		290		734
Preferred stock		—		—		6,366
Diluted		<u>30,998</u>		<u>31,275</u>		<u>28,390</u>
Net income per share:						
Basic	\$	0.08	\$	0.41	\$	0.35
Diluted	\$	0.08	\$	0.40	\$	0.25

**Note 7—Guarantees:*****Indemnifications***

In the ordinary course of business, the Company enters into contractual arrangements under which the Company may agree to indemnify the third party to such arrangement from any losses incurred relating to the services they perform on behalf of the Company or for losses arising from certain events as defined within the particular contract, which may include, for example, litigation or claims relating to patent infringement. Such indemnification obligations may not be subject to maximum loss clauses. To date, we have not made any payments related to these indemnifications.

***Product Warranties:***

The Company generally offers a 90-day warranty for its memory chip products. The Company provides reserves for the estimated costs of product warranties at the time revenue is recognized. The Company estimates the costs of its warranty obligations based on its historical experience of replacement costs incurred for the last 90 days in correcting product failures. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary. Accordingly, the Company assessed the level of warranty reserve as of December 31, 2003 and determined that no warranty reserve was necessary.

The following table presents the changes in the Company's warranty reserve during the years ended December 31, 2003, 2002 and 2001 (in thousands):

Warranty reserve balance as of December 31, 2000	\$ (155)
Accrued warranty expense	—
Usage of warranty reserve	100
Warranty reserve balance as of December 31, 2001	(55)
Accrued warranty expense	(131)
Usage of warranty reserve	186
Warranty reserve balance as of December 31, 2002	—
Accrued warranty expense	—
Usage of warranty reserve	—
Warranty reserve balance as of December 31, 2003	\$ —

**Note 8—Stockholders' Equity (Deficit):*****Common Stock Warrants***

The following table summarizes the activity of outstanding warrants (in thousands, except per share amounts):

	<u>Common Stock under Warrants</u>	<u>Exercise Price per Share</u>
Outstanding at December 31, 2000	3,315	\$5.50–\$8.50
Exercised warrants, granted to Series F and Series F-1 Preferred stockholders and Dell Computer	(349)	\$0–\$5.50
Expired warrants, previously granted to Series F and Series F-1 Preferred stockholders and Dell Computer	(1,766)	\$5.50–\$8.50
Outstanding and exercisable at December 31, 2001	1,200	\$6.50
Exercised warrants issued to TSMC in connection with termination of a capacity agreement	(1,200)	\$6.50
Outstanding and exercisable at December 31, 2002 and 2003	—	

The following assumptions were applied when estimating the fair value of the above warrants using the Black–Scholes option pricing model: dividend yield of 0%, risk–free interest rate of 5.45%–5.84%, contractual terms of 3.5 years to 4.25 years and volatility of 40%–60%. The fair market values of common stock underlying the above warrants ranged from \$1.00 to \$2.00 on dates of issuance. Pursuant to the terms of an amended common stock purchase warrant for the purchase of 1,200,000 shares of our common stock at \$6.50 per share, on June 14, 2002, TSMC exercised the warrant on a net basis by surrendering the warrant when the fair market value of the common stock was \$10.69 per share and receiving 470,346 shares of common stock. Resale of the shares was subject to a lock–up agreement under which TSMC agreed not to sell or otherwise dispose of the shares for a period of 180 days after June 14, 2002. In June 2001, the Company issued 90,000 shares of common stock to Dell Computer upon its cashless exercise of a warrant to purchase 600,000 shares of common stock. This warrant had an exercise price of \$8.50 per share and was exercised on a net basis at a fair value of \$10.00 per share of common stock, an amount that approximated the initial public offering price in July 2001. In April 2001, the Company issued 259,000 shares of common stock pursuant to the exercise of warrants to purchase 1,515,000 shares of common stock at \$5.50 per share, and the balance of the warrants for the purchase of 1,256,000 shares expired without exercise. No warrants were outstanding as of December 31, 2003.

### *Common Stock Option Plans*

The 1992 Stock Option Plan (the “1992 Plan”) authorizes the board of directors to grant incentive stock options and nonqualified stock options for up to 3,300,000 shares of common stock to employees, directors and consultants. Under the 1992 Plan, incentive stock options are to be granted at a price not less than 100% of the fair value of the stock at the date of grant, as determined by the board of directors. Nonqualified stock options are to be granted at a price not less than 85% of the fair value of the stock at the date of grant, as determined by the board of directors. Options generally vest over a four–year period and are exercisable for a maximum period of ten years after the date of grant. The 1992 Plan was terminated in 1996, and no further options were granted under the plan.

In 1996, the Company adopted the 1996 Stock Plan (the “1996 Plan”), which authorizes the board of directors to grant incentive stock options and nonqualified stock options for up to 2,500,000 shares of common stock to employees, directors and consultants. The option terms under the 1996 Plan are substantially the same as the 1992 Plan except that options granted under the 1996 Plan may be exercised immediately. Common stock purchased pursuant to the exercise of an unvested option is subject to repurchase by the Company, at the exercise price, under certain conditions. Options generally vest over a four–year period and are exercisable for a maximum period of ten years after the date of grant.

The Company’s 2000 employee stock option plan (the “2000 plan”) was adopted in October 2000 in connection with the Company’s reincorporation in the state of Delaware. A total of 6,207,000 shares of common stock have been reserved for issuance under the 2000 plan. In addition, the 2000 plan provides for an automatic annual increase in the number of shares reserved under the plan on January 1 of each year beginning in 2001, equal to the lesser of 500,000 shares, two percent of the Company’s outstanding shares of common stock on such date or a lesser amount determined by the board of directors. The term of options granted under the 2000 plan may not exceed ten years. The term of all incentive stock options granted to an optionee who, at the time of grant, owns stock representing more than 10% of the voting power of all classes of the Company’s stock may not exceed five years. Generally, 25% of the options granted under the 2000 plan will vest and become exercisable on the first anniversary of the date of grant, and 1/48th of the options will vest and become exercisable each month thereafter.

The exercise price of incentive stock options granted under the 2000 plan must be at least equal to the fair market value of the shares on the date of grant. The exercise price of nonstatutory stock options granted under the 2000 plan will be determined by the board of directors, but in no event will be less than 85% of the fair market value of the common stock on the date of grant. The exercise price of any incentive stock option or nonstatutory stock option granted to a ten–percent stockholder must equal at least 110% of the fair market value of the common stock on the date of grant.

A summary of the status of all the Company’s stock option plans as of December 31, 2001, 2002 and 2003 and changes during the years ended on these dates are presented below (in thousands, except per share amounts):

	Options Outstanding		
	Available for Grant	Number of Shares	Weighted Average Exercise Prices
Balance at December 31, 2000	5,279	2,751	\$ 3.98
Authorized under the 2000 Plan	207		
Granted	(1,191)	1,191	\$ 8.79
Cancelled	588	(588)	\$ 3.71
Exercised	—	(310)	\$ 2.72
Expired ungranted under the 1992 Plan	(246)	—	
Balance at December 31, 2001	4,637	3,044	\$ 6.05
Additional authorized under the 2000 Plan	500		
Granted	(1,534)	1,534	\$ 10.02
Cancelled	314	(314)	\$ 8.43
Exercised	—	(159)	\$ 2.93
Balance at December 31, 2002	3,917	4,105	\$ 7.47
Additional authorized under the 2000 Plan	500		
Granted	(1,066)	1,066	\$ 7.99
Cancelled	360	(360)	\$ 8.60
Exercised	—	(439)	\$ 3.30
Balance at December 31, 2003	3,711	4,372	\$ 7.92

Information relating to stock options outstanding at December 31, 2003 is as follows (in thousands, except per share amounts):

Range of Exercise Price	Options Outstanding at December 31, 2003			Options Exercisable at December 31, 2003	
	Number Outstanding	Weighted Average Remaining Contractual Life (in Years)	Weighted Average Exercise Price	Number Outstanding	Weighted Average Exercise Price
\$1.00–\$4.00	637	4.58	\$ 1.02	636	\$ 1.02
\$4.01–\$8.00	1,487	8.14	\$ 7.33	670	\$ 7.44
\$8.01–\$10.00	1,010	8.42	\$ 9.41	380	\$ 9.60
\$10.01–\$16.00	1,238	8.18	\$ 10.97	572	\$ 11.03
	4,372			2,258	

Our board of directors may issue up to 20,000,000 shares of preferred stock without stockholder approval on such terms as the board might determine. The rights of the holders of common stock will be subject to, and might be adversely affected by, the rights of the holders of any preferred stock that might be issued in the future.

#### *Employee stock purchase plan*

The Company's 2000 employee stock purchase plan was adopted in October 2000 in connection with the Company's Delaware re-incorporation, to become effective upon the pricing date of the Company's initial public offering. A total of 400,000 shares of common stock have been reserved for issuance under the purchase plan. In addition, the purchase plan provides for an automatic annual increase in the number of shares reserved under the plan on January 1 of each year, equal to the lesser of 100,000 shares, one percent of the Company's outstanding shares of common stock on such date or a lesser amount determined by the board of directors. The purchase plan, which is intended to qualify under Section 423 of the Internal Revenue Code, is administered by the board of directors or a committee appointed by the board of directors.

Employees, including officers and employee directors but excluding 5% stockholders, are eligible to participate if they are customarily employed for at least 20 hours per week and for more than five months in any calendar year. The purchase plan permits eligible employees to purchase common stock through payroll deductions, which may not exceed 10% of an employee's compensation. Employees will be permitted to invest a maximum of \$25,000 in any offering period.

The purchase plan has been implemented in a series of overlapping offering periods, each to be approximately 12 months in duration. The initial offering period under the purchase plan began on June 27, 2001 and expired on July 1, 2002, which was the first day of the third offering period. Offering periods begin on the first trading day on or after January 1 and July 1 of each year and end on the last trading day in the period ending twelve months later. Each participant is granted an option on the first day of the offering period, and such option will be automatically exercised at the end of month six of the offering period and on the last day of the offering period. The purchase price of the common stock under the purchase plan is equal to 85% of the lesser of the fair market value per share of common stock on the start date of the offering period or on the date on which the option is exercised. Employees may end their participation in an offering period at any time during that period, and participation ends automatically on termination of employment with the Company. The purchase plan will terminate in June 2010, unless sooner terminated by the board of directors.

Of the 400,000 shares authorized to be issued under the purchase plan, 298,000 shares remained available for issuance at December 31, 2003. Employees purchased 55,000 and 47,000 shares in 2003 and 2002, respectively. No shares were purchased under the plan in 2001.

#### ***Deferred stock-based compensation cost to employees***

During the years ended December 31, 2003, 2002 and 2001, the Company recorded deferred compensation cost of approximately \$0, \$314,000 and \$1.5 million, respectively, which would amortize in future periods. The 2002 deferred compensation cost represented the shares of common stock issued to certain employees of ATMOS that were subject to vesting requirements related to the acquisition of ATMOS, which cost is being amortized over the vesting period of 36 months using the graded vesting method. The deferred compensation cost recorded during the year ended 2001 represented the excess of the fair market value of the Company's common stock over the grant price during the period in which the options were granted.

During the years ended December 31, 2003, 2002 and 2001, the Company recorded stock compensation expenses of \$459,000, \$656,000 and \$1.4 million, respectively, of which \$211,000, \$582,000 and \$1.4 million, respectively, was attributable to the excess of the fair market value of the Company's common stock over the price at which the Company granted stock options to employees. Stock compensation expenses in 2003 and 2002 also included \$227,000 and \$74,000, respectively, for amortization of deferred compensation cost attributable to the fair market value of shares of the Company's common stock issued to certain employees of ATMOS. In addition, the Company incurred \$21,000 of stock compensation expense in 2003 due to modification of the Company's 2000 employee stock option plan related to a former member of the board of directors.

Deferred compensation expense is being amortized using the graded vesting method, in accordance with SFAS No. 123 and FASB Interpretation No. 28, over the vesting period of each respective option, generally four years. The accelerated amortization results in expensing approximately 52% of the total award in the first year, 27% in the second year, 15% in the third year and 6% in the fourth year.

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

The Company's Stockholder Rights Plan, which was adopted in October 2000 and became effective June 27, 2001, is intended to protect stockholders from unfair or unfriendly takeover practices. In accordance with this plan, the board of directors declared a dividend distribution of one Series AA preferred stock purchase right on each outstanding share of its common stock held as of June 27, 2001, and on each share of common stock issued by the Company thereafter. Each right entitles the registered holder to purchase from the Company one one-thousandth share of Series AA preferred stock at a price of \$110. The rights become exercisable in certain circumstances, including the acquisition by any person or group, or the commencement or announcement of a tender or exchange offer for the acquisition, of beneficial ownership of 15 percent or more of the Company's common stock without the approval of the board of directors (except for certain affiliates prior to the effective date of the Plan as to whom this ownership limit is 25%). The rights do not confer any rights as a stockholder until they are exercised. In the event the rights become exercisable, each right will entitle the holder to acquire shares of common stock of the Company or the acquiring corporation (in the event of merger or similar business combination) having a value equal to twice the purchase price of the right. The rights are redeemable by the Company prior to exercise at \$0.01 per right and expire on October 11, 2010.

#### ***Notes receivable from related parties***

In April 2001, certain holders of warrants issued in connection with Series F and F-1 preferred stock exercised their rights to purchase 43,000 shares of common stock at \$5.50 per share, in exchange for promissory notes. The notes total \$239,000, are bearing interest of 9%, and are full recourse. All of these notes had been paid in full as of December 31, 2003.



**Note 9—Retirement Savings Plan:**

Effective January 1997, the Company adopted the MoSys 401(k) Plan (the “Savings Plan”) which qualifies as a thrift plan under Section 401(k) of the Internal Revenue Code. All full-time employees who are at least 21 years old are eligible to participate in the Savings Plan at the time of hire. Participants may contribute up to 15% of their earnings to the Savings Plan. The Company makes a Matching Contribution on behalf of each Participant in an amount equal to 25% of a Participant’s Deferral Contributions during the Plan Year. The Company made matching contributions of \$107,000, \$98,000 and \$84,000 in 2003, 2002 and 2001, respectively.

**Note 10—Business Segments, Concentration of Credit Risk and Significant Customers:**

The Company has adopted SFAS No. 131, “Disclosure about Segments of an Enterprise and Related Information.” Although the Company offers various intellectual property components and services to its customers, the Company does not manage its operations by these intellectual property components and services, but instead views the Company as one operating segment when making business decisions. The Company does not manage its operations on a geographical basis. Revenue attributed to the United States and to all foreign countries is based on the geographical location of the customer. The Company uses one measurement of profitability for its business.

The Company supplies semiconductor memories to the electronics industry. This industry segment is characterized by rapid technological change and significant competition.

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash, cash equivalents short-term and long-term investments and accounts receivable. Cash, cash equivalents short-term and long term investments are deposited with high credit quality institutions.

The Company sells its products and licenses its 1T-SRAM technologies to customers in the Far East, North America and Europe as follows (in thousands):

	<u>Years Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
North America	\$ 7,767	\$ 8,007	\$ 12,405
Japan	7,146	13,365	5,891
Asia	3,969	5,646	3,808
Europe	351	773	386
Total	<u>\$ 19,233</u>	<u>\$ 27,791</u>	<u>\$ 22,490</u>

Customers who accounted for at least 10% of total revenues were as follows:

	<u>Year Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Sony	17 %	—	—
NEC	14 %	38 %	19 %
UMC	11 %	12 %	—
Cisco Systems	—	—	22 %

Five customers accounted for 21%, 18%, 12%, 11% and 10% of gross accounts receivable, respectively, at December 31, 2003. Also, five customers accounted for 19%, 15%, 12%, 12% and 12% of gross accounts receivable, respectively, at December 31, 2002. The Company performs ongoing credit evaluations of its customers’ financial condition and maintains an allowance for uncollectible accounts receivable based upon the expected collectibility of all accounts receivable. No amounts were written off in 2003, 2002 and 2001.

Net property, plant and equipment, classified by major geographic areas were as follows at December 31, 2003 and 2002.

	<u>December 31,</u>	
	<u>2003</u>	<u>2002</u>
U.S.	\$ 1,110	\$ 1,880

(in thousands)

Non-U.S.	<u>686</u>	<u>1,472</u>
Total	<u>\$ 1,796</u>	<u>\$ 3,352</u>

**Note 11—Commitments and Contingencies:**

The Company leases its facilities under non-cancelable operating leases that expire in 2005 and 2008. Rent expense was approximately \$1,143,000, \$925,000 and \$793,000 for the years ended December 31, 2003, 2002 and 2001, respectively. The leases provide for monthly payments and are being charged to operations ratably over the lease terms. In addition to the minimum lease payments, the Company is responsible for property taxes, insurance and certain other operating costs.

The Company leases certain equipment under non-cancelable lease agreements that are accounted for as capital leases. Equipment under capital lease arrangements included in property and equipment aggregated approximately \$176,000 at December 31, 2003 and December 31, 2002. Related accumulated depreciation was approximately \$161,000 and \$108,000 at December 31, 2003 and 2002, respectively.

Future minimum lease payments under the non-cancelable operating leases as of December 31, 2003 are as follows (in thousands):

<u>Year Ended December 31,</u>	<u>Operating Leases</u>	<u>Capital Leases</u>
2004	\$ 1,325	\$ 14
2005	825	14
2006	358	—
2007	372	—
2008	129	—
Total minimum payments	\$ 3,009	\$ 28
Less amount representing interest		2
		26
Less current portion		13
Long term portion		\$ 13

**Legal Matters**

From time to time the Company may be subject to legal proceedings and claims in the ordinary course of business. These claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources. The Company is not aware of any legal proceedings or claims that the Company believes believe could harm our business or cause its revenues or stock price to fall.

**Note 12—Subsequent Events (Unaudited):**

On February 23, 2004, Synopsys, Inc., a Delaware corporation (“Synopsys”), Mountain Acquisition Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Synopsys (“Acquisition Sub”), and the Company entered into a definitive Agreement and Plan of Merger and Reorganization (the “Reorganization Agreement”) which contemplates the acquisition by Synopsys, through Acquisition Sub, of all of the outstanding common stock of MoSys in a two-step transaction comprised of a combination cash and stock exchange offer for all of the issued and outstanding shares of MoSys common stock for consideration valued at an aggregate of \$13.50 per share of the Company’s common stock (the “Offer”), followed by a merger of Acquisition Sub with and into the Company (the “Merger”). In the Offer, each share of MoSys common stock validly tendered (and not withdrawn) would be converted into a combination of \$6.75 in cash and a fraction of a share of Synopsys common stock having a value of \$6.75 based on a formula set forth in the Reorganization Agreement. Synopsys has the right, at any time through the date two business days prior to the expiration date of the Offer (as it may be extended from time to time), to convert the Offer into an all-cash tender offer, in which case each share of the Company’s common stock would be converted into \$13.50 in cash.

**Schedule II—Valuation and Qualifying Accounts  
(In thousands)**

<u>Description</u>	<u>Balance at beginning of period</u>	<u>Charged to expenses</u>	<u>Credited to expenses</u>	<u>Balance at end of period</u>
<b>Allowance for doubtful accounts receivable:</b>				
Fiscal year ended December 31, 2003	\$ —	\$ —	\$ —	\$ —
Fiscal year ended December 31, 2002	\$ 200	\$ 75	\$ 275	\$ —
Fiscal year ended December 31, 2001	\$ 200	\$ —	\$ —	\$ 200

**Monolithic System Technology, Inc**  
**List of Subsidiaries**

MoSys International, Inc.  
ATMOS Corporation  
MoSys Europe EURL

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**CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS**

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-64302) pertaining to the 2000 Employee Stock Option Plan, 2000 Employee Stock Purchase Plan, 1996 Stock Plan and 1992 Stock Option Plan of Monolithic System Technology, Inc., of our report dated January 26, 2004, with respect to the consolidated financial statements and schedule of Monolithic System Technology, Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2003.

/s/ Ernst & Young LLP

San Jose, California  
March 10, 2004

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CERTIFICATIONS

## RULE 13a-14 THE SECURITIES EXCHANGE ACT OF 1934

I, Fu-Chieh Hsu, certify that:

1. I have reviewed this Form 10-K of Monolithic System Technology, Inc. for the year ended December 31, 2003;
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 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 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 12, 2004

/s/ Fu-Chieh Hsu

Fu-Chieh Hsu

*Chairman of the Board and  
Chief Executive Officer*

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**CERTIFICATIONS**

## RULE 13a-14 THE SECURITIES EXCHANGE ACT OF 1934

I, Mark Voll, certify that:

1. I have reviewed this Form 10-K of Monolithic System Technology, Inc. for the year ended December 31, 2003;
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 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 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 12, 2004

/s/ Mark Voll

Mark Voll

*Vice President of Finance and  
Chief Financial Officer*

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**CERTIFICATION OF CEO AND CFO FURNISHED PURSUANT TO  
18 U.S.C. § 1350,  
AS ADOPTED PURSUANT TO  
§ 906 OF THE SARBANES–OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10–K of Monolithic System Technology, Inc. (the “Company”) for the year ended December 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of Fu–Chieh Hsu, Chairman of the Board and Chief Executive Officer of the Company, and Mark Voll, Vice President, Finance and Administration, Chief Financial Officer and Secretary of the Company, hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes–Oxley Act of 2002, to the best of his knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Fu–Chieh Hsu

Fu–Chieh Hsu  
*Chairman of the Board and Chief Executive Office*  
March 12, 2004

/s/ Mark Voll

Mark Voll  
*Vice President, Finance and Administration, Chief Financial  
Officer and Secretary*  
March 12, 2004

This certification accompanies this Report pursuant to § 906 of the Sarbanes–Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes–Oxley Act of 2002, or otherwise required, be deemed filed by the Company for purposes of § 18 of the Securities Exchange Act of 1934, as amended.