



Annual Report
2004

Financial Summary

In thousands except for per share amounts	2004	2003
For the year:		
Net sales	\$27,789	\$14,089
Operating expenses	12,321	9,041
Net income (loss)	3,403	(1,559)
Net income (loss) per share:		
Basic	\$ 0.35	\$ (0.16)
Diluted	\$ 0.34	\$ (0.16)
Weighted average shares outstanding:		
Basic	9,589	9,477
Diluted	10,113	9,477
At year-end:		
Cash and cash equivalents	\$ 7,268	\$ 4,087
Total assets	20,835	16,469
Shareholders' equity	17,440	13,671

About the Company

Aetrium is a leading supplier of test handlers and other proprietary equipment used by the global semiconductor industry to assemble and test integrated circuits and other electronic components.

The semiconductor industry has earned the reputation of being one of the most, if not the most, cyclical industry in the technology marketplace. The cyclical performance of the industry in 2004 did nothing to alter that reputation. After a multi-year down cycle, calendar year 2004 promised to be a year of strong and sustained growth. In the first half of 2004 the semiconductor industry responded aggressively to an increasing demand for integrated circuits (ICs) from a wide customer base by adding significant new production capacity. Following the multi-year down cycle, many equipment suppliers to the industry found themselves in the position of having small order backlogs and were eager and able to respond quickly to industry demands. As a result, IC manufacturers were able to rapidly and cost effectively add capacity in response to the growing demand for their products. The year started strong for the IC industry's equipment suppliers, but it became obvious as early as the third quarter of 2004 that the growth would not be sustained. The amount of the new IC production capacity that was added and the speed at which it was added, coupled with a slowing demand for IC products in the second half of 2004, once again put the IC industry in a situation where supply exceeded demand for its products. Inventories had clearly grown to excessive levels and IC production equipment utilization rates began to drop. Rather than let the supply and demand problem build, the IC industry acted responsibly and moved quickly to curtail the addition of new production equipment and began to reduce the level of inventory that had built up in the first half of the year. The inventory correction had an immediate and significant negative impact on the industry's equipment suppliers, and our equipment sales dropped as the result of yet another IC industry cycle driven by inventory excess.

Thus, calendar year 2004 was a roller coaster year for equipment suppliers to the IC segment of the

semiconductor industry, especially those companies like Aetrium who provide equipment to the test, assembly, and packaging (TAP) segment of the IC industry. The IC industry's long-term average growth rate of approximately 12% was surpassed easily in 2004 as the industry grew at the accelerated rate of 28%. However, the largest part of the IC industry's growth took place in the first half of the year. The average growth rate of suppliers of TAP equipment was a very healthy 45% in 2004. Like the IC industry, however, the growth was non-linear and was greatest in the first half of 2004, with revenues declining in the second half of the year.

Aetrium handily outpaced the TAP segment of the semiconductor equipment industry growth rate, growing at 97% in 2004, more than double the average growth rate of other TAP equipment suppliers. After building backlog in the last half of 2003, we enjoyed substantial quarter over quarter growth in each of the first two quarters of 2004. Notwithstanding the industry conditions in the second half of 2004, we experienced significant year over year growth in each of the four quarters in 2004 and we achieved profitability from operations in all four quarters. Similar to the rest of the TAP equipment suppliers, however, our sales and order backlog began to decrease materially in the last half of the year as orders for additional capacity were delayed by IC manufacturers who were working aggressively to reduce excessive inventory in the supply chain and increase equipment utilization rates.

The inventory correction and the reluctance of the IC industry to add new production continued into the first quarter of 2005 and these conditions are expected to hang over into the second quarter. It is increasingly being reported, however, that IC inventories in the supply chain have now been reduced to more sustainable levels. Although analysts are far from uniform in their forecasts for the year, there also seems

*Joseph C. Levesque
Chairman, President and
Chief Executive Officer*

to be growing belief that the need for additional production capacity is likely to increase materially in the second half of 2005. Accordingly, we believe that in 2005 our business prospects may produce a mirror image of our performance pattern in 2004, with a weak first half and a stronger second half performance.

The demand for ICs continues to be broad based in nature and not the result of any one end user segment, the introduction of any single application, or the adoption of any single new technology. Two of the strongest areas of demand are being driven by personal communications technology and the need for computing power for both personal and business applications. Aetrium has a long and successful history of providing mission critical production equipment to the IC industry for ICs aimed in particular at these and other strong areas of demand for electronic products. Our new product development and most recent new product introductions continue to be aimed at the IC industry's newest generations of IC packages and new manufacturing processes, and are designed specifically for the largest and fastest growing of all the IC product segments. During 2004 we were successful in adding significantly to our customer base and we were able to expand applications for our products at existing customers as a result of the introduction and acceptance of some of our newer products. They have joined a proven list of more mature products, which we believe together make up the largest portfolio of products of any of our competitors.

We cannot stop the cycles the IC industry creates or experiences. We can only respond to them as they occur. In 2004 we managed Aetrium in a cost effective and efficient manner that allowed us to provide industry segment leading profit margins and the generation of significant positive cash flow from operations. As a

result, we started 2005 with a much healthier balance sheet than when we entered 2004. We are also in a stronger competitive position in 2005 because of our newer product offerings and our expanded customer base. As a result of our competitive position we

see significant growth opportunities as the IC industry progresses through its inventory correction to a pattern of renewed growth. We have improved our infrastructure and added to the depth and strength of our management team. We believe we are better equipped to deal with the cyclical and demanding nature of our customer base as a result. With the performance of the IC industry in the first quarter of 2005 already behind us, we now know that 2005 will be yet another cyclical and challenging year for Aetrium. We believe we are uniquely well positioned to take full advantage of the opportunities that the IC industry may provide us in 2005 and expect that we will once again surpass the average performance of other TAP equipment suppliers.



Sincerely,

A handwritten signature in black ink, appearing to be 'J. Levesque', written in a cursive style.

*Joseph C. Levesque
Chairman, President and Chief Executive Officer*

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

FORM 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2004**
- OR**
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____**

Commission File No. 0-22166

AETRIUM INCORPORATED
(Exact name of registrant as specified in its charter)

Minnesota
(State or other jurisdiction of
incorporation or organization)

41-1439182
(I.R.S. Employer
Identification No.)

2350 Helen Street
North St. Paul, Minnesota 55109
(Address of principal executive offices) (Zip code)

Registrant's telephone number, including area code: **(651) 770-2000**
Securities registered pursuant to Section 12(b) of the Act: **None**
Securities registered pursuant to Section 12(g) of the Act: **Common Stock, \$.001 par value**

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 Rule 12b-2 of the Act). YES
NO

The aggregate market value of the Registrant's Common Stock held by non-affiliates, computed by reference to the price at which the Common Stock was last sold as of June 30, 2004, which is the last business day of the Registrant's most recently completed second fiscal quarter, as reported by The Nasdaq Stock Market was \$68,161,000.

As of March 16, 2005, 9,629,123 shares of Common Stock of the Registrant were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Annual Report on Form 10-K incorporates by reference information (to the extent specific sections are referred to herein) from the Registrant's definitive Proxy Statement for its 2005 Annual Meeting of Stockholders to be held May 25, 2005 (the "2005 Proxy Statement").

Form 10-K

For the fiscal year ended December 31, 2004

TABLE OF CONTENTS

PART I

ITEM 1. BUSINESS	1
ITEM 2. PROPERTIES	11
ITEM 3. LEGAL PROCEEDINGS	12
ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS	12
ITEM 4A. EXECUTIVE OFFICERS OF THE REGISTRANT	13

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS	15
ITEM 6. SELECTED FINANCIAL DATA	16
ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	18
ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	29
ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	29
ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	30
ITEM 9A. CONTROLS AND PROCEDURES	30
ITEM 9B. OTHER INFORMATION	30

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT	31
ITEM 11. EXECUTIVE COMPENSATION	31
ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	31
ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS	31
ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES	32

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	33
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EXHIBIT INDEX	E-1
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PART I

This Form 10-K contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained in this Form 10-K that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, words such as “may,” “will,” “expect,” “believe,” “anticipate,” “estimate” or “continue” or comparable terminology are intended to identify forward-looking statements. These statements by their nature involve substantial risks and uncertainties, and actual results may differ materially depending on a variety of factors, including those set forth under the heading “Business Risks and Uncertainties” located in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” under Item 7 below. We undertake no obligation to correct or update any forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any future disclosures we may make on related subjects in future filings with the SEC. References in this Form 10-K to “Aetrium,” “the company,” “we” and “our,” unless the context otherwise requires, refer to Aetrium Incorporated and its consolidated subsidiaries and their respective predecessors.

ITEM 1. BUSINESS.

Overview

We design, manufacture and market a variety of electromechanical equipment used in the handling and testing of semiconductor and passive electronic devices, such as integrated circuits, or ICs, and discrete electronic components. Our primary focus is on high volume IC device types and on the latest device package designs. Our products are purchased primarily by semiconductor manufacturers and their assembly and test subcontractors. Our products are used in the test, assembly and packaging, or TAP, segment of semiconductor manufacturing (in which we include the manufacture of both semiconductor and passive electronic devices). Our products automate critical functions to improve manufacturing yield, raise quality levels, increase product reliability and reduce manufacturing costs.

We have three principal equipment product lines:

- ***Test Handler Products.*** In terms of revenue, this is our largest product line. Our broad line of test handler products incorporates thermal conditioning, contacting and automated handling technologies to provide automated handling of ICs and discrete electronic components during production test cycles. We also offer change kits to adapt our test handlers to different device package configurations or to upgrade installed equipment for enhanced performance. Change kits represent a significant part of our revenue.
- ***Semiconductor Automation Products.*** Most of our semiconductor automation products are sold to semiconductor manufacturers and their subcontractors, and are used to automate the loading and unloading of burn-in boards. The rest of our semiconductor automation products are sold to original equipment manufacturers, or OEMs, to be incorporated as the automated handling components of such OEMs’ own proprietary equipment for a variety of other IC processing requirements, such as marking, lead scanning, and lead trim and form.
- ***Reliability Test Equipment.*** The primary focus of our reliability test products is to provide IC manufacturers with structural performance data to aid in the evaluation and improvement of IC designs and manufacturing processes to increase IC yield and reliability.

Test handler products accounted for 56%, 52% and 51% of our net sales in 2004, 2003 and 2002, respectively. Semiconductor automation products accounted for 6%, 11% and 8% of our net sales in 2004, 2003 and 2002, respectively. Reliability test equipment accounted for 21%, 20% and 18% of our net sales in 2004, 2003 and 2002, respectively. Change kits and spare parts accounted for 17%, 17% and 23% of our net sales in 2004, 2003 and 2002, respectively.

2004 was a year of transitions in the TAP segment of the semiconductor equipment industry. In the first half of 2004, fueled by increasing demand for semiconductors, revenue for the TAP segment of the semiconductor equipment industry increased approximately 80% over that of the same period in 2003, according to Semiconductor Equipment and Materials International, or SEMI, reporting on North American semiconductor equipment manufacturers. However, the semiconductor industry and its distribution channels took quick and strong action in the second half of 2004 to address growing and excess inventories. As a result, revenue for the TAP segment of the semiconductor equipment industry decreased in the second half of 2004, although revenue for the year was approximately 45% higher than for 2003, as reported by SEMI on the same companies. Our results were similar in pattern, although more pronounced. Our revenues for the first half of 2004 increased approximately 140% over that of the same period in 2003, as we enjoyed strong demand across our product lines. Demand for our products lessened considerably, however, in the second half of 2004, as our customers experienced the same market conditions as the rest of the semiconductor industry. Nevertheless, our revenue for all of 2004 increased 97% over that of 2003, our operations were profitable in each quarter of 2004, and our ending cash position for 2004 increased by more than \$3,000,000 over 2003. In addition, we continued our product development efforts throughout 2004, which were focused on the newest and fastest growing IC package types and the latest semiconductor processes. We ended the year having made substantial progress on pivotal customer evaluations of our newest product introductions.

There are many and varied projections offered by analysts of the semiconductor and semiconductor equipment industries as to how 2005 will proceed for those industries. Our customers offer us little visibility into the demand for our products in 2005 as they continue to react very conservatively to the flattened semiconductor industry market conditions. We believe we are positioned to take full advantage of the industry conditions however they develop because of our cost structure, our newer product introductions that led our strong growth in the first half of 2004, our newest product introductions that we believe will open new markets for us, and our strong working capital position.

All of our product development and manufacturing activities are conducted at either our North St. Paul, Minnesota or Dallas, Texas facilities. We manufacture products within each of our principal product lines at both of these facilities.

Background

Our strategy has focused on revenue growth through product line expansion, by both internally developing and acquiring complementary technologies, businesses, or product lines.

In 1998, we acquired the equipment business of WEB Technology, Inc. The primary products we acquired were semiconductor automation products used to automate the loading and unloading of burn-in boards. This equipment can be configured to accommodate any burn-in board currently being manufactured. We manufacture this equipment at our Dallas operations.

In 1997, we completed two acquisitions that expanded our test handler product lines. In November 1997, we acquired a product line of pick-and-place test handlers from Advantek Inc. This acquisition extended our product line of pick-and-place test handlers for non-memory analog and logic IC devices. We manufacture the product line acquired from Advantek at our North St. Paul operations.

In April 1997, we acquired a line of turret based test handler products through our purchase of the assets of Forward Systems Automation, Inc., which we have since expanded and advanced through internal product development. This line of test handlers addresses discrete electronic components and small ICs, including the fastest growing and newest IC package types. We manufacture this product line at our Dallas operations.

In December 1995, we acquired the assets of E.J. Systems, Inc. Through this acquisition, we obtained some early stage conductive thermal core technology that we have further developed and transferred to our North St. Paul operations.

In November 1994, we acquired the assets of Sym-Tek Systems, Inc., which expanded our presence in the memory IC market, and also extended our line of gravity feed test handlers for non-memory IC test handler applications. We have since discontinued the products for non-memory applications. In the fourth quarter of 2000, we also decided to exit the highly volatile handler market for memory applications. However, through this acquisition we obtained core pick-and-place and in-tray handling technologies, which we further developed and transferred to our North St. Paul operations.

In December 1993, we originated our reliability test systems product line through the purchase of the assets of Sienna Technologies, Inc. Since the acquisition, we have developed and introduced a new generation product line that has been well received by a growing customer base. Our reliability test products are primarily manufactured at our North St. Paul operations.

In April 1988, we acquired the core products of our 5050 series of gravity feed test handlers through our acquisition of Electro-Mechanical Systems, Inc. Since then, through internal development we have expanded this series of products and developed and introduced the 55V6 and 55V8 series of gravity feed test handlers. All of these series of test handlers include a full range of thermal conditioning capabilities, contactors and change kits for a wide range of IC package types. We sell these products into the largest and fastest growing IC market segments. We manufacture our gravity feed test handlers at our North St. Paul operations.

We were incorporated in Minnesota in December 1982. Our executive offices are located at 2350 Helen Street, North St. Paul, Minnesota 55109. Our telephone number is (651) 770-2000. Our web site address is www.aetrium.com. We make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to those reports, as soon as is reasonably practicable after such material is electronically filed with or furnished to the SEC. Our website is not intended to be a part of, nor are we incorporating it by reference into, this Annual Report on Form 10-K.

Financial Information About Segments

Since our inception, we have operated in the single industry segment of supplying electromechanical equipment to the semiconductor industry. Our financial results are set forth in Items 6 and 15 of this Annual Report on Form 10-K.

Test Handler Products

Test handlers are electromechanical systems interfaced with a tester to form a test system designed to handle, thermally condition, contact and sort ICs and discrete electronic components automatically during the final test stage of the manufacturing process. The devices are loaded into the handler from bowls, tubes or trays and then, if required, transported to a temperature chamber within the test handler where they are thermally conditioned and controlled to the required testing temperature. The

devices are then placed into a contactor, which provides an electrical connection between the device and the tester. After testing, the test handler sorts the devices according to test performance as provided by the tester. In some cases, additional process steps are completed by the test handler system. These include marking or inspection of the device packages, and automatic placement of the devices into a tube, tray or tape for shipment to the end user. Test handlers must meet industry criteria for thermal conditioning, contactor integrity and minimization of damage to the device during the test handling cycle.

ICs are multi-function semiconductor devices that may contain millions of individual transistors, and include microprocessors, microcontrollers, digital signal processors and memory devices. ICs come in a wide range of sizes and package types, depending upon their application. Discrete electronic components are single function semiconductor devices, such as transistors and diodes, and passive electronic devices, such as resistors and capacitors. They are typically very small and are manufactured in several package types.

In the testing of ICs and discrete electronic components, the device package type being tested often dictates the type of test handler used. Small outline packages, or SOPs, constituting the largest IC package segment, have leads, or electrical contacts, extending from two sides and are typically tested with gravity feed test handlers. Micro leadless packages, or MLPs and sometimes referred to as MLF™s, SONs or QFNs, have electrical contact pads flush with the sides and bottoms of the ICs and are typically tested with gravity feed or turret based test handlers. MLPs constitute one of the fastest growing new IC package types.

More complex ICs are sometimes packaged in the IC package families more easily damaged in handling. These package families are typically tested with pick-and-place test handlers. More fragile IC package types include QFPs, BGAs, PGAs, some CSPs and the most fragile SOP packages. QFPs, or quad flat packs, have leads extending from all four sides. BGAs, or ball grid array packages, have bumped leads on the bottom of the package. PGAs, or pin grid arrays, have pin type leads extending from the bottom of the package. CSPs, or chip scale packages, are a category of some of the smallest IC packages, with package sizes being no more than 1.2 times the size of the IC die within.

Discrete electronic component package types include small outline transistor packages, or SOTs, which are also sometimes used for the smallest ICs. Discrete electronic component package types are typically tested with turret based test handlers.

Our primary focus continues to be on the newest device and package types, and the largest volume and fastest growing markets, in the IC side of the semiconductor industry. We believe we offer the broadest line of test handling products to the semiconductor industry, addressing the full spectrum of non-memory device types, device package types and media transport types. Our test handler products are complementary with minimal overlap of application, and we distribute and service them through a common organization for efficiency.

Gravity Feed Test Handlers

Traditionally, test handlers have used gravity to move ICs from tubes through the handler system and back into tubes. Typically, in gravity feed systems ICs are halted at necessary points in the handling process by colliding against other ICs or other stopping mechanisms, which can result in lead damage to more fragile IC packages. Accordingly, gravity feed handlers are best suited for more rugged IC packages, which include MLPs and most SOPs.

Our gravity feed test handlers compete most favorably in high-volume applications and their high throughput rates are an added advantage in relatively short test time applications. These handlers adapt to

“plunge-to-board”-type contacting and third party contactors, as well as our internally developed proprietary contactors, providing cost-effective solutions to a wide range of customer test requirements. In “plunge-to-board”-type contacting, the IC is placed directly against the test head with no intermediary sockets or connections, which is particularly well suited for high performance ICs. Our gravity feed test handlers can heat or cool the ICs being tested to any test temperature from -55 degrees C to +155 degrees C. They use mechanical refrigeration to cool ICs, which is more economical than liquid nitrogen, commonly used as a refrigerant in competing handlers. Our dual and quad site gravity feed test handlers can simultaneously test devices in each of their sites to increase productivity and reduce testing costs in certain applications. Our principal gravity feed test handlers include:

- *55V6 Series.* First introduced in 2002, our 55V6 Series of single and dual site gravity feed test handlers for analog and logic IC applications addresses a wide range of IC packages, including SOPs and MLPs. The 55V6 Series offers a small footprint, a vertical backplane that can accommodate any size of test head, and our high speed test site actuator that we believe offers significant throughput advantages over our competition, depending upon device test times and thermal conditioning requirements.
- *55V8 Series.* Our newly developed 55V8 Series of quad site gravity feed test handlers for analog and logic IC applications addresses a wide range of IC packages, including SOPs and MLPs. The 55V8 Series offers the advantages of the 55V6 Series, including our high speed test site actuator. We completed our first sales of the 55V8 Series in the fourth quarter of 2004.
- *5050 Series.* Our 5050 Series of gravity feed test handlers for analog and logic IC applications addresses a wide range of SOP package types. In addition to single test site capability, we offer dual test site and quad test site capability within our 5050 Series of handlers.

Turret Based Test Handlers

Turret based test handlers have a series of pickup heads that rotate around a fixed axis and move devices from station to station. They are typically configured for bowl feed input and tape and reel output, although they can be configured for tube or tray input and tube or tray output. One or more stations on turret based handlers are used for testing ICs and discrete electronic components. Stations on turret based handlers can also be used for additional process steps such as marking and inspection. Turret based handlers are well suited for discrete electronic components and smaller ICs that are difficult to handle in gravity feed handlers because of their size and small mass, and are well suited for MLPs because MLPs can be handled in bulk. Turret based handlers are typically more costly than gravity feed handlers, but typically offer higher throughput rates than gravity feed handlers.

Our turret based test handlers are designed for high volume testing of discrete electronic component packages and ICs in MLP, CSP and SOT packages. These test handlers can integrate several functions, including test, laser marking, mark inspection, lead inspection, and tape and reel output. They can be configured for a variety of options for contacting, including “plunge-to-board”-type contacting. These test handlers are typically configured for bowl feed input and tape and reel output. Our principal turret based handlers include:

- *Model 5800.* We introduced the Model 5800 Small Component Integrated Test Handler in 2000. It has eight stations, and can be configured for up to four test sites. It operates at temperatures ranging from ambient to +150 degrees C, and can be configured for tube input and tube output. The Model 5800 can achieve throughputs of up to 16,000 devices per hour.

- *Model 8832.* We introduced the Model 8832 Small Component Integrated Test Handler in 2000. It has 32 stations, which provide a high degree of flexibility in integrating additional device process functions into the handler. It can be configured for up to eight test sites and, optionally, for tube or tray input and tube or tray output. The Model 8832 is capable of throughputs of up to 24,000 devices per hour.

Pick-and-Place Test Handlers

Pick-and-place test handlers move ICs by “picking” up each device and “placing” the device to the appropriate position, similar to a robot. The motions avoid sliding contact and jarring stops that can potentially result in lead damage to some package types. Thus, pick-and-place test handlers can handle a wide variety of packages, including the IC package families most easily damaged in handling.

Our pick-and-place test handlers can be configured for a wide variety of analog and logic ICs in SOP, QFP, BGA, CSP and PGA packages. Using a conventional thermal chamber technique, these handlers can heat or cool the devices being tested to any test temperature from -55 degrees C to +155 degrees C. These handlers are configured and equipped to safely and reliably handle the most fragile IC packages. Devices are transported with their leads up, virtually eliminating the possibility of lead damage. These handlers feature “plunge-to-board”-type contacting, and can be modified with change kits, typically within 15 minutes, to accommodate nearly every IC package configuration being manufactured in volume today. Our principal pick-and-place handlers include:

- *Model 3000.* The Model 3000 test handler is a dual site pick-and-place test handler, which allows for significantly increased throughput for dual site applications, as compared to single site test handlers.
- *Model 1400.* The Model 1400 is a single site pick-and-place test handler.

Change Kits, Upgrades and Spare Parts

We have an ongoing demand for IC and discrete electronic component package change kits for our installed test handler products, including test handlers no longer in our active product lines. We sell a variety of change kits to accommodate the growing variety of device packages used in the semiconductor industry. The demand for change kits is driven by the introduction of new device package types and increased production volumes experienced by our end customers. Also included in change kits are upgrade kits to enhance the performance of installed equipment. We sell spare parts with new orders as kits or separately as piece parts or in kit form as required.

Semiconductor Automation Products

We have applied our core automation technologies to extend our product lines to other applications of automation of the handling of ICs and discrete electronic components.

4800 Series Burn-in Board Loaders/Unloaders

Our 4800 Series is a line of products used to automate the loading and unloading of burn-in boards. Burn-in boards vary in size and density, and are used to place individual ICs into a convection oven for an extensive reliability screening and stress testing procedure known as “burn-in.” Our burn-in board automation products take untested ICs out of trays or other media and place them into sockets on a burn-in board. After the burn-in test is complete, the 4800 Series system unloads and removes ICs that have completed the burn-in cycle from the burn-in board sockets and sorts the ICs according to the results

of the test as provided by the burn-in system. The burn-in process screens for early failures by operating the IC at elevated voltages and temperatures, usually at 125 degrees C, for periods typically ranging from 12 to 96 hours. Burn-in systems can process thousands of ICs simultaneously, utilizing multiple boards. Most leading-edge microprocessors, digital signal processors, and memory ICs undergo burn-in testing.

Our 4800 Series comes in single pick-up head, dual-head, five-head, ten-head and our newly introduced sixteen-head versions. The single and dual head models are best suited for large IC packages or for those applications requiring a quick conversion of the 4800 Series system to handle a different IC package. The five-head, ten-head and sixteen-head systems are best suited to very high volume memory applications. Our new sixteen-head version offers significant throughput advantage over other versions and is currently in evaluation and verification process at a key customer. All versions are available with a variety of input and output options, including tubes and trays. Package positioning stations ensure device alignment into sockets and output media. An optional stacked burn-in board elevator and trolley allows the system to process up to 32 burn-in boards without any operator intervention.

Automation Modules Product Line for OEMs

We market our Automation Modules product line to a limited number of other semiconductor equipment manufacturers to provide automation for their semiconductor process equipment for a variety of other IC processing requirements, such as marking, lead scanning, and lead trim and form. Our revenues from our Automation Modules product line were severely impacted by the record industry downturn in 2001-2003 as our OEM customers experienced the same business conditions that we were experiencing. As products incorporating our Automation Modules continue to age, we expect that future revenues from this product line will be increasingly dependent upon our success in our OEM customers incorporating Automation Modules into their new product introductions. Sales of Automation Modules represented less than 3% of our revenue in 2004. Currently we are not engaged in any material efforts to develop new applications for our Automation Modules. As a result, we do not expect revenue growth from this product line.

Reliability Test Equipment

The IC industry's demand for higher performance devices through smaller circuit geometries has led to significant technological changes in the materials and processes used to manufacture ICs, including a continuing migration to copper materials for the increasingly minute circuitry of devices. These changes in technology, along with IC user demand for increased reliability, have created a need for increasingly sophisticated reliability testing of IC designs and manufacturing processes. Our reliability test equipment product line enables IC manufacturers to force and measure precise levels of voltage and current through ICs, collect and analyze relevant data, and predict lifetime performance of ICs. This equipment can be utilized to perform reliability testing of packaged and unpackaged ICs.

In 1998, we introduced our 1164 Series of reliability test equipment, including a suite of applications for customers to perform a variety of tests. We have since added many new features, including the full reliability test functionality necessary for testing an IC manufacturer's entire copper process. The 1164 Series features a modular design that allows for great flexibility in performing reliability tests, and can test up to 4,096 devices at a time and perform numerous simultaneous tests on batches of ICs. 14 of the top 20 semiconductor manufacturers in the world are using our 1164 Series of reliability test equipment for copper and related advanced process technologies.

Our reliability test products also include a line of products designed to test over-voltage protection devices for telecommunications applications.

Competition

The semiconductor capital equipment market is highly competitive. In the market for test handler products, we compete with a number of companies ranging from very small businesses to large companies, some of which have substantially greater financial, manufacturing, marketing and product development resources than we have. Some of these companies manufacture and sell both testers and test handlers. The particular companies with which we compete vary with our different test handler product lines, with no one company dominating the overall test handler market. The companies with which we compete most directly in the test handler market include Multitest Electronic Systems GmbH, Rasco AG, Ismecca S.A., SRM Technology (M) Sdn Bhd, Tesec Corporation and Cohu, Inc.

We compete for test handler sales primarily on the basis of effective handler throughput, cost of ownership, temperature accuracy and other performance characteristics of our products, the breadth of our product lines, the effectiveness of our sales and distribution channels and our customer relationships. We believe we compete favorably on all of these factors.

The market for burn-in board automation products is highly competitive. We compete with a number of companies ranging from very small businesses to large companies, some of which have substantially greater financial, manufacturing, marketing and product development resources than we have. The companies with which we compete most directly in this market include Cohu, Inc., Racal Instruments and Todo Seisakusho, Ltd.

We compete for burn-in board automation product sales primarily on the basis of effective throughput, cost of ownership, versatility, and other performance characteristics of our products, the breadth of our product line, the effectiveness of our sales and distribution channels and our customer service. We believe we compete favorably on all of these factors.

We believe that the market for our Automation Modules sold on an OEM basis has no clearly defined commercial competitors offering similar automated handling modules to the IC equipment industry. Historically, OEMs supplying equipment for IC manufacturing processes have developed custom or semi-custom handling components. Many of these OEMs have internal development capability for automated handling and many engineering companies also have automated handling development capability.

The market for our reliability test equipment is also highly competitive and our competitors include QualiTau, Ltd., Chiron Technology Pte. Ltd., ESPEC Corp. and Reedholm Instruments Co. We compete for reliability test system sales on the basis of technology, price, delivery, system flexibility and overall system performance. We believe we compete favorably on all of these factors.

Manufacturing and Supplies

We manufacture test handlers, reliability test equipment and our Automation Modules product line at our North St. Paul, Minnesota facility. We manufacture our turret based test handler products, some of our reliability test equipment and our 4800 Series at our Dallas, Texas facility. Our manufacturing operations consist of procurement and inspection of components and subassemblies, assembly and extensive testing of finished products.

We emphasize quality and reliability in both the design and manufacture of our products. We or our suppliers inspect all components and subassemblies for mechanical and electrical compliance to our specifications. We test all finished products against our specifications, and customer specifications where

applicable, and fully assembled test handler products are tested at all temperatures for which they are designed and with all the device packages to be accommodated.

A significant portion of the components and subassemblies used in our products, including machined parts, PC boards, refrigeration systems, vacuum pumps and contactor elements, are manufactured by third parties on a subcontract basis. As a part of our total quality management program, we have an ongoing supplier quality program under which we select, monitor and rate our suppliers, and recognize suppliers for outstanding performance.

Certain components used in our products, including certain contactor components, printed circuit boards and refrigeration systems, are currently available from only a limited number of sources. We do not maintain long-term supply agreements with most of our suppliers, and we purchase most of our components through individual purchase orders. We may not always be able to replace all of our suppliers within a time period consistent with our business requirements. We attempt to keep an adequate supply of critical components in our inventory to minimize any significant impact the loss of a supplier may cause.

Customers

We rely on a limited number of customers for a substantial percentage of our net sales. In 2004, Maxim Integrated Products, Inc. and Samsung America, Inc. each accounted for more than 10% of net sales. Maxim Integrated Products, Inc. also accounted for more than 10% of net sales in 2003 and 2002, and MB Electronique S.A. also accounted for more than 10% of net sales in 2003. The loss of or a significant reduction in orders by these or other significant customers, including reductions due to market, economic or competitive conditions in the semiconductor industry, would likely have a negative impact on our financial condition and results of operations.

Sales and Marketing

We market our products through a combination of direct salespeople, domestic independent sales representatives and international distributors. Our direct sales organization, comprised of seven salespeople, is responsible for most domestic sales, and coordinates the activities of our domestic independent sales representatives and international distributors and actively participates with them in selling efforts. This enables us to establish strong direct ties with our customers.

We maintain sales and service locations in North St. Paul, Minnesota, Santa Clara, California, San Diego, California, Dallas, Texas, Boise, Idaho, and Saugus, Massachusetts. As of December 31, 2004, we had international distributors located in the United Kingdom, France, Germany, Italy, Korea, Japan, Taiwan, Hong Kong, China, Thailand, Malaysia, Singapore and the Philippines.

Our marketing efforts include participation in industry trade shows and production of product literature and sales support tools. These efforts are designed to generate sales leads for our domestic independent sales representatives, international distributors and direct salespeople.

International shipments accounted for 52%, 54% and 59% of our net sales in 2004, 2003 and 2002, respectively. In addition, it is not uncommon for U.S. customers to take delivery of products in the United States for subsequent shipment to international sites, particularly the Automation Modules product line that is sold on an OEM basis. Most of our international shipments are made to international sites of U.S. semiconductor manufacturers, although there is a growing foreign customer base included in our international sales.

We invoice all of our international sales in U.S. dollars and, accordingly, have not historically been subject to fluctuating currency exchange rates. We establish credit limits from time to time on our international distributors, who purchase products from us and resell to end-users. We also often require irrevocable letters of credit from our end-user international customers to minimize credit risk and to simplify the purchasing/payment cycle.

Research and Development

We believe we must continue to enhance, broaden and modify our existing product lines to meet the constantly evolving needs of the semiconductor equipment market. To date, we have relied both on internal development and acquisitions of technology and product lines to extend our product lines, increase our customer base and avoid reliance on any single semiconductor equipment market segment. Our research and development is conducted at both our North St. Paul, Minnesota and Dallas, Texas facilities. We focus our new product development efforts on the most compelling requirements in the largest and fastest growing segments of the IC side of the semiconductor industry, with emphasis on near term revenue potential. In 2004, we concentrated our new product development efforts on:

- completing development of and beta testing the 55V8 Series quad test site gravity feed handlers;
- developing alternative applications for our high speed test site actuator for the 55V6 and 55V8 Series of test handlers;
- integrating laser mark capability on the Model 8832 test handler;
- developing and beta testing the sixteen-head model burn in board loader/unloader for the 4800 Series; and
- developing additional test capabilities for our 1164 Series of reliability test equipment for the latest generations of copper, gate oxide and transistor device technologies.

Product development expenses are typically divided approximately 50% for new product development and 50% for continuation engineering. Our continuation engineering efforts include the development of additional change kits to meet the expanding families of IC and discrete electronic component package types, further advancement of contactor technologies, and the addition of features and performance options for existing equipment.

We expense all research and development costs, including costs for software development, as incurred. In 2004, 2003 and 2002, our expenses relating to research and development were approximately \$3.6 million, \$2.6 million and \$2.3 million, respectively. Over time, our objective is to invest approximately 12% to 15% of our net sales in research and development, and in 2004 our research and development expense totaled about 13% of our revenue. However, the percentage may be higher in periods of reduced sales, such as 2003 and 2002. We employed 27 engineering personnel as of December 31, 2004.

Intellectual Property

We attempt to protect the proprietary aspects of our products with patents, copyrights, trade secret law and internal nondisclosure safeguards. We currently hold several U.S. patents covering certain features of our handling systems, reliability test systems and Automation Modules, the contactor elements incorporated in certain of our test handlers, and elements of our proprietary conductive thermal

technology. The source code for the software contained in our products is considered proprietary and we typically do not furnish source code to our customers. We have also entered into confidentiality agreements with our employees. Despite these restrictions, it may be possible for competitors or users to copy aspects of our products or to obtain information that we regard as a trade secret.

There is a rapid pace of technological change in the semiconductor industry, which in turn compels us to continually enhance and extend our product lines. We believe that patent, trade secret and copyright protection is less significant to our competitive position than factors such as the knowledge, ability and experience of our personnel, new product development, frequent product enhancements, name recognition and ongoing, reliable product maintenance and support.

Backlog

Our backlog was \$2.8 million at the end of 2004 and \$6.4 million at the end of 2003. Because purchase orders are generally subject to cancellation or delay by customers with limited or no penalty, our backlog is not necessarily indicative of future revenue or earnings. We expect to ship in 2005 all of our backlog as of the end of 2004.

Employees

As of December 31, 2004, we had 90 employees, consisting of 35 in manufacturing, 27 in engineering and product development, 17 in sales, marketing and customer service, and 11 in general administration and finance. None of our employees is represented by a labor union or is subject to any collective bargaining agreement. We have never experienced a work stoppage and we believe that our employee relations are satisfactory.

Financial Information About Geographic Areas

See Note 16 to the Consolidated Financial Statements included in this Annual Report on Form 10-K for information about geographic areas.

Certain Important Factors

In addition to the factors identified above, there are several important factors that could cause our actual results to differ materially from our results in the past and those we anticipate as reflected in any forward-looking statements. Please refer to the heading "Business Risks and Uncertainties" located in "Management's Discussion and Analysis of Financial Condition and Results of Operations" under Item 7 of this Annual Report on Form 10-K for a discussion of these factors and their potential impact on the success of our operations and our ability to achieve our goals.

ITEM 2. PROPERTIES.

We conduct our corporate functions and manufacturing, product development, sales, marketing and field service activities in North St. Paul, Minnesota. We currently occupy approximately 45,000 square feet in North St. Paul under a lease that expires in February 2006. We have an option under the lease, exercisable at any time during the initial lease term, to require construction of approximately 45,000 additional square feet for lease at the same rental rate. We also conduct manufacturing, product development, sales, marketing and field service activities in approximately 28,000 square feet in Dallas, Texas, under a lease that expires in April 2006.

We also have the following continuing lease obligations:

- We vacated a 30,000 square foot facility that is adjacent to our North St. Paul facility in June 2001 when we consolidated our North St. Paul operations into a single building. This facility is under a lease that expires in February 2006. Approximately two-thirds of this space is currently subleased to third parties, and we are actively seeking to sublease the remainder. We remain liable under the lease, on a contingent basis, for the portion of this facility that is subleased.
- We vacated a 45,000 square foot facility in Poway, California in 2000. This lease expires in January 2010. This space is currently subleased to third parties. We remain liable for this facility under the lease, on a contingent basis.

ITEM 3. LEGAL PROCEEDINGS.

We are not a party to, and none of our property is the subject of, any material pending legal, governmental, administrative or other proceedings.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

We did not submit any matter to a vote of our security holders during the fourth quarter of fiscal year 2004.

ITEM 4A. EXECUTIVE OFFICERS OF THE REGISTRANT.

Our executive officers, their ages and the offices they held as of March 1, 2005 are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Joseph C. Levesque	60	Chairman of the Board, President and Chief Executive Officer
Douglas L. Hemer	58	Chief Administrative Officer, Secretary and Director
Daniel M. Koch	51	Vice President — Worldwide Sales
John J. Pollock	45	Vice President — General Manager, North St. Paul Operations
Keith E. Williams	61	President — Dallas Operations
Paul H. Askegaard	53	Treasurer
Timothy G. Foley	45	Vice President — Manufacturing, North St. Paul Operations
Dean K. Hedstrom	55	Vice President — Engineering, North St. Paul Operations

Mr. Levesque has served as our President, Chief Executive Officer and Chairman of our board since 1986. From 1973 to 1986, Mr. Levesque served in various capacities and most recently as Executive Vice President of Micro Component Technology, Inc., a manufacturer of IC testers and test handlers.

Mr. Hemer has served as one of our directors since 1986, and has served as our Secretary since May 2000 and as our Chief Administrative Officer since March 2001. He served as our Group Vice President from August 1998 to March 2001, as the President of our Poway, California operations from February 1997 to August 1998 and as our Chief Administrative Officer from May 1996 until February 1997. Mr. Hemer was a partner in the law firm of Oppenheimer Wolff & Donnelly LLP for more than 15 years before joining Aetrium. Mr. Hemer is also a director of Versa Companies, a privately held company.

Mr. Koch has served as our Vice President - Worldwide Sales since March 1991. From March 1990 to March 1991, Mr. Koch served as the Vice President of Sales of Summation, Inc., a company involved with the testing of IC boards. From December 1973 to March 1990, Mr. Koch served in various sales positions and most recently as Vice President of Sales of Micro Component Technology, Inc.

Mr. Pollock has served as the Vice President and General Manager of our North St. Paul operations since December 2001. From August 1998 to December 2001, Mr. Pollock served as our Vice President of Product Development and Marketing. From April 1998 to August 1998, Mr. Pollock served as interim general manager of our North St. Paul operations. From November 1997 to May 1998, Mr. Pollock served as interim general manager of the handler group we acquired from Advantek Inc. From September 1996 to August 1997, Mr. Pollock served as Business Unit Manager of our Automation Modules product group.

Mr. Williams has served as the President of our Dallas operations since April 1998, when we acquired the handler equipment business of WEB Technology, Inc. Mr. Williams co-founded WEB in 1982, and served as its President and CEO from its inception until we acquired it.

Mr. Askegaard has served as our Treasurer since February 1992. From October 1986 to February 1992, Mr. Askegaard served as our Corporate Controller.

Mr. Foley has served as the Vice President – Manufacturing of our North St. Paul operations since December 2001. Prior to that, he served at our North St. Paul Operations as Vice President – Operations from August 1998 to December 2001, Vice President – Manufacturing from October 1996 to August 1998, and in various other positions since joining us in 1988.

Mr. Hedstrom has served as the Vice President – Engineering of our North St. Paul operations since September 2004. From 1993 to 1998 Mr. Hedstrom was a co-founder, director, and later President of CariTech, Inc., a manufacturer of carrier tape materials for the IC industry. Following the acquisition of CariTech by Illinois Tool Works in August 1998, he served as Engineering Manager – World Wide Operations for Illinois Tool Works until May 2001. Prior to founding CariTech and subsequent to his retirement from Illinois Tool Works, Mr. Hedstrom served as President and a Principal of Hedstrom Engineering Co., a consulting firm specializing in industrial automation and controls.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

Market Information

Our common stock is quoted on The Nasdaq National Market under the symbol "ATRM." The following table summarizes the high and low closing sale prices per share of our common stock for the periods indicated, as reported on The Nasdaq National Market. These prices do not include adjustments for retail mark-ups, markdowns or commissions.

		<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
Fiscal 2004	High	\$ 5.82	\$ 9.55	\$ 7.43	\$ 5.69
	Low	\$ 2.94	\$ 4.72	\$ 4.11	\$ 3.40
Fiscal 2003	High	\$ 1.06	\$ 1.76	\$ 2.78	\$ 4.20
	Low	\$ 0.70	\$ 0.88	\$ 1.26	\$ 2.06

Holdings

As of March 16, 2005, there were approximately 169 shareholders of record. We estimate that an additional 4,200 shareholders own stock held for their accounts at brokerage firms and financial institutions.

Dividends

We have never paid cash dividends on our common stock. We currently intend to retain any earnings for use in our operations and do not anticipate paying cash dividends in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans

The information required to be disclosed by Item 201(d) of Regulation S-K, "Securities Authorized for Issuance Under Equity Compensation Plans," is included under Item 12 of Part III of this Annual Report on Form 10-K.

Recent Sale of Unregistered Securities

We did not have any unregistered sales of equity securities during fiscal year 2004.

ITEM 6. SELECTED FINANCIAL DATA.

You should read the Selected Financial Data presented below in conjunction with the Consolidated Financial Statements and notes thereto included elsewhere in this Annual Report on Form 10-K, and in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this Annual Report on Form 10-K.

Five Year Summary (in thousands, except per share data)

Year ended December 31,	2004	2003	2002	2001	2000
Statement of operations data:					
Net sales	\$ 27,789	\$ 14,089	\$ 12,688	\$ 20,014	\$ 46,052
Income (loss) from operations	3,468 ¹	(1,600) ^{1,3}	(3,336) ^{1,4}	(11,143) ^{1,6}	(7,423) ^{1,7}
Income (loss) before cumulative effect of a change in accounting principle	3,403 ^{1,2}	(1,559) ^{1,3}	(2,806) ^{1,4}	(10,669) ^{1,6}	(21,705) ^{1,7,8}
Cumulative effect of a change in accounting principle	—	—	(6,486) ⁵	—	(824) ⁹
Net income (loss)	3,403 ^{1,2}	(1,559) ^{1,3}	(9,292) ^{1,4,5}	(10,669) ^{1,6}	(22,529) ^{1,7,8,9}
Income (loss) per share before cumulative effect of a change in accounting principle:					
Basic	\$ 0.35	\$ (0.16)	\$ (0.30)	\$ (1.13)	\$ (2.29)
Diluted	\$ 0.34	\$ (0.16)	\$ (0.30)	\$ (1.13)	\$ (2.29)
Net income (loss) per share:					
Basic	\$ 0.35	\$ (0.16)	\$ (0.98)	\$ (1.13)	\$ (2.38)
Diluted	\$ 0.34	\$ (0.16)	\$ (0.98)	\$ (1.13)	\$ (2.38)
Weighted average common shares outstanding:					
Basic	9,589	9,477	9,476	9,438	9,466
Diluted	10,113	9,477	9,476	9,438	9,466
December 31,	2004	2003	2002	2001	2000
Balance sheet data:					
Total assets	\$ 20,835	\$ 16,469	\$ 18,081	\$ 29,386	\$ 44,374
Long-term debt, less current portion	132	—	—	—	—

- As a result of the adoption of SFAS No. 142, “Goodwill and Other Intangible Assets,” we recorded no goodwill amortization expense in 2004, 2003 and 2002. Goodwill amortization expense amounted to \$0.7 million in 2001 and \$0.7 million in 2000. See Note 5 to the Consolidated Financial Statements.
- Includes a \$0.1 million gain on a claim settlement and a \$0.2 million loss on the sale of marketable securities. See Note 6 to the Consolidated Financial Statements.
- Includes a \$0.1 million restructuring charge. See Note 7 to the Consolidated Financial Statements.
- Includes a \$0.7 million goodwill impairment charge. See Note 5 to the Consolidated Financial Statements.
- Includes a \$6.5 million goodwill impairment charge recorded as a cumulative effect of a change in accounting principle. See Note 5 to the Consolidated Financial Statements.
- Includes pre-tax charges of \$3.7 million for inventory excess and obsolescence charges and \$2.2 million for charges related to restructuring costs and asset write-downs.
- Includes pre-tax charges of \$1.7 million for inventory excess and obsolescence charges and \$4.1 million for charges related to restructuring costs and asset write-downs.

8. Includes a \$17.3 million charge to record a valuation reserve against deferred tax assets. See Note 15 to the Consolidated Financial Statements.
9. In 2000, we implemented a change in accounting for revenue for certain types of equipment sales. The cumulative effect of the change in accounting principle was an after-tax charge of \$0.8 million.

Quarterly Financial Data (Unaudited)
(in thousands, except per share data)

	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
2004 Net sales	\$ 6,141	\$ 9,107	\$ 7,073	\$ 5,468
Gross profit	3,437	5,167	4,230	2,955
Net income (loss) ¹	713	2,003	821	(134)
Net income (loss) per share:				
Basic ²	0.07	0.21	0.09	(0.01)
Diluted ²	0.07	0.19	0.08	(0.01)
2003 Net sales	\$ 3,070	\$ 3,243	\$ 3,325	\$ 4,451
Gross profit	1,571	1,665	1,737	2,467
Net income (loss) ³	(630)	(511)	(516)	98
Net income (loss) per share (basic and diluted)	(0.07)	(0.05)	(0.05)	0.01

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1. Includes a \$0.1 million gain on a claim settlement in the second quarter and a \$0.2 million loss on the sale of marketable securities in the fourth quarter. See Note 6 to the Consolidated Financial Statements.
 2. The sum of the four quarterly per share amounts do not equal the calculation for the full year due to rounding.
 3. Includes a \$0.1 million restructuring charge in the first quarter related to a workforce reduction. See Note 7 to the Consolidated Financial Statements.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

Overview:

Aetrium designs, manufactures and markets a variety of electromechanical equipment used by the semiconductor industry to handle and test semiconductor and passive electronic devices, such as integrated circuits, or ICs, and discrete electronic components. Our primary emphasis is on the IC segment of semiconductor manufacturing.

The semiconductor equipment industry is often described as a cyclical growth industry characterized by a long-term growth trend occasionally interrupted by periods of contraction and significant declines in revenue. General industry conditions and the demand for Aetrium's products can fluctuate significantly from period to period as a result of numerous factors, including but not limited to changes in U.S. and worldwide economic conditions, supply and demand for ICs and discrete electronic components, changes in semiconductor manufacturing capacity, advancements in industry technologies and competitive factors. For these and other reasons, our operating results for 2002, 2003 and 2004 may not be indicative of future operating results.

Following a very strong year in calendar 2000, the semiconductor equipment industry experienced a deep and prolonged business downturn during the three-year period ended December 31, 2003. During most of this period, U.S. and global economic conditions were generally weak and many semiconductor manufacturers experienced significantly reduced demand for their products, resulting in elevated inventory levels and significant excess production capacity. These factors led to a dramatic cutback in capital spending, resulting in the most severe downturn in the history of the semiconductor equipment industry.

In 2001, semiconductor manufacturers experienced a significant decrease in demand for their products, which led to sharply reduced capital spending and rescheduling or cancellation of many existing equipment orders. These generally weak industry conditions continued into early 2002, but began to improve somewhat by mid-year as many semiconductor manufacturers began to experience stronger demand for ICs and improvements in capacity utilization. However, the anticipated industry recovery stalled in the second half of the year amid weakening economic conditions, concerns about war and lower consumer demand for products containing ICs and discrete electronic components. As a result, 2002 revenues for the test, assembly and packaging, or TAP, segment of the semiconductor equipment industry dropped approximately 70% compared with 2000 levels, according to Semiconductor Equipment and Materials International, reporting on North American semiconductor equipment companies. Our 2002 revenues of \$12.7 million were down 37% compared with 2001 and down 72% compared with 2000.

In 2003, semiconductor industry business conditions remained very weak although there were signs of improvement as the year progressed, including increasing shipments of semiconductors, decreasing inventory levels, improving capacity utilization rates and an improving economic climate. As the end of the year approached, these factors led to increased capital spending at levels that suggested the beginning of an industry recovery. Aetrium's revenues remained relatively flat through the first three quarters of 2003 and increased in the fourth quarter as equipment orders increased significantly. As a result of the stronger fourth quarter, our 2003 revenues of \$14.1 million were up 11% compared with 2002, which was comparable to the percentage increase in capital spending by the worldwide semiconductor industry as a whole in 2003.

In the first half of 2004, business conditions improved significantly as many semiconductor manufacturers increased capital spending in response to increased demand for their products. Aetrium's

revenues increased dramatically in this period and were more than double the revenues for the first half of 2003. However, industry conditions weakened again in the second half of 2004 as semiconductor manufacturers addressed rising inventory levels. As a result, semiconductor manufacturers decreased capital spending, particularly in the TAP segment of the semiconductor equipment industry. Aetrium's orders and revenues decreased sequentially in the third and fourth quarters, and second half revenues were approximately 18% lower than the first half of the year. Revenues for the year totaled \$27.8 million compared with \$14.1 million in 2003, an increase of 97%. Although the duration and severity of the current industry slowdown is unknown, we expect industry conditions to remain weak through at least the first quarter of 2005.

Critical Accounting Policies and Estimates:

Management's discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. We believe the critical accounting policies that require the most significant judgments and estimates used in the preparation of our consolidated financial statements are those related to revenue recognition, accounts receivable, inventories, identifiable intangible assets, goodwill, warranty obligations and income tax accounting.

Revenue Recognition

Our policy is to recognize revenue on product sales upon shipment if contractual obligations have been substantially met, collection of the proceeds is assessed as being reasonably assured, and title and risk of loss have passed to the customer, which is generally the case for sales of spare parts, accessories, change kits and some equipment and equipment upgrades. In instances where title does not pass upon shipment, revenue is recognized upon delivery or customer acceptance based upon the terms of the sales agreement. In instances where equipment or equipment upgrade sales contracts include post-shipment obligations to be performed by Aetrium and/or contractual terms that can only be satisfied after shipment, such as installation and meeting customer-specified acceptance requirements at the customer's site, revenue is not recognized until such obligations have been completed and there is objective evidence that the applicable contract terms have been met. Due to the high selling price of certain types of equipment, the timing of revenue recognition of a relatively small number of transactions may have a significant impact on our quarterly or annual results.

Accounts Receivable

We maintain an allowance for doubtful accounts that reflects our estimate of losses that may result from the uncollectibility of accounts receivable. Our allowance for doubtful accounts is based primarily on an analysis of individual accounts for which we have information indicating the customer may not be able to pay amounts owed to us. In these cases, based on the available facts and circumstances, we estimate the amount that will be collected from such customers. We also evaluate the collectibility of our accounts receivable in the aggregate based on factors such as the aging of receivable amounts, customer concentrations, historical experience, and current economic trends and conditions. We adjust our allowance for doubtful accounts when additional information is received that impacts the amount reserved. If circumstances change, our estimates of the recoverability of accounts receivable

could be reduced or increased by a material amount. Such a change in estimated recoverability would be accounted for in the period in which the facts that give rise to the change become known. As of December 31, 2004, our allowance for doubtful accounts was \$0.3 million.

Inventories

We establish valuation reserves on our inventories for estimated excess and obsolete inventory equal to the difference between the cost of inventory and its estimated market value based upon assumptions about future product demand and market conditions. If actual product demand or market conditions are less favorable than those projected by management, additional inventory reserves may be required. As of December 31, 2004, our inventory excess and obsolescence reserve was \$2.8 million.

Identifiable Intangible Assets

We review our identifiable intangible assets and other long-lived assets whenever an event or change in circumstances indicates that the carrying value of an asset may be impaired. If such an event or change in circumstances occurs and potential impairment is indicated because the carrying values exceed the estimated future undiscounted cash flows, we would measure the impairment loss as the amount by which the carrying value of the asset exceeds its fair value. During 2002, as a result of our identified impairment of the carrying value of goodwill, we reviewed our identifiable intangible and other long-lived assets for potential impairment and concluded that the carrying value of these assets was not impaired. As of December 31, 2004, the carrying value of our identifiable intangible assets was \$0.9 million.

Goodwill

Effective January 1, 2002, we adopted SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS 142 provides that goodwill is no longer amortized, but rather is reviewed for impairment at the beginning of the fiscal year in which the standard is adopted and at least annually thereafter. SFAS 142 requires a two-step process in the review of goodwill for impairment. Step one requires that we compare the fair value of our single reporting unit (*i.e.*, Aetrium) with the net carrying value of our assets, including goodwill. If our fair value is less than our net asset carrying value, we perform the second step of the impairment test. In step two, we compare the aggregate fair values of our non-goodwill assets and liabilities with the fair value of Aetrium in order to determine the implied fair value of goodwill. At January 1, 2002, we determined that the carrying value of our goodwill exceeded its implied fair value by \$6.5 million and recorded a goodwill impairment charge in that amount. At December 31, 2002, we determined that the carrying value of our goodwill exceeded its implied fair value by \$0.7 million and recorded a goodwill impairment charge in that amount. As of December 31, 2002, after recording the goodwill impairment charge at that date, we had no remaining goodwill balance.

Warranty Obligations

We accrue estimated warranty costs in the period that the related revenue is recognized. Our warranty cost estimates and warranty reserve requirements are determined based upon product performance, historical warranty experience, and costs incurred in addressing product performance issues. Should product performance or cost factors differ from our estimates, adjustments to our warranty accrual may be required. As of December 31, 2004, our warranty reserve was \$0.2 million.

Income Tax Accounting

We carry the benefit we will derive in future accounting periods from tax losses and credits and deductible temporary differences as “deferred tax assets” on our balance sheet. In the fourth quarter of 2000, however, we recorded a full valuation allowance against our deferred tax assets. We recorded this valuation allowance because the cumulative losses we had incurred over the previous three years made it questionable whether we would realize value from the deferred tax assets. Since the fourth quarter of 2000, we have continued to maintain a valuation allowance to fully reserve these assets. We assess the realizability of our deferred tax assets and the need for this valuation allowance based on SFAS No. 109. We expect to continue to maintain a full valuation allowance until we can sustain a level of profitability that demonstrates our ability to use these assets. To the extent we determine that the realization of some or all of these benefits is more likely than not based upon expected future taxable income, a portion or all of the valuation allowance will be reversed. Such a reversal would be recorded as an income tax benefit and, for some portion related to deductions for stock option exercises, an increase in shareholders' equity. As of December 31, 2004, our valuation allowance was \$25.1 million.

Results of Operations:

Selected statements of operations data as a percentage of our net sales for 2004, 2003 and 2002 were as follows:

	2004	2003	2002
Net sales	100.0%	100.0%	100.0%
Cost of goods sold	43.2	47.2	46.7
Gross profit	56.8	52.8	53.3
Operating expenses:			
Selling, general and administrative	31.4	45.4	55.9
Research and development	12.9	18.8	18.1
Goodwill impairment charge	—	—	5.6
Total operating expenses	44.3	64.2	79.6
Income (loss) from operations	12.5	(11.4)	(26.3)
Interest income (expense), net	.2	.3	.7
Other income (expense), net	(.3)	—	—
Income (loss) before income taxes	12.4	(11.1)	(25.6)
Income tax expense (benefit)	.2	—	(3.5)
Net income (loss) before cumulative effect of a change in accounting principle	12.2	(11.1)	(22.1)
Cumulative effect of a change in accounting principle	—	—	(51.1)
Net income (loss)	12.2%	(11.1)%	(73.2)%

Net Sales:

Aetrium's net sales by product line as a percentage of total sales for 2004, 2003 and 2002 were as follows:

	2004	2003	2002
Test handler products	56%	52%	51%
Reliability test equipment products	21	20	18
Semiconductor automation products	6	11	8
Change kits and spare parts	17	17	23
Total	100%	100%	100%

Our net sales increased to \$27.8 million in 2004 compared with \$14.1 million in 2003, a 97% increase. Semiconductor industry conditions began to improve in the fourth quarter of 2003 and continued to strengthen in the first half of 2004, which resulted in an increase in the volume of products we sold in 2004 when compared to 2003. Although industry conditions weakened again in the second half of 2004, our net sales for the year increased across all our product lines compared to 2003. Net sales of test handlers, representing 56% of total net sales, was \$15.7 million in 2004, an increase of \$8.4 million or 115% compared to 2003. Net sales of reliability test equipment, representing 21% of total net sales, was \$5.7 million in 2004, an increase of \$2.9 million or approximately 100% over 2003. Net sales of semiconductor automation equipment, representing 6% of total net sales, was \$1.6 million in 2004, an increase of \$0.1 million or 3% over 2003. Net sales of change kits and spare parts, representing 17% of total net sales, was \$4.8 million in 2004, an increase of \$2.4 million or approximately 100% over 2003.

Aetrium's net sales increased to \$14.1 million in 2003 compared with \$12.7 million in 2002, an increase of 11%. Quarterly revenue levels were relatively flat in the first three quarters of the year, ranging from \$3.1 to \$3.3 million, and were comparable to revenue levels in each of the first three quarters of 2002. Orders for new equipment increased significantly late in the year with net sales amounting to \$4.5 million in the fourth quarter. For the year, equipment net sales increased across all product lines. Test handler net sales, representing 52% of total net sales, increased 12% compared to 2002. Net sales of our reliability test equipment, representing 20% of total net sales, increased 26% in 2003 compared to 2002. Net sales of our semiconductor automation products, representing 11% of total net sales, increased 61% with increases in sales of both burn-in board loaders/unloaders and automation products to OEM customers. Net sales of change kits and spare parts, representing 17% of total net sales, decreased 23% compared to 2002.

Gross Profit:

Gross profit, as a percentage of net sales, was 56.8% of net sales in 2004 compared with 52.8% in 2003 and 53.3% in 2002. Gross margins improved in 2004 compared to 2003 primarily due to efficiencies realized from significantly higher production volumes and revenue levels. Gross margins decreased in 2003 compared to 2002 primarily due to a higher mix of automation equipment sales and a lower mix of change kits and spare parts sales.

Selling, General and Administrative Expenses:

Selling, general and administrative, or SG&A, expenses were \$8.7 million in 2004 compared with \$6.4 million in 2003 and \$7.1 million in 2002. Commission expense increased \$1.1 million in 2004 due to significantly higher net sales volume and a higher mix of commissionable foreign sales. Incentive compensation expense increased \$0.5 million based on profit levels achieved in 2004. Employee wages increased approximately \$0.4 million compared with the prior year primarily due to wage increases, including the reversal of wage reductions implemented prior to 2004. SG&A expenses decreased \$0.7 million in 2003 compared with 2002. Wages decreased approximately \$0.1 million due to a workforce reduction early in the year. Commission expense decreased approximately \$0.2 million in 2003 partially due to the termination of our U.S. independent sales representatives in 2002, although in the second half of 2003 we re-signed an independent representative in one domestic territory. Warranty expense decreased approximately \$0.3 million in 2003 due to reduced warranty claims resulting from product improvements and the settlement of a warranty claim with a customer.

Research and Development Expenses:

Research and development expenses were \$3.6 million in 2004 compared with \$2.6 million in 2003 and \$2.3 million in 2002. The increase of \$1.0 million in 2004 includes an increase of \$0.6 million

in third-party contractor research and development costs related primarily to the development of our new Model 55V8 gravity feed test handler. Incentive compensation expense increased \$0.1 million based on profit levels achieved in 2004. Wages increased \$0.1 million due to the reversal of wage reductions implemented prior to 2004, normal wage increases and the addition of two engineering personnel during the year. The increase in research and development expenses in 2003 relative to 2002 was due to higher materials costs of \$0.1 million and higher contract services of \$0.2 million primarily associated with the development of the 55V8 Series gravity feed test handler. As a percentage of net sales, research and development expenses were 12.9%, 18.8%, and 18.1% in 2004, 2003, and 2002, respectively. New product development is an essential part of our strategy to gain market share. Consistent with 2004, we expect to invest 12% to 15% of our revenues in research and development during profitable periods. However, consistent with 2002 and 2003, we expect that our investment in research and development may exceed these levels during down cycles.

Goodwill Impairment Charges:

Effective January 1, 2002, Aetrium adopted SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS 142 provides that goodwill is no longer amortized, but rather is reviewed for impairment at the beginning of the fiscal year in which the standard is adopted and at least annually thereafter.

The adoption of SFAS 142 required that we complete a transitional goodwill impairment test as of January 1, 2002 using a two-step process. We completed step one of the impairment test by comparing the fair value of our single reporting unit (*i.e.*, Aetrium) with the net carrying value of our assets, including goodwill. The fair value of Aetrium was determined based on quoted market prices of our common stock, as adjusted for a control premium. Since the carrying value of our net assets exceeded their fair value, we concluded that there was a potential impairment. Because there was an indication of a potential impairment, we completed step two of the impairment test in order to measure the amount of any impairment loss. In performing the second step of the impairment test, we compared the aggregate fair values of our non-goodwill assets and liabilities with the fair value of Aetrium in order to determine the implied fair value of goodwill. Step two of the impairment test indicated that the carrying value of our goodwill exceeded its implied fair value by \$6.5 million. In accordance with SFAS 142, this impairment charge (net of income taxes of \$0) was recorded in our consolidated statement of operations as a change in accounting principle effective January 1, 2002.

Aetrium completed its annual goodwill impairment test at December 31, 2002, again using the prescribed two-step process. The impairment test at December 31, 2002 indicated that the carrying value of our goodwill exceeded its implied fair value by \$0.7 million. This impairment charge is included in operating expenses in our consolidated statement of operations for the year ended December 31, 2002.

Restructuring Activities:

During the period 2000 through 2003, the semiconductor equipment industry experienced a significant, prolonged downturn. As a result, we implemented a number of actions to better align our cost structure with significantly reduced revenue levels. In 2000 and 2001, we recorded restructuring charges related to various workforce reductions, consolidations of operations, and facility closures. In the first quarter of 2003, we recorded severance and related costs of \$149,000 in connection with the terminations of six employees.

As of December 31, 2004, we had the following lease obligations related to vacated facilities:

- A 30,000 square-foot facility in North St. Paul, Minnesota is under a lease that expires in February 2006. Approximately two-thirds of this facility is subleased to third parties through the end of our lease term.
- A 45,000 square-foot facility in Poway, California is under a lease that expires in January 2010. As of March 2005, this facility is subleased to three independent parties with the sublease agreements expiring at various times between March and December 2006.

The following table summarizes severance and facility exit restructuring charges and the associated accrual activity for the three years ended December 31, 2004 (in thousands):

	Severance & Related Costs	Facility Exit Costs	Total
Accrual balance, December 31, 2001	\$ 404	\$ 704	\$ 1,108
Cash payments	(404)	(329)	(733)
Accrual balance, December 31, 2002	—	375	375
Severance and related charges	149	—	149
Cash payments	(149)	(151)	(300)
Accrual balance, December 31, 2003	—	224	224
Cash payments	—	(139)	(139)
Accrual balance, December 31, 2004	\$ —	\$ 85	\$ 85

The \$85,000 accrual for facility exit costs at December 31, 2004 is related to the vacated facilities in North St. Paul, Minnesota and Poway, California. We estimate that the accrual will be paid before the end of 2005 and that scheduled subtenant rental income, assuming a continuation of the subleases in place, will fully offset the remainder of our lease obligations. However, if one or more of our current subtenants were to default on their sublease agreements, or if we are unsuccessful in extending subleases or locating replacement subtenants upon the expiration of existing sublease agreements, we may have to record additional facility exit charges in the future.

Interest Income (Expense), Net:

Interest income (expense), net, amounted to \$61,000, \$41,000 and \$91,000 in 2004, 2003 and 2002, respectively. These amounts consisted primarily of interest income from the investment of excess funds, partially offset by approximately \$10,000 of interest expense in 2004 related to a note payable to a bank. Interest income increased in 2004 as a result of higher average cash balances and slightly higher interest rates. Interest income decreased in 2003 due to lower average cash balances and generally lower interest rates compared with 2002.

Other Income (Expense), Net:

In the second quarter of 2004, we settled a claim against a customer for past-due invoices for products we had delivered plus charges related to a purchase order cancelled by the customer in 2001. We accepted shares of the customer's common stock with a market value of approximately \$233,000 in settlement of these claims. Of this amount, approximately \$106,000 was applied to the customer's past-due accounts receivable amounts owed to us. The remaining \$127,000, related to purchase order cancellation charges, was recorded as a gain in the second quarter of 2004. Prior to December 31, 2004, we sold the shares for approximately \$31,000 and realized a loss of approximately \$202,000 in the fourth quarter of 2004. The net effect of these transactions was a net loss of \$74,000, which is presented as "Other income (expense), net" in our Consolidated Statement of Operations.

Income Taxes:

Our income tax expense of \$52,000 for the year ended December 31, 2004 consisted primarily of the Federal alternative minimum tax and certain state minimum fees. Since 2000, we have maintained a valuation allowance to fully reserve our deferred tax assets. We recorded the valuation allowance in 2000 because the cumulative losses we had incurred over the previous three years made it questionable whether we would realize value from the deferred tax assets. We continue to monitor the realizability of the benefits related to our net deferred tax assets. To the extent we determine that the realization of some or all of these benefits is more likely than not based upon expected future taxable income, a portion or all of the valuation allowance will be reversed. Such a reversal would be recorded as an income tax benefit and, for some portion related to deductions for stock option exercises, an increase in shareholders' equity. In 2002, we recorded an income tax benefit of \$0.4 million related to a refund resulting from tax legislation enacted in 2002.

Financial Condition, Liquidity and Capital Resources:

Cash and cash equivalents increased by approximately \$3.2 million in 2004 to \$7.3 million at December 31, 2004. We generated \$2.9 million of cash from operating activities during the year. The major components of cash flows generated from operating activities were net income of \$3.4 million, \$1.1 million in non-cash depreciation and amortization expense, and an increase of \$0.5 million in deferred revenue and customer deposits. These sources of cash were partially offset by increases in accounts receivable of \$0.3 million and inventories of \$1.8 million. Deferred revenue increased due to the receipt of \$0.3 million in progress payments related to shipped equipment that had not met revenue recognition criteria at December 31, 2004 and customer deposits increased due to the receipt of a \$0.1 million deposit with a special equipment order from a new customer. Inventories increased in 2004 due to increased production levels resulting from higher business volumes. Accounts receivable increased because revenues in the fourth quarter of 2004 were approximately 23% higher than in the fourth quarter of 2003. Although accounts receivable increased in absolute dollars, average days' sales outstanding improved from 68 days at December 31, 2003 to 59 days at December 31, 2004.

Cash and cash equivalents decreased by approximately \$1.7 million in 2003 to \$4.1 million at December 31, 2003. We used \$1.5 million to fund operating activities during this period. The major components of cash flows used in operating activities were a net loss of \$1.6 million, a \$1.7 million increase in accounts receivable and a \$1.0 million decrease in accrued liabilities partially offset by non-cash depreciation and amortization expense of \$1.1 million, a \$0.6 million decrease in inventories, and a \$0.9 million increase in accounts payable. Accounts receivable increased \$1.7 million primarily due to a 40% increase in net sales in the fourth quarter of 2003 compared with the fourth quarter of 2002 and also due to the timing of certain collections. We received approximately \$0.7 million in customer payments at the end of December 2002 that resulted in a relatively low accounts receivable balance at December 31, 2002. Although we increased inventory purchases in December 2003 to support increased order activity, inventory levels decreased throughout 2003 as we continued inventory reduction initiatives first implemented during fiscal 2001. Accounts payable increased primarily due to increased inventory purchases in the fourth quarter of 2003 as discussed above. Accrued liabilities decreased primarily due to a reduction in deferred revenue associated with two equipment sales for which a total of \$0.6 million in progress payments was received prior to December 31, 2002 and revenue was recognized in 2003 upon final acceptance of the equipment.

Cash and cash equivalents decreased by \$1.4 million in 2002 to \$5.8 million at December 31, 2002. We used \$1.3 million of cash in operating activities in 2002. The major components of cash flows used in operating activities were a net loss of \$9.3 million and decreases in other accrued liabilities of \$1.9 million, partially offset by \$7.2 million in non-cash goodwill impairment charges, \$1.3 million in

non-cash depreciation and amortization expense and a decrease in inventories of \$1.5 million. The decrease in other accrued liabilities reflects payments of accrued severance and other restructuring costs during the year and a decrease in customer deposits and deferred revenue due primarily to lower sales volumes. Inventories decreased throughout 2002 as a result of inventory reduction initiatives implemented beginning in 2001.

Our use of cash in investing activities in 2004, 2003, and 2002 related primarily to expenditures for equipment, which amounted to \$244,000, \$163,000, and \$41,000, respectively. The capital expenditures in 2004 and 2003 were primarily related to upgrading our data processing capabilities at both our North St. Paul, Minnesota and Dallas, Texas manufacturing facilities. In 2004, we received approximately \$31,000 in cash from the sale of marketable securities originally received in a claim settlement.

In 2004, we generated \$0.5 million in cash flows from financing activities. During the year, we received approximately \$360,000 in cash from the exercise of employee stock options. In addition, in the first quarter of the year, we executed a bank loan for \$190,000 to finance certain data processing equipment purchases. The bank loan is payable in monthly installments of \$3,637 through March 2009, is collateralized by the data processing equipment and bears interest at the prime rate plus 1.5% with a minimum loan interest rate of 5.5% and maximum rate of 7.5%. The prime interest rate was 5.25% at December 31, 2004.

Historically we have supported our capital expenditure and working capital needs with cash generated from operations and our existing cash and cash equivalents. We believe our cash and cash equivalents of \$7.3 million at December 31, 2004 will be sufficient to meet capital expenditure and working capital needs at least through 2005. However, a prolonged continuation of the current industry slowdown or future industry downturns could negatively impact the demand for and prices of our products and adversely affect future cash flows. Also, we may acquire other companies, product lines or technologies that are complementary to our business, and our working capital needs may change as a result of such acquisitions.

We do not presently have a bank line of credit or other working capital financing. Although we believe we will be able to secure financing if needed, there can be no assurance that such financing will be available with terms favorable to Aetrium or at all.

Our contractual obligations as of December 31, 2004 are summarized below (in thousands):

Contractual Obligations	Payments Due By Period						
	Total	2005	2006	2007	2008	2009	2010
Non-cancelable operating leases	\$ 3,215	\$ 1,054	\$ 588	\$ 497	\$ 509	\$ 522	\$ 45
Bank loan payments (assuming interest rate of 6.75%)	194	44	44	44	44	18	—
Purchase order commitments	752	752	—	—	—	—	—
Total	\$ 4,161	\$ 1,850	\$ 632	\$ 541	\$ 553	\$ 540	\$ 45

The above minimum operating lease payments have not been reduced by minimum sublease rentals of \$0.8 million due in the future under noncancellable subleases. Purchase order commitments are related primarily to inventory purchases in the ordinary course of business.

Recent Accounting Pronouncements

In November 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 151, "Inventory Costs", an amendment of Accounting Research Bulletin No. 43, which is the result of the

FASB's efforts to converge U.S. accounting standards for inventories with International Accounting Standards. SFAS 151 requires idle facility expenses, freight, handling costs, and wasted material (spoilage) costs to be recognized as current-period charges. It also requires that the allocation of fixed production overheads be based on the normal capacity of the production facilities. SFAS 151 will be effective for inventory costs incurred during 2006. We are currently evaluating the impact of SFAS 151 on our consolidated financial statements. However, we do not expect SFAS 151 to have a significant impact on our financial position or results of operations.

In December 2004, the FASB issued SFAS No. 123 (Revised 2004), "Share-Based Payment" (SFAS 123R). SFAS 123R addresses all forms of share-based payment awards, including shares issued under employee stock purchase plans, stock options, restricted stock and stock appreciation rights. SFAS 123R will require Aetrium to expense share-based payment awards with compensation cost for share-based payment transactions measured at fair value. SFAS 123R requires us to adopt the new accounting provisions beginning in the third quarter of 2005. This standard, when adopted, will result in a charge to our operations for all existing unvested stock options and any new stock option grants over their vesting period. We are currently evaluating how we will adopt the standard and the impact of adopting SFAS 123(R) on our financial position and results of operations.

Business Risks and Uncertainties:

Several important risks and uncertainties exist which could have an impact on our future operating results. These factors could cause our actual results to differ materially from our anticipated results or results that are reflected in any forward-looking statements in this Annual Report on Form 10-K. These factors, and their impact on the success of our operations and our ability to achieve our goals, include the following:

Market Fluctuations in the Semiconductor Industry

Our business and results of operations depend upon capital expenditures by manufacturers of ICs and discrete electronic components. As a result, our operating results are materially dependent upon economic and business conditions in the semiconductor industry. This industry has been subject to significant market fluctuations and has experienced periodic downturns, which often have had a disproportionate effect on capital equipment suppliers, such as Aetrium. In periods of excess capacity, the semiconductor industry sharply reduces purchases of capital equipment, such as our products. A downturn or slowdown in the semiconductor industry could substantially reduce our revenues and operating results and could harm our financial condition. There has been a trend of decreasing revenues in the TAP segment of the semiconductor equipment industry that began in the third quarter of 2004. This trend may continue and may have a material and adverse impact on Aetrium.

Successful Development and Introduction of New Products and Product Improvements

We operate in an industry that is highly competitive with respect to timely product innovations. The market for our products is characterized by rapid technological change and evolving industry standards. The development of more complex ICs has driven the need for new equipment and processes to produce such devices at an acceptable cost. We believe that our future success will depend in part upon our ability to anticipate changes in technologies, IC and discrete electronic component package types, market trends and industry standards. If we cannot successfully develop and introduce new and enhanced cost-effective products on a timely basis that are accepted in the marketplace, our business and operating results would likely suffer.

Reliance on Significant Customers

We rely on a limited number of customers for a substantial percentage of our net sales. A reduction, delay or cancellation of orders from one or more of these significant customers, or the loss of one or more of these customers, would likely have a negative impact on our operating results.

Fixed Cost Constraints on Reduction of Expenses

Many of our expenses, particularly those relating to properties, capital equipment and certain manufacturing overhead items, are fixed in the short term. Accordingly, reduced demand for our products and services causes our fixed production costs to be allocated across reduced production volumes, which negatively affects our gross margins and profitability. Our ability to reduce expenses is further constrained because we must continue to invest in research and development to maintain our competitive position and to maintain service and support for our existing customer base. Accordingly, in the event of a reduction in our revenues, resulting from an industry downturn or otherwise, we may not be able to maintain profitable operations.

Impact of Cost Reduction Actions

In the event of a sustained downturn and continuing decline in our revenues, we may implement cost reduction actions, such as workforce reductions, consolidation of operations, pay freezes and reductions, and reductions in other expenditures. In doing so, we would attempt to maintain the necessary infrastructures to allow us to take full advantage of subsequent improvements in conditions. However, there can be no assurance that reductions we may have made in personnel and expenditure levels and the loss of the capabilities of personnel we may have terminated would not inhibit us in the timely completion of product development efforts, the effective service of and responsiveness to customer requirements, and the timely ramp up of production in response to improving market conditions.

Impact of Changes in Securities Laws and Regulations

We have made, and will need to continue to make, changes in our corporate governance and securities disclosure and compliance practices as a result of the Sarbanes-Oxley Act of 2002. The SEC and the NASD have enacted, and we expect will continue to enact, new rules on a variety of subjects as a result of the Sarbanes-Oxley Act of 2002. While we believe that we can ultimately comply with the new legislated requirements associated with being a public company, compliance with the Sarbanes-Oxley Act of 2002 will increase our costs and may present new challenges and risks. These developments could also possibly make it more difficult and more expensive to obtain director and officer liability insurance. We may be required to accept reduced coverage or incur substantially higher costs to obtain coverage for our officers and directors, which may make it more difficult for us to attract and retain qualified board members or executive officers. We are currently evaluating and monitoring regulatory developments and cannot estimate the timing or magnitude of additional costs that may be incurred as a result of the Sarbanes-Oxley Act of 2002.

Reduction in the Sales Efforts by our Current Distributors

We market and sell our test handlers and reliability test products outside of the United States primarily through international distributors that are not under our direct control. We have limited internal sales personnel. A reduction in the sales efforts by our current distributors, or the termination of one or more of these relationships with Aetrium, could negatively affect our operating results.

Reduction in our International Sales

We expect that international sales will continue to account for a significant portion of our net sales. As a result, our operations are subject to a number of risks inherent in conducting business internationally, which if any of them occur could negatively impact our operating results.

Failure to Retain our IC Processing Equipment OEMs

We market our Automation Modules product line to a limited number of IC processing equipment OEMs. Our revenues from our Automation Modules product line were severely impacted by the record industry downturn in 2001-2003 as our OEM customers experienced the same business conditions that we were experiencing. As products incorporating our Automation Modules continue to age, we expect that future revenues from this product line will be increasingly dependent upon our success in our OEM customers incorporating Automation Modules into their new product introductions. Sales of Automation Modules represented less than 3% of our revenue in 2004. Currently we are not engaged in any material efforts to develop new applications for our Automation Modules. As a result, we do not expect revenue growth from this product line. Our principal customer for Automation Modules in 2004 has commenced reorganization proceedings and has recently reported entering into an agreement for the sale of the segment of its business that utilizes Automation Modules. We cannot predict what impact this transaction may have on our future sales of Automation Modules, but it may be negative.

Supply of Significant Components for our Products

Certain significant components used in our products, including certain contactor components, printed circuit boards, and refrigeration systems, are currently available only from sole or limited sources. We do not maintain long-term supply agreements with most of our suppliers and we purchase most of our components through individual purchase orders. Our inability to obtain components in required quantities or of acceptable quality could result in delays or reductions in our product introductions or shipments, which could damage our relationships with our customers and cause our operating results to suffer.

We have no obligation to update the above information, including the forward-looking statements, in this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Our exposure to interest rate risk relates primarily to our short-term investment of excess funds which, as of December 31, 2004, consisted primarily of bank repurchase agreements with original maturities of less than three months. Given the short duration of our investments and the size of our investment portfolio, we do not believe a change in interest rates would have a significant impact on our financial condition or results of operations. We generally conduct business in U.S. dollars and, therefore, risks associated with changes in foreign currency rates are insignificant.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Our Consolidated Financial Statements and the report of our independent registered public accounting firm are included in this Annual Report on Form 10-K beginning on page F-1. The index to this report and the financial statements is included in Item 15(a)(1) below.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Our President and Chief Executive Officer, our Chief Administrative Officer and our Treasurer conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Securities Exchange Act Rules 13a-15(e) and 15d-15(e)) as of December 31, 2004. Based on their evaluation, they concluded that our disclosure controls and procedures were effective and designed to give reasonable assurance that the information required to be disclosed by us in reports that we file or submit under the Exchange Act was made known to them by others and was recorded, processed, summarized and reported within the time periods specified in SEC rules and forms. There was no change in our internal controls that occurred during the fourth fiscal quarter in the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to affect, our internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

Directors of the Registrant

The information under the captions “Election of Directors — Information About Nominees,” “Election of Directors — Other Information About Nominees” and “Election of Directors—Additional Information About the Board and Its Committees” in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

Executive Officers of the Registrant

The information under the caption “Item 4A. Executive Officers of the Registrant” located elsewhere in this Annual Report on Form 10-K is incorporated herein by reference.

Compliance with Section 16(a) of the Exchange Act

The information under the caption “Section 16(a) Beneficial Ownership Reporting Compliance” in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

Identification of Audit Committee; Audit Committee Financial Expert

The information under the caption “Executive Compensation and Other Benefits – Audit Committee Report – Membership and Role of the Audit Committee” in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

Code of Ethics

The information under the caption “Code of Ethics” in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

ITEM 11. EXECUTIVE COMPENSATION.

The information under the captions “Election of Directors — Compensation of Directors” and “Executive Compensation and Other Benefits” in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information under the captions “Security Ownership of Certain Beneficial Owners and Management” and “Executive Compensation and Other Benefits—Securities Authorized for Issuance Under Equity Compensation Plans” in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

The information under the caption “Certain Relationships and Related Transactions” in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information concerning principal accountant fees and services and the audit committee's pre-approval policies and procedures under the captions "Independent Registered Public Accounting Firm—Audit and Non-Audit Fees" and "Independent Registered Public Accounting Firm—Pre-approval Policies and Procedures" in our 2005 Proxy Statement is incorporated in this Annual Report on Form 10-K by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1. Financial Statements of Registrant.

The following Consolidated Financial Statements of Aetrium and the Independent Registered Public Accounting Firm's Report thereon are included herein:

<u>Description</u>	<u>Page(s)</u>
Report of Independent Registered Public Accounting Firm.....	F-1
Consolidated Financial Statements:	
Consolidated Statements of Operations.....	F-2
Consolidated Balance Sheets.....	F-3
Consolidated Statements of Changes in Shareholders' Equity	F-4
Consolidated Statements of Cash Flows	F-5
Notes to Consolidated Financial Statements.....	F-6 – F-17

(a) 2. Financial Statement Schedule of Registrant.

Schedule II - Valuation and Qualifying Accounts	S-1
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All other schedules are omitted as the required information is inapplicable or the information is presented in the financial statements or related notes.

(a) 3. Exhibits.

The exhibits to this Annual Report on Form 10-K are listed in the Exhibit Index beginning on page E-1 of this Annual Report on Form 10-K.

If you were one of our shareholders on March 31, 2005 and you want a copy of any of the exhibits listed or referred to in the Exhibit Index, we will furnish it to you at a reasonable cost upon your written request sent to Aetrium Incorporated, 2350 Helen Street, North St. Paul, Minnesota 55109; Attn.: Shareholder Relations.

The following is a list of each management contract or compensatory plan or arrangement we are required to file as an exhibit to this Annual Report on Form 10-K pursuant to Item 15(c):

1. Form of Incentive Stock Option Agreement (incorporated by reference to Exhibit 10.6 to our Form 10-KSB for the year ended December 31, 1993) (File No. 0-22166).
2. Form of Non-Statutory Stock Option Agreement (incorporated by reference to Exhibit 10.7 our Form 10-KSB for the year ended December 31, 1993) (File No. 0-22166).
3. 1993 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 10.2 to our Annual Report on Form 10-K for year ended December 31, 1997) (File No. 0-22166).
4. Salary Savings Plan (incorporated by reference to Exhibit 10.3 to our Registration Statement on Form SB-2) (File No. 33-64962C).
5. Employment Agreement dated April 1, 1986 between Joseph C. Levesque and us (incorporated by reference to Exhibit 10.6 to our Registration Statement on Form SB-2) (File No. 33-64962C).
6. 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10.18 to our Annual Report on Form 10-K for the year ended December 31, 2002) (File No. 0-22166).
7. Form of Change of Control Agreement (incorporated by reference to Exhibit 10.19 to our Annual Report on Form 10-K for the year ended December 31, 2003) (File No. 0-22166).
8. Sales Incentive Program (incorporated by reference to Exhibit 10.21 to our Annual Report on Form 10-K for the year ended December 31, 2003) (File No. 0-22166).
9. Executive Officer Profit Sharing Program (filed herewith electronically).

FINANCIAL STATEMENTS OF REGISTRANT

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Aetrium Incorporated

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Aetrium Incorporated and its subsidiaries (“the Company”) at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004, in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Minneapolis, Minnesota
February 7, 2005

AETRIUM INCORPORATED
Consolidated Statements of Operations

Year Ended December 31,	2004	2003	2002
Net sales	\$ 27,788,624	\$ 14,088,883	\$ 12,687,755
Cost of goods sold	11,999,848	6,648,671	5,920,062
Gross profit	15,788,776	7,440,212	6,767,693
Operating expenses:			
Selling, general and administrative	8,727,072	6,398,855	7,099,306
Research and development	3,593,487	2,641,803	2,299,089
Goodwill impairment charge	—	—	705,731
Total operating expenses	12,320,559	9,040,658	10,104,126
Income (loss) from operations	3,468,217	(1,600,446)	(3,336,433)
Interest income (expense), net	61,396	41,294	90,506
Other income (expense), net (See Note 6)	(74,196)	—	—
Income (loss) before income taxes and cumulative effect of a change in accounting principle	3,455,417	(1,559,152)	(3,245,927)
Income tax expense (benefit)	52,000	—	(440,000)
Income (loss) before cumulative effect of a change in accounting principle	3,403,417	(1,559,152)	(2,805,927)
Cumulative effect of a change in accounting principle, net of taxes (See Notes 2 and 5)	—	—	(6,486,000)
Net income (loss)	\$ 3,403,417	\$ (1,559,152)	\$ (9,291,927)
Basic income (loss) per share:			
Income (loss) before cumulative effect of a change in accounting principle	\$ 0.35	\$ (0.16)	\$ (0.30)
Cumulative effect of a change in accounting principle, net of taxes (See Notes 2 and 5)	—	—	(0.68)
Net income (loss)	\$ 0.35	\$ (0.16)	\$ (0.98)
Diluted income (loss) per common share:			
Income (loss) before cumulative effect of a change in accounting principle	\$ 0.34	\$ (0.16)	\$ (0.30)
Cumulative effect of a change in accounting principle, net of taxes (See Notes 2 and 5)	—	—	(0.68)
Net income (loss)	\$ 0.34	\$ (0.16)	\$ (0.98)
Weighted average common shares outstanding:			
Basic	9,589,000	9,477,000	9,476,000
Diluted	10,113,000	9,477,000	9,476,000

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

AETRIUM INCORPORATED
Consolidated Balance Sheets

December 31,	2004	2003
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 7,267,874	\$ 4,087,439
Accounts receivable, net of allowance for doubtful accounts of \$286,000 and \$237,000, respectively	3,538,009	3,320,345
Inventories	8,493,928	6,688,728
Other current assets	175,224	209,182
Total current assets	19,475,035	14,305,694
Property and equipment:		
Furniture and fixtures	588,526	597,628
Equipment	2,100,888	2,497,810
Less accumulated depreciation and amortization	(2,287,006)	(2,709,686)
Property and equipment, net	402,408	385,752
Identifiable intangible assets, net	878,906	1,749,870
Other assets	78,437	27,774
Total assets	\$ 20,834,786	\$ 16,469,090
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	\$ 33,339	\$ —
Trade accounts payable	1,571,071	1,579,636
Accrued compensation	354,013	312,028
Other accrued liabilities	1,304,035	906,865
Total current liabilities	3,262,458	2,798,529
Long-term debt, less current portion	132,294	—
Commitments and contingencies (See Note 11)		
Shareholders' equity:		
Common stock, \$.001 par value; 30,000,000 shares authorized; 9,627,436 and 9,477,910 shares issued and outstanding, respectively	9,627	9,478
Additional paid-in capital	60,617,859	60,251,952
Accumulated deficit	(43,187,452)	(46,590,869)
Total shareholders' equity	17,440,034	13,670,561
Total liabilities and shareholders' equity	\$ 20,834,786	\$ 16,469,090

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

AETRIUM INCORPORATED
Consolidated Statements of Changes in Shareholders' Equity

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount			
Balance, December 31, 2001	9,474,566	\$ 9,475	\$ 60,246,000	\$ (35,739,790)	\$ 24,515,685
Exercise of stock options	2,478	2	4,173	—	4,175
Net loss	—	—	—	(9,291,927)	(9,291,927)
Balance, December 31, 2002	9,477,044	9,477	60,250,173	(45,031,717)	15,227,933
Exercise of stock options	866	1	1,779	—	1,780
Net loss	—	—	—	(1,559,152)	(1,559,152)
Balance, December 31, 2003	9,477,910	9,478	60,251,952	(46,590,869)	13,670,561
Exercise of stock options	149,526	149	365,907	—	366,056
Net income	—	—	—	3,403,417	3,403,417
Balance, December 31, 2004	9,627,436	\$ 9,627	\$ 60,617,859	\$ (43,187,452)	\$ 17,440,034

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

AETRIUM INCORPORATED
Consolidated Statements of Cash Flows

Year Ended December 31,	2004	2003	2002
Cash flows from operating activities:			
Net income (loss)	\$ 3,403,417	\$ (1,559,152)	\$ (9,291,927)
Adjustments to reconcile net income (loss) to net cash generated by (used in) operating activities:			
Depreciation and amortization	1,098,371	1,133,278	1,299,970
Gain on claim settlement	(127,444)	—	—
Loss on sale of marketable securities	201,640	—	—
Provision for excess and obsolete inventories	120,000	80,000	100,000
Provision for bad debts	60,000	—	—
Goodwill impairment charge	—	—	705,731
Cumulative effect of a change in accounting principle, net of taxes	—	—	6,486,000
Changes in assets and liabilities:			
Accounts receivable	(383,320)	(1,691,862)	(123,301)
Inventories	(1,925,200)	590,146	1,497,140
Other current assets	33,958	(57,569)	(20,351)
Other assets	(50,663)	12,896	15,692
Trade accounts payable	31,435	942,953	(79,623)
Accrued compensation	41,985	(129,783)	(51,463)
Other accrued liabilities	357,170	(868,206)	(1,886,092)
Net cash generated by (used in) operating activities	2,861,349	(1,547,299)	(1,348,224)
Cash flows from investing activities:			
Purchase of property and equipment	(244,063)	(162,958)	(40,611)
Sale of marketable securities	31,460	—	—
Net cash used in investing activities	(212,603)	(162,958)	(40,611)
Cash flows from financing activities:			
Proceeds from sale of common stock	366,056	1,780	4,175
Proceeds from long-term debt	190,000	—	—
Payments on long-term debt	(24,367)	—	—
Net cash provided by financing activities	531,689	1,780	4,175
Increase (decrease) in cash and cash equivalents	3,180,435	(1,708,477)	(1,384,660)
Cash and cash equivalents at beginning of year	4,087,439	5,795,916	7,180,576
Cash and cash equivalents at end of year	\$ 7,267,874	\$ 4,087,439	\$ 5,795,916

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

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

NOTE 1: BUSINESS DESCRIPTION

Aetrium Incorporated designs, manufactures and markets a variety of electromechanical equipment used by the semiconductor industry to handle and test integrated circuits, or ICs, and discrete electronic components. References in the Notes to Consolidated Financial Statements to “Aetrium,” “the company,” “we” or “our,” unless the context otherwise requires, refer to Aetrium Incorporated and its consolidated subsidiaries and their respective predecessors.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation: The consolidated financial statements include the accounts of Aetrium Incorporated and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates: The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Reclassifications: Certain previously reported amounts have been reclassified to conform to the current year presentation. Such reclassifications had no impact on previously reported net income (loss), shareholders’ equity or cash flows. These included the reclassification of \$149,000 of unusual charges related to 2003 restructuring activities from a separate line on the consolidated statement of operations to selling, general and administrative expenses.

Cash Equivalents: Cash equivalents include highly liquid investments purchased with an original maturity of three months or less.

Marketable Securities: Marketable securities are classified as short-term or long-term in our balance sheet based on their maturity date and expectations regarding sales. Available-for-sale securities are carried at fair value, with unrealized gains and losses reported as a separate component of shareholders’ equity until realized. Fair value is determined using quoted market prices. The carrying amounts of securities used to compute unrealized gains and losses and the cost of securities used to compute realized gains and losses are determined by specific identification.

Inventories: Inventories are valued at the lower of cost or market, with cost determined on a first-in, first-out basis.

Property and Equipment: Furniture, fixtures and equipment are recorded at cost and are depreciated using the double declining balance method over estimated useful lives ranging from three to seven years. When assets are retired or disposed of, the cost and accumulated depreciation are removed from the accounts. Depreciation expense was \$0.2 million, \$0.2 million and \$0.4 million for the years ended December 31, 2004, 2003 and 2002, respectively. Maintenance and repairs are charged to expense as incurred.

Goodwill: Effective January 1, 2002, Aetrium adopted Statement of Financial Accounting Standards (“SFAS”) No. 142, “Goodwill and Other Intangible Assets.” SFAS 142 provides that goodwill is no longer amortized, but rather is reviewed for impairment at the beginning of the fiscal year in which the standard is adopted and at least annually thereafter. SFAS 142 requires a two-step process in the review of goodwill for impairment. Step one requires that Aetrium compare the fair value of its single reporting unit (*i.e.*, Aetrium) with the net carrying value of its assets, including goodwill. If the fair value is less than the net asset carrying value, Aetrium performs the second step of the impairment test. In step two, Aetrium

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

compares the aggregate fair values of non-goodwill assets and liabilities with the fair value of Aetrium in order to determine the implied fair value of goodwill. If the carrying value of goodwill exceeds its implied value, an impairment loss is recorded. See Note 5 for additional information regarding the adoption of SFAS 142 and the results of the transitional and annual impairment tests.

Other Intangible Assets: Identifiable intangible assets, consisting primarily of acquired technology, are capitalized at their respective fair values, which are generally determined using discounted future cash flow techniques and assumptions appropriate to each situation. Such intangibles are amortized on a straight-line basis over their estimated useful lives of seven to fifteen years.

Valuation of Long-Lived Assets: Aetrium reviews its identifiable intangible and other long-lived assets for impairment whenever an event or change in circumstances indicates that the carrying value of an asset may not be recoverable. If such an event or change in circumstances occurs and potential impairment is indicated because the carrying values exceed the estimated future undiscounted cash flows, Aetrium would measure the impairment loss as the amount by which the carrying value of the asset exceeds its fair value.

Revenue Recognition: Aetrium's policy is to recognize revenue on product sales upon shipment if contractual obligations have been substantially met, collection of the proceeds is assessed as being reasonably assured, and title and risk of loss have passed to the customer, which is generally the case for sales of spare parts, accessories, change kits and some equipment and equipment upgrades. In instances where title does not pass upon shipment, revenue is recognized upon delivery or customer acceptance based upon the terms of the sales agreement. In instances where equipment or equipment upgrade sales contracts include post-shipment obligations to be performed by Aetrium and/or contractual terms that can only be satisfied after shipment, such as installation and meeting customer-specified acceptance requirements at the customer's site, revenue is not recognized until such obligations have been completed and there is objective evidence that the applicable contract terms have been met. In situations where equipment is shipped but revenue and the related receivable are not recognized, the cost of the equipment is included in inventories in our consolidated balance sheet. We often receive payments from customers prior to recognizing revenue. For example, we may receive partial payments prior to shipment, which we record as "customer deposits" or we may receive partial payments after shipment but prior to recognizing revenue, which we record as "deferred revenue." Customer deposits and deferred revenue are recorded as liabilities and included in "other accrued liabilities" in our consolidated balance sheet. See Notes 8 and 9.

Warranty Costs: Estimated warranty costs are accrued in the period that the related revenue is recognized. The following table summarizes product warranty liability accruals and settlements for the three years ended December 31, 2004 (in thousands):

	Balance at beginning of year	Accruals for warranties issued	Settlements made	Balance at end of year
2002	\$ 455	\$ 333	\$ (383)	\$ 405
2003	405	81	(281)	205
2004	205	233	(271)	167

There were no changes in estimated warranty accruals for any of the years presented.

Research and Development: Research and development expenditures, which include software development costs, are expensed as incurred. SFAS No. 86, "Accounting for the Costs of Computer Software to Be Sold, Leased or Otherwise Marketed," requires the capitalization of certain software development costs once technological feasibility is established, which we define as the completion of a working model. To date, the period between achieving technological feasibility and the general

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

availability of such software that is embedded in our equipment has been short and software development costs qualifying for capitalization have been insignificant. Accordingly, we have not capitalized any software development costs.

Income Taxes: Income taxes are accounted for in accordance with SFAS No. 109, "Accounting for Income Taxes." Deferred tax assets are recognized for deductible temporary differences and tax credit carryforwards and deferred tax liabilities are recognized for taxable temporary differences. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized, or the application of SFAS 109 does not permit management to conclude thereunder that it is more likely than not that some portion or all of the deferred tax assets will be realized.

Income (Loss) Per Common Share: Basic income (loss) per common share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding during each period. Diluted net income per share is computed by dividing net income by the weighted-average number of common shares and potentially dilutive shares outstanding during each period. Potentially dilutive shares include stock options using the treasury stock method. For loss periods, the computation of diluted loss per share excludes the impact of stock options because they would be antidilutive and diluted loss per share is therefore the same as basic loss per share. A reconciliation of the number of shares used in the computations of basic and diluted income (loss) per share follows (in thousands):

Year ended Dec. 31,	2004	2003	2002
Weighted average common shares outstanding	9,589	9,477	9,476
Potentially dilutive stock options	524	—	—
Weighted average common shares outstanding, assuming dilution	<u>10,113</u>	<u>9,477</u>	<u>9,476</u>

For the year ended December 31, 2004, options to purchase 260,938 common shares are excluded from the diluted computation because their exercise prices exceeded the average market value of our common stock and they would therefore be antidilutive to earnings per share. For the years ended December 31, 2003 and 2002, all stock options are excluded from the loss per share computations because they would be antidilutive. As of December 31, 2003 and 2002, respectively, there were 1,895,299 and 1,498,746 outstanding stock options that could have potentially impacted diluted earnings per share.

Stock-Based Employee Compensation: Aetrium accounts for its stock incentive plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations. No stock-based compensation cost is reflected in our consolidated statements of operations, as all options granted to employees and directors under our plans had an exercise price equal to the market value of the underlying common stock on the date of grant and all options vest based only upon continuing employment. The following table illustrates the effect on net income (loss) and net income (loss) per share if we had applied the fair value recognition provisions of SFAS No. 123, "Accounting for Stock-Based Compensation," to stock-based compensation (in thousands, except per share amounts):

Year ended Dec. 31,	2004	2003	2002
Net income (loss), as reported	\$ 3,403	\$ (1,559)	\$ (9,292)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all grants, net of related tax effects	<u>(436)</u>	<u>(311)</u>	<u>(641)</u>
Pro forma net income (loss)	<u>\$ 2,967</u>	<u>\$ (1,870)</u>	<u>\$ (9,933)</u>

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

Year ended Dec. 31,	2004	2003	2002
Net income (loss) per share:			
Basic - as reported	\$ 0.35	\$ (0.16)	\$ (0.98)
Basic - pro forma	\$ 0.31	\$ (0.20)	\$ (1.05)
Diluted - as reported	\$ 0.34	\$ (0.16)	\$ (0.98)
Diluted - pro forma	\$ 0.30	\$ (0.20)	\$ (1.05)

For the years ending December 31, 2003 and 2002, no tax benefit was applied to the fair value expense calculated under SFAS No. 123 due to establishing valuation allowances on deferred tax assets (see Note 15 for further discussion on income taxes).

Using the Black-Scholes option-pricing model, the weighted-average fair value of options granted in 2004, 2003, and 2002 was \$2.46, \$1.31, and \$0.99, respectively. Weighted average assumptions used in applying the Black-Scholes option-pricing model to estimate the fair value of options granted were as follows:

	2004	2003	2002
Expected dividend level	0%	0%	0%
Expected stock price volatility	70%	66%	65%
Risk-free interest rate	2.9%	2.6%	3.0%
Expected life of options (years)	3.5	3.5	3.5

See Note 13 for additional information regarding Aetrium's stock option plans.

Comprehensive Income (Loss): Aetrium's comprehensive income (loss) is equal to its net income (loss) for all periods presented.

Repurchases of Common Stock: Aetrium accounts for repurchased shares as retirements. The par value of repurchased shares is charged to the common stock account and the excess of the purchase cost over par value is charged to additional paid-in capital.

NOTE 3: RECENT ACCOUNTING PRONOUNCEMENTS

In November 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 151, "Inventory Costs", an amendment of Accounting Research Bulletin No. 43, which is the result of the FASB's efforts to converge U.S. accounting standards for inventories with International Accounting Standards. SFAS 151 requires idle facility expenses, freight, handling costs, and wasted material (spoilage) costs to be recognized as current-period charges. It also requires that the allocation of fixed production overheads be based on the normal capacity of the production facilities. SFAS 151 will be effective for inventory costs incurred during 2006. We are currently evaluating the impact of SFAS 151 on our consolidated financial statements. However, we do not expect SFAS 151 to have a significant impact on our financial position or results of operations.

In December 2004, the FASB issued SFAS No. 123 (Revised 2004), "Share-Based Payment" (SFAS 123R). SFAS 123R addresses all forms of share-based payment awards, including shares issued under employee stock purchase plans, stock options, restricted stock and stock appreciation rights. SFAS 123R will require Aetrium to expense share-based payment awards with compensation cost for share-based payment transactions measured at fair value. SFAS 123R requires us to adopt the new accounting provisions beginning in the third quarter of 2005. This standard, when adopted, will result in a charge to our operations for all existing unvested stock options and any new stock option grants over their vesting period. We are currently evaluating how we will adopt the standard and the impact of adopting SFAS 123R on our financial position and results of operations.

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

NOTE 4: SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION

Cash payments (refunds) for interest and income taxes were as follows (in thousands):

Year ended Dec. 31,	2004	2003	2002
Interest paid	\$ 10	\$ 5	\$ 11
Income taxes paid (refunded), net	\$ 66	\$ —	\$ (440)

NOTE 5: GOODWILL AND OTHER INTANGIBLE ASSETS - CHANGE IN ACCOUNTING PRINCIPLE

Effective January 1, 2002, Aetrium adopted SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS 142 provides that goodwill is no longer amortized, but rather is reviewed for impairment at the beginning of the fiscal year in which the standard is adopted and at least annually thereafter.

The adoption of SFAS 142 required that we complete a transitional goodwill impairment test as of January 1, 2002 using a two-step process. We completed step one of the impairment test by comparing the fair value of our single reporting unit (*i.e.*, Aetrium) with the net carrying value of our assets, including goodwill. The fair value of Aetrium was determined based on quoted market prices of our common stock, as adjusted for a control premium. Since the carrying value of our net assets exceeded their fair value, we concluded that there was a potential impairment. Because there was an indication of a potential impairment, we completed step two of the impairment test in order to measure the amount of any impairment loss. In performing the second step of the impairment test, we compared the aggregate fair values of our non-goodwill assets and liabilities with the fair value of Aetrium in order to determine the implied fair value of goodwill. Step two of the impairment test indicated that the carrying value of our goodwill exceeded its implied fair value by \$6.5 million. In accordance with SFAS 142, this impairment charge (net of income taxes of \$0) was recorded in our consolidated statement of operations as a change in accounting principle effective January 1, 2002.

Aetrium completed its annual goodwill impairment test at December 31, 2002, again using the prescribed two-step process. The impairment test at December 31, 2002 indicated that the carrying value of our goodwill exceeded its implied fair value by \$0.7 million. This impairment charge is included in operating expenses in our consolidated statement of operations for the year ended December 31, 2002.

Identifiable intangible assets are comprised of the following (in thousands):

December 31,	2004			2003		
	Gross	Accumulated amortization	Net	Gross	Accumulated amortization	Net
Developed technology	\$ 2,600	\$ (2,511)	\$ 89	\$ 2,600	\$ (2,155)	\$ 445
Core technology	3,167	(2,761)	406	3,167	(2,368)	799
Customer list	1,100	(742)	358	1,100	(633)	467
Other	99	(73)	26	99	(60)	39
Total	\$ 6,966	\$ (6,087)	\$ 879	\$ 6,966	\$ (5,216)	\$ 1,750

Amortization expense related to identifiable intangible assets was as follows (in thousands): 2004 - \$871; 2003 - \$884; 2002 - \$885. Estimated amortization expense in future years is as follows (in thousands): 2005 - \$536; 2006 - \$202; 2007 - \$113; 2008 - \$28.

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

NOTE 6: OTHER INCOME (EXPENSE), NET

In the second quarter of 2004, we settled a claim against a customer for past-due invoices for products we had delivered plus charges related to a purchase order cancelled by the customer in 2001. We accepted shares of the customer's common stock with a market value of approximately \$233,000 in settlement of these claims. Of this amount, approximately \$106,000 was applied to the customer's past-due accounts receivable amounts owed to us. The remaining \$127,000, related to purchase order cancellation charges, was recorded as a gain in the second quarter of 2004. Prior to December 31, 2004, we sold the shares for approximately \$31,000 and realized a loss of approximately \$202,000 in the fourth quarter of 2004. The net effect of these transactions was a net loss of \$74,196, which is presented as "Other income (expense), net" in our Consolidated Statement of Operations.

NOTE 7: RESTRUCTURING ACTIVITIES

During the period 2000 through 2003, the semiconductor equipment industry experienced a significant, prolonged downturn and we implemented a number of actions to better align our cost structure with significantly reduced revenue levels. In 2000 and 2001, we recorded restructuring charges related to various workforce reductions, consolidations of operations, and facility closures. In the first quarter of 2003, we recorded severance and related costs of \$149,000 in connection with the terminations of six employees.

As of December 31, 2004, we had the following lease obligations related to vacated facilities:

- A facility in North St. Paul, Minnesota is under a lease that expires in February 2006. Approximately two-thirds of this facility is subleased to third parties through the end of our lease term.
- A facility in Poway, California is under a lease that expires in January 2010. As of March 2005, this facility is subleased to three independent parties with the subleases expiring at various times between March and December 2006.

The following table summarizes severance and facility exit restructuring charges and the associated accrual activity for the three years ended December 31, 2004 (in thousands):

	Severance & Related Costs	Facility Exit Costs	Total
Accrual balance, December 31, 2001	\$ 404	\$ 704	\$ 1,108
Cash payments	(404)	(329)	(733)
Accrual balance, December 31, 2002	—	375	375
Severance and related charges	149	—	149
Cash payments	(149)	(151)	(300)
Accrual balance, December 31, 2003	—	224	224
Cash payments	—	(139)	(139)
Accrual balance, December 31, 2004	\$ —	\$ 85	\$ 85

The \$85,000 accrual for facility exit costs at December 31, 2004 is related to the vacated facilities in North St. Paul, Minnesota and Poway, California. We estimate that the accrual will be paid before the end of 2005 and that scheduled subtenant income, assuming a continuation of the subleases in place, will fully offset the remainder of our lease obligations. However, if one or more of our current subtenants were to default on their sublease agreements or if we are unsuccessful in extending subleases or locating replacement subtenants upon the expiration of current sublease agreements, we may have to record additional facility exit charges in the future.

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

NOTE 8: INVENTORIES

A summary of the composition of inventories is as follows (in thousands):

December 31,	2004	2003
Purchased parts and completed subassemblies	\$ 3,919	\$ 3,127
Work-in-process	2,903	2,414
Finished goods, including demonstration equipment	1,379	824
Equipment shipped, subject to revenue deferral	293	324
Total inventories	\$ 8,494	\$ 6,689

NOTE 9: OTHER ACCRUED LIABILITIES:

Other accrued liabilities are comprised of the following (in thousands):

December 31,	2004	2003
Accrued commissions	\$ 258	\$ 146
Accrued warranty	167	205
Customer deposits and deferred revenue	528	71
Accrued restructuring costs	85	224
Other	266	261
Total other accrued liabilities	\$ 1,304	\$ 907

NOTE 10: LONG-TERM DEBT

In the first quarter of 2004, we executed a note payable to a bank for \$190,000, payable in monthly installments of \$3,637 through March 2009. The note is collateralized by certain data processing equipment with a carrying value of approximately \$202,000 at December 31, 2004, and bears interest at the prime rate plus 1.5% with a minimum loan interest rate of 5.5% and maximum rate of 7.5%. The prime interest rate was 5.25% at December 31, 2004. The loan balance at December 31, 2004 was \$165,633. Future maturities of long-term debt as of December 31, 2004 are as follows (in thousands):

2005	\$ 33
2006	36
2007	38
2008	41
2009	18
Total	\$ 166

NOTE 11: LEASE OBLIGATIONS

Aetrium leases two adjacent buildings in North St. Paul, Minnesota from a partnership controlled by certain of our shareholders under two lease agreements, each of which expires in February 2006. Each lease provides us with an option to extend the term for an additional five years. None of the shareholders in the partnership are directors or officers of Aetrium, or, to our knowledge, own more than five percent of our common stock. In 2001, we vacated one of the buildings in connection with a restructuring of operations. As of March 2005, we have subleased approximately two-thirds of this building to three unrelated parties with terms coinciding with the expiration of our lease. We currently conduct our North St. Paul operations in the second building.

Aetrium leases a manufacturing facility in Dallas, Texas under a lease agreement that expires in April 2006. The lease agreement provides us with an option to extend the term for an additional two years.

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

In 2000, we vacated a leased facility in Poway, California. The lease expires in January 2010. The lease was assigned to an unrelated company in 2000 and Aetrium continued to be contingently liable under the lease if the assignee were to default. In January 2004, we were notified by the lease assignee that it would be discontinuing operations. We negotiated a termination of the lease assignment for a lump sum payment of \$452,000 less credits for applied deposits and future subtenant rentals, and the lease was re-assigned to Aetrium. As of March 2005, this facility is subleased to three independent parties with the sublease agreements expiring at various times between March and December 2006.

Rent expense related to the facility leases described above and various short-term equipment operating leases was as follows (in thousands):

Year ended Dec. 31,	2004	2003	2002
Leased from shareholders	\$ 438	\$ 438	\$ 438
Leased from others	808	344	473
Sublease/assigned lease income	(745)	(341)	(351)
Total net rent expense	\$ 501	\$ 441	\$ 560

As of December 31, 2004, future minimum annual lease payments under operating leases were as follows (in thousands):

2005	\$ 1,054
2006	588
2007	497
2008	509
2009	522
Thereafter	45
Total minimum lease payments	\$ 3,215

The above minimum lease payments have not been reduced by minimum sublease rentals of \$0.8 million due in the future under noncancellable subleases.

NOTE 12: RELATED PARTY TRANSACTIONS

We purchase machined parts from two suppliers in which one of our executive officers has a minority ownership interest. Purchases from these suppliers amounted to a total of \$210,000, \$237,000 and \$197,000 in the years ended December 31, 2004, 2003 and 2002, respectively.

NOTE 13: STOCK OPTION PLANS

Aetrium's 1993 Stock Incentive Plan (the 1993 Plan) terminated in June 2003. Stock options granted under the 1993 Plan that were outstanding at the time the plan terminated may continue to be exercised according to their individual terms. In May 2003, Aetrium's shareholders approved the adoption of the 2003 Stock Incentive Plan (the 2003 Plan) to replace the 1993 Plan. Employees, officers, directors, consultants and independent contractors providing services to us are eligible to receive awards under the 2003 Plan. The number of shares available for issuance under the 2003 Plan is equal to 20% of the aggregate number of shares of common stock outstanding less the total number of shares of common stock issuable upon the exercise or conversion of any outstanding stock options, warrants or other stock rights. Our 2003 Plan is administered by the Compensation Committee of our board of directors and provides for the granting of: (a) stock options; (b) stock appreciation rights; (c) restricted stock; (d) performance awards; and (e) stock awards valued in whole or in part by reference to or otherwise based upon our stock. Options granted under the 2003 Plan may be incentive stock options or nonqualified stock options. The 2003 Plan will terminate on February 28, 2013. Our stock incentive plans provide that the Compensation Committee may, at its discretion, allow the exercise price of stock options to be paid, in

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

whole or in part, by tendering previously acquired shares that have been held by the option holder for at least six months.

The following table summarizes activity under our stock incentive plans:

	Outstanding Options		
	Number of Shares	Range of Exercise Prices	Weighted Average Exercise Price
Balance, December 31, 2001	1,124,000	\$ 1.69 to 7.08	\$ 4.91
Options granted	545,300	1.03 to 2.06	2.02
Options exercised	(2,478)	1.69	1.69
Options forfeited	(168,076)	1.69 to 7.08	5.47
Balance, December 31, 2002	1,498,746	1.03 to 7.08	3.80
Options granted	701,950	0.87 to 2.76	2.70
Options exercised	(866)	2.06	2.06
Options forfeited	(304,531)	1.03 to 7.08	5.70
Balance, December 31, 2003	1,895,299	0.87 to 7.08	3.09
Options granted	100,000	4.81	4.81
Options exercised	(150,607)	0.87 to 5.88	2.46
Options forfeited	(135,772)	2.05 to 7.08	6.47
Balance, December 31, 2004	1,708,920	\$ 0.87 to 5.97	\$ 2.97
Options exercisable as of December 31, 2004	964,675	\$ 0.87 to 5.97	\$ 3.07

The following table summarizes information related to stock options outstanding at December 31, 2004, all of which are nonqualified options and expire five years after the grant date and of which 297,875 options were fully exercisable when granted, 30,000 options become exercisable over 32 months from date of grant and 1,381,045 options become exercisable over four years from date of grant:

Options Outstanding				Options Exercisable	
Range of Exercise Prices	Number Outstanding at 12/31/04	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable at 12/31/04	Weighted Average Exercise Price
\$ 0.87 to 1.03	25,000	2.9 years	\$ 0.95	9,115	\$ 0.91
1.69 to 2.06	653,703	2.0 years	1.90	521,931	1.87
2.76	669,279	4.0 years	2.76	166,441	2.76
4.81 to 5.97	360,938	1.7 years	5.47	267,188	5.70
\$ 0.87 to 5.97	1,708,920	2.7 years	\$ 2.97	964,675	\$ 3.07

NOTE 14: EMPLOYEE SAVINGS 401(k) PLAN

Aetrium has a 401(k) employee savings plan, which covers full-time employees who are at least 21 years of age. Our contributions to the savings plan, which are at the discretion of management, amounted to \$116,723 in 2004. We made no contributions to the plan in 2002 or 2003.

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

NOTE 15: INCOME TAXES

Income tax expense (benefit) reported in our consolidated statement of operations is made up of the following components (in thousands):

Year ended December 31,	2004	2003	2002
Current tax expense (benefit):			
Federal	\$ 49	\$ —	\$ (440)
State	3	—	—
Total current expense (benefit)	52	—	(440)
Deferred tax expense (benefit):			
Federal	—	—	—
State	—	—	—
Total deferred expense (benefit)	—	—	—
Total income tax expense (benefit)	\$ 52	\$ —	\$ (440)

A reconciliation of income tax expense (benefit) computed using the federal statutory rate to the income tax expense (benefit) reported in our consolidated statements of operations is as follows (in thousands):

Year ended December 31,	2004	2003	2002
Tax computed at federal statutory rate	\$ 1,175	\$ (530)	\$ (3,309)
State taxes, net of federal benefit	85	(31)	(217)
Change in tax rates	(512)	—	—
Increase (decrease) in tax from:			
Business meals and entertainment	26	17	15
Valuation allowance change	(747)	561	3,066
Other, net	25	(17)	5
Reported income tax expense (benefit)	\$ 52	\$ —	\$ (440)

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

December 31,	2004	2003	2002
Accounts receivable, principally due to allowances for doubtful accounts	\$ 103	\$ 81	\$ 95
Inventories, principally due to reserves for excess and obsolete inventories and additional costs inventoried for tax purposes pursuant to the Tax Reform Act of 1986	1,103	1,193	1,416
Employee compensation and benefits accrued for financial reporting purposes	65	54	57
Amortization of intangibles	7,206	7,379	7,970
NOL and tax credit carryforwards	16,482	16,721	15,198
Restructuring accruals	31	76	127
Warranty accrual	60	70	138
Other, net	49	54	66
Deferred tax assets	\$ 25,099	\$ 25,628	\$ 25,067
Less, valuation allowance	(25,099)	(25,628)	(25,067)
Net deferred tax assets	\$ —	\$ —	\$ —

Income tax expense of \$52,000 for the year ended December 31, 2004 consisted primarily of the Federal alternative minimum tax and certain state minimum fees. The income tax benefit of \$0.4 million recorded in 2002 was related to a refund resulting from tax legislation enacted in 2002.

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

We carry the benefit we will derive in future accounting periods from tax losses and credits and deductible temporary differences as “deferred tax assets” on our balance sheet. In the fourth quarter of 2000, however, we recorded a full valuation allowance against our deferred tax assets. We recorded this valuation allowance because the cumulative losses we had incurred over the previous three years made it questionable whether we would realize value from the deferred tax assets. Since the fourth quarter of 2000, we have continued to maintain a valuation allowance to fully reserve these assets. We assess the realizability of our deferred tax assets and the need for this valuation allowance based on SFAS No. 109. We expect to continue to maintain a full valuation allowance until we can sustain a level of profitability that demonstrates our ability to use these assets. To the extent we determine that the realization of some or all of these benefits is more likely than not based upon expected future taxable income, a portion or all of the valuation allowance will be reversed. Such a reversal would be recorded as an income tax benefit and, for some portion related to deductions for stock option exercises, an increase in shareholders' equity.

Approximately \$0.3 million of the \$25.1 million valuation allowance at December 31, 2004 is related to deductions for exercised stock options (of which \$0.2 million is related to options exercised in 2004), which would be recorded as an increase in shareholders' equity if the valuation allowance were to be reversed in a future period.

Aetrium has federal net operating loss carryforwards of approximately \$43 million that will begin to expire in 2020 if not utilized. We also have state net operating loss carryforwards of approximately \$15 million that will expire at various times, beginning in 2005, if not utilized. We also have federal and state research tax credit carryforwards of approximately \$1 million that will expire at various times, beginning in 2013, if not utilized. The utilization of net operating loss carryforwards may be subject to annual limitations in the event of future changes in ownership pursuant to the requirements of Section 382 of the Internal Revenue Code. Such limitations could result in the expiration of net operating loss and tax credit carryforwards before utilization.

NOTE 16: BUSINESS SEGMENT, GEOGRAPHIC AND SIGNIFICANT CUSTOMER INFORMATION, AND CONCENTRATION OF CREDIT RISK

We view our operations and manage our business as one segment, supplying electromechanical equipment to the semiconductor industry. Factors used to identify our single operating segment include our organizational structure and the financial information used by our executive management in making decisions about how to allocate resources and assess performance. The following table sets forth the various components of net sales by product line as a percentage of total sales:

Year ended December 31,	2004	2003	2002
Test handler products	56%	52%	51%
Reliability test equipment products	21	20	18
Semiconductor automation products	6	11	8
Change kits and spare parts	17	17	23
Total	100%	100%	100%

Sales by geographic region based on product shipment destination were as follows (in thousands):

Year ended December 31,	2004	2003	2002
United States	\$ 13,437	\$ 6,531	\$ 5,186
Asia	12,936	5,357	6,688
Europe	1,276	2,120	756
Other	140	81	58
Total	\$ 27,789	\$ 14,089	\$ 12,688

AETRIUM INCORPORATED
Notes to Consolidated Financial Statements

Sales to customers comprising more than 10% of our total net sales were as follows:

Year ended December 31,	2004	2003	2002
Customer A	53%	37%	31%
Customer B	11%	*	*
Customer C	*	11%	*

* Sales to customer were less than 10% of total net sales

Accounts receivable from customers comprising more than 10% of our total accounts receivable were as follows:

December 31,	2004	2003
Customer A	38%	34%
Customer D	*	12%

* Accounts receivable from customer were less than 10% of total accounts receivable.

We sell our products principally to manufacturers of ICs, discrete electronic components, and semiconductor equipment. Our accounts receivable balance is concentrated with customers principally in one industry. We regularly monitor the creditworthiness of our customers, however, in order to manage this collection risk.

SIGNATURES

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

AETRIUM INCORPORATED

Date: March 30, 2005

By: /s/ Joseph C. Levesque
Joseph C. Levesque
Chief Executive Officer and President
(principal executive officer)

By: /s/ Paul H. Askegaard
Paul H. Askegaard
Treasurer
(principal financial and accounting officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on March 30, 2005 by the following persons on behalf of the registrant and in the capacities indicated.

<u>Signature</u>	<u>Title</u>
<u>/s/ Joseph C. Levesque</u> Joseph C. Levesque	Chairman of the Board
<u>/s/ Darnell L. Boehm</u> Darnell L. Boehm	Director
<u>/s/ Terrence W. Glarner</u> Terrence W. Glarner	Director
<u>/s/ Andrew J. Greenshields</u> Andrew J. Greenshields	Director
<u>/s/ Douglas L. Hemer</u> Douglas L. Hemer	Director

AETRIUM INCORPORATED
EXHIBIT INDEX TO ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2004

<u>Item No.</u>	<u>Item</u>	<u>Method of Filing</u>
3.1	Our Restated Articles of Incorporation, as amended.	Incorporated by reference to Exhibit 3.1 to our Registration Statement on Form SB-2 (File No. 33-64962C).
3.2	Amendment to Restated Articles of Incorporation	Incorporated by reference to Exhibit 3.2 to our Quarterly Report for the quarter ended September 30, 1998 (File No. 0-22166).
3.3	Our Bylaws, as amended.	Incorporated by reference to Exhibit 3.2 to our Registration Statement on Form SB-2 (File No. 33-64962C).
4.1	Specimen Form of our Common Stock Certificate.	Incorporated by reference to Exhibit 4.1 to our Registration Statement on Form SB-2 (File No. 33-64962C).
10.1	1993 Stock Incentive Plan, as amended.	Incorporated by reference to Exhibit 10.2 to our Annual Report on Form 10-K for year ended December 31, 1997 (File No. 0-22166).
10.2	Salary Savings Plan.	Incorporated by reference to Exhibit 10.3 to our Registration Statement on Form SB-2 (File No. 33-64962C).
10.3	Form of Incentive Stock Option Agreement.	Incorporated by reference to Exhibit 10.6 to our Annual Report on Form 10-KSB for the year ended December 31, 1993 (File No. 0-22166).
10.4	Form of Non-Statutory Option Agreement.	Incorporated by reference to Exhibit 10.7 to our Annual Report on Form 10-KSB for the year ended December 31, 1993 (File No. 0-22166).
10.5	Employment Agreement dated April 1, 1986, between Joseph C. Levesque and us.	Incorporated by reference to Exhibit 10.6 to our Registration Statement on Form SB-2 (File No. 33-64962C).
10.6	Credit Agreement dated August 11, 1989, between Harris Bank and us.	Incorporated by reference to Exhibit 10.7 to our Registration Statement on Form SB-2 (File No. 33-64962C).
10.7	Lease Agreement, dated July 19, 1995, between KAMKO Investments and us.	Incorporated by reference to Exhibit 10.12 to our Registration Statement on Form SB-2 (File No. 33-98040).

10.8	Amendment to Lease Agreement, dated September 26, 1995, between KAMKO Investments and us.	Incorporated by reference to Exhibit 10.13 to our Registration Statement on Form SB-2 (File No. 33-98040).
10.9	Indenture dated June 25, 1998 between KAMKO Investments and the company.	Incorporated by reference to Exhibit 10.19 to our Annual Report on Form 10-K for the year ended December 31, 1998 (File No. 0-22166).
10.10	Standard Industrial/Commercial Single-Tenant Lease, dated September 18, 1998, between W.H. Pomerado, LLC and us, including addendum and material exhibits to lease.	Incorporated by reference to Exhibit 10.16 to our Annual Report on Form 10-K for the year ended December 31, 1999 (File No. 0-22166).
10.11	Standard Lease Agreement, dated December 19, 1987, between Crow-Markison 22-27, Limited Partnership and WEB Technology, Inc., including all supplements and amendments thereto through December 27, 1999.	Incorporated by reference to Exhibit 10.17 to our Annual Report on Form 10-K for the year ended December 31, 1999 (File No. 0-22166).
10.12	Assignment and Assumption of Lease Agreement, dated August 8, 2000, by and between us and Littlefeet, Inc.	Incorporated by reference to Exhibit 10.16 to our Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-22166).
10.13	Bill of Sale, Assignment and Assumption and Lease Agreement, dated March 31, 2000, by and between Aetrium-EJ Inc. and Daniel Gamelin and Mark Woodman.	Incorporated by reference to Exhibit 10.17 to our Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-22166).
10.14	Assignment, dated August 31, 2000, by and between Aetrium-EJ Inc. and Daniel Gamelin and Mark Woodman.	Incorporated by reference to Exhibit 10.18 to our Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-22166).
10.15	Amendment dated January 27, 2003, between Crow-Markison 22-27, Limited Partnership and Aetrium-WEB Technology, LP to Standard Lease Agreement scheduled herein as item 10.12.	Incorporated by reference to Exhibit 10.17 to our Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22166).
10.16	2003 Stock Incentive Plan.	Incorporated by reference to Exhibit 10.18 to our Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22166).
10.17	Form of Change of Control Agreement	Incorporated by reference to Exhibit 10.19 to our Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22166).

10.18	Assignment Agreement, dated January 20, 2004, by and between us and Littlefeet, Inc.	Incorporated by reference to Exhibit 10.20 to our Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22166).
10.19	Sales Incentive Program	Incorporated by reference to Exhibit 10.21 to our Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22166).
10.20	Executive Officer Profit Sharing Program	Filed herewith electronically.
14.1	Code of Business Conduct and Ethics	Incorporated by reference to Exhibit 14.1 to our Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22166).
21.1	Subsidiaries of the Registrant.	Incorporated by reference to Exhibit 10.18 to our Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22166).
23.1	Independent Registered Public Accounting Firm's Consent.	Filed herewith electronically.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith electronically.
31.2	Certification of Chief Administrative Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith electronically.
31.3	Certification of Treasurer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith electronically.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith electronically.

SCHEDULE II

Valuation and Qualifying Accounts

<u>Description</u>	<u>Balance at beginning of year</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance at end of year</u>
Allowance for doubtful accounts:				
2002	\$ 395	\$ 0	\$ (115)	\$ 280
2003	280	0	(43)	237
2004	237	60	(11)	286
Inventory excess and obsolescence reserve (1):				
2002	\$ 4,171	\$ 100	\$ (270)	\$ 4,001
2003	4,001	80	(721)	3,360
2004	3,360	120	(631)	2,849

(1) Deductions represent sales or disposals of reserved inventory.

Board of Directors

Joseph C. Levesque
Chairman of the Board,
President and
Chief Executive Officer,
Aetrium Incorporated

Darnell L. Boehm
Principal of
Darnell L. Boehm & Associates

Douglas L. Hemer
Chief Administrative Officer
and Secretary,
Aetrium Incorporated

Terrence W. Glarner
President,
West Concord Ventures, Inc.

Andrew J. Greenshields
President,
Pathfinder Venture Capital Funds

Corporate Management

Joseph C. Levesque
Chairman, President and Chief
Executive Officer

Douglas L. Hemer
Chief Administrative Officer
and Secretary

Paul H. Askegaard
Treasurer

Daniel M. Koch
Vice President, Worldwide
Sales

Keith E. Williams
President,
Dallas Operations

John J. Pollock
Vice President and
General Manager,
North St. Paul Operations

Timothy G. Foley
Vice President, Manufacturing,
North St. Paul Operations

Dean K. Hedstrom
Vice President, Engineering,
North St. Paul Operations

Investor Information

**Independent Registered Public
Accounting Firm**
PricewaterhouseCoopers LLP
Minneapolis, MN

Legal Counsel
Oppenheimer Wolff & Donnelly
LLP
Minneapolis, MN

Stock Listing
NASDAQ symbol: ATRM

Transfer Agent and Registrar
Computershare Investor Services
Chicago, IL
312-588-4991

Principal Market Makers
Knight Equity Markets
UBS Capital Markets
The Archipelago Exchange
National Stock Exchange

Annual Meeting

The annual meeting of shareholders of Aetrium Incorporated will be held on Wednesday, May 25, 2005 at 4:00 p.m. at Aetrium's Corporate Headquarters, 2350 Helen Street, North St. Paul, MN.

Aetrium Incorporated

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N A S D A Q : A T R M