



# **FORM 10-K**

## **MERRIMAC INDUSTRIES INC – MRM**

**Filed: April 16, 2007 (period: December 30, 2006)**

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

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

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**FORM 10-K**

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

(Mark One)

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

**For the fiscal year ended December 30, 2006  
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 number 0-11201**

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**MERRIMAC INDUSTRIES, INC.**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**41 Fairfield Place, West Caldwell, New Jersey**  
(Address of Principal Executive Offices)

**22-1642321**  
(I.R.S. Employer  
Identification No.)

**07006**  
(Zip Code)

**(973) 575-1300**

(Registrant's telephone number, including area code)

**WEBSITE:**    [www.merrimacind.com](http://www.merrimacind.com)

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

<b>Title of Each Class</b>	<b>Name of Exchange on Which Registered</b>
Common Stock	The American Stock Exchange
Common Stock Purchase Rights	The American Stock Exchange

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

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

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

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file 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 a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Indicate by check mark whether the registrant is a shell Company (as defined in Rule 12b-2 of the Exchange Act).  
Yes  No

As of April 12, 2007, 2,908,735 shares of common stock of the registrant were outstanding and the aggregate market value of common stock held by non-affiliates of the registrant was approximately \$17,058,624.

#### DOCUMENTS INCORPORATED BY REFERENCE

The registrant's Proxy Statement for its 2007 Annual Meeting of stockholders is hereby incorporated by reference into Part III of this Form 10-K.

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## FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains statements relating to future results of Merrimac Industries, Inc. ("Merrimac" or the "Company") (including certain projections and business trends) that are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. In this report, the words "we", "us" and "our" refer to Merrimac and its subsidiaries. Actual results may differ materially from those projected as a result of certain risks and uncertainties. These risks and uncertainties include, but are not limited to: risks associated with demand for and market acceptance of existing and newly developed products as to which the Company has made significant investments, particularly its Multi-Mix® products; the possibilities of impairment charges to the carrying value of our Multi-Mix® assets, thereby resulting in charges to our earnings; risks associated with adequate capacity to obtain raw materials and reduced control over delivery schedules and costs due to reliance on sole source or limited suppliers; slower than anticipated penetration into the satellite communications, defense and wireless markets; failure of our Original Equipment Manufacturer, or OEM, customers to successfully incorporate our products into their systems; changes in product mix resulting in unexpected engineering and research and development costs; delays and increased costs in product development, engineering and production; reliance on a small number of significant customers; the emergence of new or stronger competitors as a result of consolidation movements in the market; the timing and market acceptance of our or our OEM customers' new or enhanced products; general economic and industry conditions; the risk that the benefits expected from the Company's acquisition of Filtran Microcircuits Inc. are not realized; the ability to protect proprietary information and technology; competitive products and pricing pressures; our ability and the ability of our OEM customers to keep pace with the rapid technological changes and short product life cycles in our industry and gain market acceptance for new products and technologies; foreign currency fluctuations between the U.S. and Canadian dollars; risks relating to governmental regulatory actions in communications and defense programs; and inventory risks due to technological innovation and product obsolescence, as well as other risks and uncertainties as are detailed from time to time in the Company's Securities and Exchange Commission filings. These forward-looking statements are made only as of the date of the filing of this Form 10-K, and the Company undertakes no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

## PART I

### ITEM 1. BUSINESS

#### GENERAL

Merrimac is a leader in the design and manufacture of active and passive RF (Radio Frequency) and microwave components and integrated multifunction assemblies for industry, government, and science. Merrimac components and integrated assemblies are found in applications as diverse as satellites, military and commercial aircraft, radar, cellular radio systems, medical and dental diagnostic instruments, personal communications systems ("PCS") and wireless internet connectivity.

Merrimac is a versatile technologically oriented company specializing in miniature radio frequency lumped-element components, integrated networks, microstrip and stripline microwave components, integrated multifunction subsystems, and ferrite attenuators. Of special significance has been the combination of two or more of these technologies into single components to achieve superior performance and reliability while minimizing package size and weight. Merrimac maintains ISO 9001:2000 and AS 9100 registered quality assurance programs.

Merrimac was originally incorporated as Merrimac Research and Development, a New York corporation, in 1954. Merrimac was reincorporated as a New Jersey corporation in 1994 and subsequently reincorporated as a Delaware corporation in 2001.

#### ELECTRONIC COMPONENTS AND SUBSYSTEMS PRODUCTS

Merrimac manufactures and sells approximately 1,500 components and subsystems used in signal processing systems in the frequency spectrum of zero to sixty-five GHz. Merrimac's products are designed to process signals having wide bandwidths and are of relatively small size and light weight. When integrated into subsystems, advantages of lower cost and smaller size are realized due to the reduced number of connectors, cases and headers. Merrimac's components range in price from \$0.50 to more than \$10,000 and its subsystems range from \$500 to more than \$1,500,000.

Merrimac has traditionally developed and offered for sale products built to specific customer needs, as well as standard catalog items. The following table provides a breakdown of electronic components sales as derived from initial orders for products custom designed for specific customer applications, repeat orders for such products and from catalog sales:

	2006	2005	2004
Initial designs	23%	27%	27%
Repeat designs	63%	57%	58%
Catalog sales	14%	16%	15%

Merrimac maintains a current product catalog on its internet website at [www.merrimacind.com](http://www.merrimacind.com). The Merrimac catalog includes over 1500 standard, passive, signal processing components. These components often form the platform-basis for customization of designs in which the size, package, finish, electrical parameters, environmental performance, reliability and other features are tailored for a specific customer application.

Merrimac's strategy is to be a reliable supplier of high quality, technically innovative signal processing products. Merrimac coordinates its marketing, research and development, and manufacturing operations to develop new products and expand its markets. Merrimac's marketing and development activities focus on identifying and producing prototypes for new military and commercial programs and applications in aerospace, navigational systems, telecommunications and cellular analog and digital wireless telecommunications electronics. Merrimac's research and development efforts are targeted towards providing customers with more complex, reliable, and compact products at lower costs.

The major aerospace companies purchase components and subsystems from Merrimac. Merrimac design engineers work to develop solutions to customer requirements that are unique or require

special performance. Merrimac is committed to continuously enhancing its leading position in high-performance electronic signal processing components and integrated assemblies for communications, defense/aerospace, and Homeland Security/Global Security and Public Safety applications.

In 1998, Merrimac introduced Multi-Mix® Microtechnology capabilities, an innovative process for microwave, multilayer integrated circuits and micro-multifunction module (MMFM®) technology and subsystems. This process is based on fluoropolymer composite substrates, which are bonded together into a multilayer structure using a fusion bonding process. The fusion bonding process provides a homogeneous dielectric medium for superior electrical performance at microwave frequencies. This 3-dimensional Multi-Mix® design consisting of stacked circuit layers permits the manufacture of components and subsystems that are a fraction of the size and weight of conventional microstrip and stripline products.

In 2001, Merrimac introduced its Multi-Mix PICO® Microtechnology. Through Multi-Mix PICO® technology, Merrimac offers a group of products at a greatly reduced size, weight and cost that includes hybrid junctions, directional couplers, quadrature hybrids, power dividers and inline couplers, filters and vector modulators along with 802.11a, 802.11b, and 802.11g Wireless Local Area Network (WLAN) modules. When compared to conventional multilayer quadrature hybrids and directional coupler products, Multi-Mix PICO® is more than 84% smaller in size, without the loss of power or performance. Merrimac continues to add new designs to its Multi-Mix PICO® product line.

In 2001, Merrimac received and started to ship its first 3G production order for a Multi-Mix PICO® integrated solution to be used by one of the world's largest suppliers of wireless power amplifiers in the design of new third-generation broadband base stations.

In 2004, Merrimac introduced its Multi-Mix Zapper® product line. The Multi-Mix Zapper® products address the demands of the wireless and other cost-sensitive markets for high quality products manufactured in volume with continued improvements in performance, with dramatic reductions in size and weight at extremely competitive cost.

In addition to wireless base station communications, Multi-Mix Zapper® products have been or are currently under evaluation for applications in airborne electronic countermeasures, radar systems, smart antennas, satellite communications receiver modules, missiles, commercial Wi-Fi (Wireless Fidelity), WLANs (Wireless Local Area Networks), WiMAX (World Interoperability for Microwave Access), the U.S. Department of Defense's next generation jet fighter, the Joint Strike Fighter (JSF), the US Army's Future Combat Systems (FCS) program, and the Joint Tactical Radio System (JTRS) cross-services radio.

Merrimac customers prefer our value-added Multi-Mix® approach over traditional solutions because it enables them to minimize considerable costs of design, test and measurement, packaging, and manufacturing, as well as the unpredictable follow-on costs typically associated with factory tuning and optimization. Multi-Mix® products provide customers with integrated solutions that simplify their internal design and manufacturing processes while reducing the time and costs it takes to implement manufacturable and repeatable products.

The Multi-Mix® technology also enables customers to outsource certain design and manufacturing functions, which in turn allows them to maintain focus on their own core business competencies.

Merrimac supports many commercial and military customers, projects, and programs with our array of traditional high-frequency technologies, including lumped-element and stripline approaches. Our continuing evolution of Multi-Mix® Microtechnology makes it possible to actively participate in next-generation commercial and military designs. At least one leading military satellite communications customer has indicated that Multi-Mix® Microtechnology is now their technology of choice for higher levels of RF integration. Our customer was able to realize a 30-to-50-percent reduction in size compared to their existing conventional technology.

In the commercial area, one version of the Multi-Mix® Resource Module, PAM, drew the attention of major communications equipment manufacturers both in the United States and abroad.



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For example, a major global telecommunications equipment manufacturer has expressed an interest in converting its cellular base-station power amplifiers from discrete component technology to a more integrated solution.

WiMAX is yet another commercial market opportunity for Multi-Mix® Microtechnology. This emerging wireless technology promises a practical solution to the "last-mile" broadband access (telephone, Internet, and television) to the home in competition with cable television (CATV) and fiber-optic approaches. Merrimac has laid the groundwork for growth in the potentially lucrative WiMAX market by offering both component solutions and higher levels of integration. Some of our existing customers are WiMAX equipment suppliers and are using Multi-Mix PICO® products; these customers offer opportunities for higher levels of integration for their WiMAX infrastructure and customer premises equipment (CPE) products.

In the area of broadband communications, Merrimac continues to work on high frequency solutions that will bring multimedia internet access to homes and offices through broadband systems.

Merrimac's major electronic components and subsystems product categories are:

- power dividers/combiners that equally divide input signals or combine coherent signals for nearly lossless power combinations;
- I&Q networks (a subassembly of circuits which allows two information signals (incident and quadrature) to be carried on a single radio signal for use in digital communication and navigational positioning);
- directional couplers that allow for signal sampling along transmission lines;
- phase shifters that accurately and repeatedly alter a signal's phase transmission to achieve desired signal processing or demodulation;
- hybrid junctions that serve to split input signals into two output signals with 0 degree phase difference or 180 degrees out of phase with respect to each other;
- balanced mixers that convert input frequencies to another frequency; variable attenuators that serve to control or reduce power flow without distortion;
- beamformers that permit an antenna to electronically track signals when receiving and electronically adjust radiation patterns when transmitting; and
- quadrature couplers that serve to split input signals into two output signals 90 degrees out of phase with respect to each other or combine equal amplitude quadrature signals.

These components can be utilized in a variety of applications including satellite communications, radar, digital communication systems, global positioning and navigation systems, electronic warfare, electronic countermeasures and cellular and wireless communications.

Merrimac's other product categories include single-side-band (SSB) modulators, image reject mixers, vector modulators, and a wide variety of specialized integrated Micro-Multifunction Modules (MMFM®) assemblies. In the last fiscal year, no one product accounted for more than ten percent of total net sales.

In 2005 and 2006, Merrimac focused its design efforts on Multi-Mix® multilayer subsystem products for several satcom and military customers.

In addition, in 2006 Merrimac received a patent for a Multi-Mix® power amplifier module (PAM) for use in base station infrastructure, military, and satcom applications. An important part of base station infrastructure equipment is the high power transmit amplifier, which must provide extremely linear performance in order to boost modulated signals carrying voice, data, and video content without distortion. These components can be utilized in a variety of applications including satellite communications, radar, digital communication systems, global positioning and navigation systems, electronic warfare, electronic countermeasures and cellular and wireless communications.

Approximately 56% of Merrimac's sales in fiscal 2006 were derived from the sales of products for use in high-reliability aerospace, satellite, and missile applications. These products are designed to

withstand severe environments without failure or maintenance over prolonged periods of time (from 5 to 20 years). Merrimac provides facilities dedicated to the design, development, manufacture, and testing of these products along with special program management and documentation personnel.

Merrimac's products are used in a broad range of other defense and commercial applications, including radar, navigation, missiles, satellites, electronic warfare and countermeasures, cellular analog and digital wireless telecommunications electronics and communications equipment. Merrimac's products are also utilized in systems to receive and distribute television signals from satellites and through other microwave networks including cellular radio.

In 2006, Merrimac made major advances in the Multi-Mix® Resource Module and the Multi-Mix® PAM, working closely with strategic partners supplying high-power transistor die for integration into multilayer Multi-Mix® designs. By incorporating device die rather than packaged parts, Multi-Mix® PAMs and Multi-Mix® Resource Modules with active circuitry can be made in a fraction of the size of conventional RF/microwave circuitry. The performance characteristics of the Multi-Mix® technology allow these compact, multilayer circuits to reliably dissipate the heat from these devices without need of bulky, expensive packages.

In 2006, Merrimac was granted a patent for its Multi-Mix® Microtechnology from the State Intellectual Property Office of the People's Republic of China ("Method of Making Microwave Multifunction Modules Using Fluoropolymer Composite Substrates"). Merrimac was also granted a patent for its Multi-Mix® Microtechnology from the United States Patent and Trademark Office ("Coupler Resource Module"). On the customer side, a major defense contractor (ITT Corporation) awarded Merrimac a contract for an advanced Multi-Mix® filter assembly for use in an airborne Electronic Countermeasures (ECM) system.

Also in 2006, Merrimac aggressively pursued research funding from the United States Government to further advance its Multi-Mix® Microtechnology. Several white papers were presented to different Department of Defense (DoD) organizations within the United States Government.

## **FILTRAN MICROCIRCUITS INC.**

### **GENERAL**

Established in 1983, and acquired by Merrimac in February 1999, Filtran Microcircuits Inc. ("FMI") is a leading manufacturer of microwave micro-circuitry for the high frequency communications industry. FMI produces microstrip, bonded stripline, and thick metal-backed Teflon® (PTFE) microcircuits for RF applications including satellite, aerospace, PCS, fiber optic telecommunications, automotive, navigational and defense applications worldwide. FMI participates in the market for millimeter-wave applications. FMI also supplies mixed dielectric multilayer and high speed interconnect circuitry to meet customer demand for high performance and cost-effective packaging.

FMI's strong technical team, proprietary processes and equipment allow FMI to manufacture precise circuits, with edge resolution of .0005 inch or better. The accuracy provided by FMI is particularly valued by customers in high-end applications who require microwave circuitry with significant reliability and performance.

FMI has pioneered sputtering techniques for PTH applications on thick-metal backed PTFE circuitry that offer superior reliability, performance and mechanical strength which allows for fabricated integrated three-dimensional shapes ideally suited for aerospace applications.

FMI has also achieved significant results in the area of accuracy of circuit board imaging. FMI employs specially developed processes using liquid photo-resists and high-intensity, collimated UV exposure techniques in fine line processing for single, double-sided and multilayer PTH boards.

### **PRODUCTS**

FMI produces precision microwave circuitry, having operating frequencies that typically range from 500 MHz to 100 GHz, through the processing of microstrip, bonded stripline, thick metal-backed



PTFE and mixed dielectric multilayer. FMI also produces aluminum, copper and brass-backed circuits. Although FMI generally purchases pre-bonded materials, it also has the capability to bond substrates to thick metal carriers when requested by customers. FMI also processes thin film circuits on hard substrates such as ceramic, ferrite and glass.

FMI has developed innovative processing that provides customers with reliable and high performance circuitry. FMI has the capability to process:

- 1 mil lines and spaces with  $\pm 0.2$  mil tolerance;
- embedded resistors;
- proprietary sputtering techniques for blind holes in thick metal-backed PTFE;
- proprietary copper thin-film metalization on ceramic substrates;
- high purity, wire-bondable gold;
- plated through hole aspect ratios up to 10:1;
- multilayer bonding;
- conductive bonding; and
- conductive and non-conductive filled via holes.

FMI has machining capabilities in computer numerically controlled routing, drilling, milling and laser machining. Machining tolerance ranges from  $\pm 0.005$  inch to  $\pm 0.001$  inch.

FMI maintains an ISO 9001:2000 registered quality assurance program. This quality assurance program along with stringent statistical process control and gate inspections assure that when customers request specified standards based on certain needs, such needs are met. FMI typically works to the standard of IPC 6018 unless otherwise indicated by the customer. FMI can also work in full compliance to MIL-PRF-31032 (preceded by MIL-P-55110) or can adopt the requirements of IPC-HF-318, depending on customer needs.

Worldwide applications include: millimeter wave (PCS backhaul, local and multipoint distribution systems, automotive radar, sensors and point to multipoint), satellite, aerospace, automotive and defense.

## **STRATEGIC OVERVIEW**

Merrimac seeks to leverage its core competencies in the development of High Power, High Frequency and High Performance products across its main platforms for growth:

- RF Microwave electronic components and subsystems;
- Microwave micro-circuitry; and
- Multi-Mix®.

Our strategy focuses on:

- Providing unique and cutting-edge customized technology solutions;
- Expanding existing customer relationships and attracting new customers with our smaller, more complex, more reliable, lower cost product offerings;

- Meeting the advanced needs of our defense, satellite and OEM wireless industry customers with innovative specialty applications and products; and
- Improving and integrating our internal development, engineering and production capacities to reduce costs and improve service.

To do this, we coordinate our marketing, research and development, and manufacturing operations to develop new products and expand our markets.

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Merrimac's marketing and development activities focus on identifying new design opportunities for new long-term military and commercial production programs and applications in aerospace, navigational systems, telecommunications and cellular analog and digital wireless telecommunications electronics. Merrimac's research and development efforts are targeted towards providing customers with more complex, reliable, and compact products at lower costs.

Merrimac intends to continue to focus on customer service, technology innovation and process excellence to further expand its penetration into the defense, satellite communications and wireless markets. Essential components of the Merrimac's strategy include the following:

### *Products.*

Our platforms for growth: RF Microwave, Multi-Mix® and Microwave micro-circuitry and High Volume Operations in Costa Rica focus on providing unique solutions and delivering profitable value to our key customers. High Power, High Frequency and High Performance are embedded competencies that drive customer value and enable Merrimac to consistently meet and exceed the demanding needs and expectations of our customers.

- **High Power:** Our thermal management design and processes enable Merrimac products to achieve power levels greater than 500 watts. Our process enables the use of low loss dielectrics and metals, so that power dissipation is minimized (i.e. less heat is generated). In addition, thick metal layers and thermal vias are utilized to draw out, spread, and sink away heat generated in the circuits and modules. Further, since thick metal layers are directly bonded to dielectric layers using a high temperature process, the resulting module is robust, and able to withstand subsequent environmental processing temperatures without being adversely affected.
- **High Frequency:** Our products operate efficiently across high frequency bands up to 100 GHz, an ever-growing marketplace requirement. The efficient performance of circuits and modules at millimeter wave frequencies is enabled by our ability to miniaturize the printed circuit elements and integrate them with semiconductor microcircuits (MMICs). Our process allows the fabrication of a homogeneous circuit medium with accurate circuit feature producibility.
- **High Performance:** Our focus on technology innovation and process excellence delivers solutions that perform without failure in all mission-critical environments and under extremely demanding conditions.

### *Pursue Technological Excellence.*

The Company intends to use its technological expertise and leadership in the defense, satellite and wireless markets to extend its competitive advantage. The Company intends to continue to invest in research and development and will focus its efforts on new product development for specific customer applications requiring integration of circuitry and further miniaturization, precision and volume applications. The Company will seek to advance its leadership in wireless technology by developing next generation products for the mobile and wireless networking markets. In addition, the Company will attempt to build upon its relationships with key original equipment manufacturers in order to develop state-of-the-art products.

Merrimac's research and development activities include the development of new designs for insertion into new programs and applications to enhance Merrimac's competitive position. Projects focusing on surface mounted devices, multilayer, and micro-electronic assemblies are directed toward development of more circuitry in smaller, lower cost, and more reliable packaging that is easier for customers to integrate into their products. Merrimac continues to expand its use of computer-aided design and manufacturing (CAD/CAM) in order to reduce design and manufacturing costs as well as development time.

### *Strengthen Customer Relationships and Attract New Customers.*

Merrimac's customers are primarily major industrial corporations that integrate Merrimac's products into a wide variety of defense and commercial systems. Merrimac's customers include BAE



Systems, The Boeing Company, Celestica, Inc., EADS Astrium, General Dynamics Corporation, ITT, Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon Company and Space Systems Loral.

Merrimac's customers desire smaller, lighter, more cost-effective, and highly integrated components, systems, and subsystems for future applications. Merrimac design engineers work to develop solutions to customer requirements that are unique or require special performance. Merrimac is committed to continuously enhancing its leading position in high-performance electronic signal processing components for communications, defense and satellite applications, thereby attracting new customers and increasing the reliance of current customers on the Company.

For most customers, Merrimac must be a "qualified" supplier, continually demonstrating our ability to meet their demanding design and manufacturing standards. For defense contractors, we are a mission-critical supplier. For Aerospace companies, our products meet the high reliability standards of space. In wireless communications, our Multi-Mix® products are being "qualified" and are supplying solutions to an ever-increasing number of major OEMs.

The qualification process brings with it subtle, yet very important differences. In defense and satellite communications, we must have the technology and process excellence to support custom applications in design, manufacturing and testing. In wireless communications, we must have the technology and process excellence to support large volume production requirements.

*Focus on efficiency and value.*

Improved production efficiencies coupled with the capacity of the Company's low-cost manufacturing facility in Costa Rica and more extensive use of automated test equipment such as Agilent network analyzers have resulted in a considerable reduction of the set-up time to take measurements, calibrate test equipment and provide data electronically. In addition, computerized cost controls such as closed job history and up-to-date work in process costs are also enhancing Merrimac's competitive position. Merrimac is continuing to invest in manufacturing capital equipment in all three of our facilities to provide greater capacity and flexibility and reduce operating costs.

*Defense and Satellite Communications.*

In the defense and satellite communications markets, Merrimac's components are found in a diverse array of applications ranging from national missile defense systems to fighter jets, electronic warfare, shipboard radar communications and other mission-critical applications. Almost all satellites in orbit today carry aboard some Merrimac technology.

For our prime contractor customers in defense and satellite communications, we deliver highly customized solutions that are designed for specific applications under very specific design criteria and rigid requirements. Today defense and satellite communications customers seek components and subsystems that meet higher integration and performance standards in smaller, lighter and less costly to produce integrated modules. These products must have exceptional shielding properties and must be able to function without failure in environments with wide temperature changes and high levels of shock and vibration.

The cost rates utilized for cost-reimbursement contracts are subject to review by third parties and can be revised, which can result in additions to or reductions from revenue. Revisions which result in reductions to revenue are recognized in the period that the rates are reviewed and finalized; additions to revenue are recognized in the period that the rates are reviewed, finalized, accepted by the customer, and collectability from the customer is assured. The Company submits financial information regarding the cost rates on cost-reimbursement contracts for each fiscal year in which the Company performed work on cost-reimbursement contracts. The Company does not record any estimates on a regular basis for potential revenue adjustments, as there currently is no reasonable basis on which to estimate such adjustments given the Company's very limited experience with these contracts.



*Wireless.*

For original equipment manufacturing customers in the wireless communications market, we provide Total Integrated Packaging Solutions® to customers who prefer our value-added Multi-Mix® solutions to conventional approaches because it enables them to:

- Minimize considerable costs of design, test and measurement, packaging, and manufacturing, as well as the unpredictable follow-on costs typically associated with factory tuning and optimization;
- Utilize modules that integrate functionality. We dramatically reduce size, weight, cost, component count and optimize thermal management by providing leading-edge multifunction modules;
- Reduce the time and costs it takes to implement manufacturable and repeatable products; and
- Outsource functions that are not considered their own core competencies, which in turn allow them to maintain focus on their core business competencies.

*Pursue New and Existing Markets.*

The Company intends to use its core competencies and market position to pursue other wireless opportunities using the component and integration capabilities of our Multi-Mix® technology. The Company plans to offer both custom components and higher orders of integrated assemblies for existing and developing space and defense requirements through the RF Microwave, Microwave micro-circuitry and Multi-Mix® technologies.

*Expand Business through Strategic Acquisitions.*

The Company intends to pursue opportunistic acquisitions of companies, product lines and technologies that complement its business. The Company will focus on acquisitions that leverage its technical expertise and business development resources and provide a competitive advantage for its targeted markets.

## **MARKETING**

Merrimac markets its products in the United States and Canada directly to customers through a sales and marketing staff comprised of 15 employees, including three employees located at FMI in Ottawa, Canada, and through 13 independent domestic sales organizations. Merrimac relies on 19 independent sales organizations to market its products elsewhere in the world. Merrimac's marketing program focuses on identifying new programs and applications for which Merrimac can develop prototypes leading to volume production orders.

Improved production efficiencies coupled with the capacity of the Company's low-cost manufacturing facility in Costa Rica and more extensive use of automated test equipment such as network analyzers from Agilent Technologies have resulted in a considerable reduction of the set-up time to take measurements, calibrate test equipment, and provide data electronically. In addition, computerized cost controls such as closed job history and up-to-date work in process costs are also enhancing Merrimac's competitive position. Merrimac is continuing to invest in capital manufacturing equipment in all three of our facilities to provide greater capacity and flexibility and reduce operating costs.

Merrimac's customers are primarily major industrial corporations that integrate Merrimac's products into a wide variety of defense and commercial systems.

Merrimac's customers include:

- BAE Systems
- The Boeing Company



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- Celestica, Inc.
- EADS Astrium
- General Dynamics Corporation
- ITT
- L-3 Communications Corporation
- Lockheed Martin Corporation
- Northrop Grumman Corporation
- Raytheon Company
- Space Systems Loral

The following table presents our key customers and the percentage of net sales made to such customers:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
Raytheon Company	11.1%	10.5%	13.9%
Lockheed Martin Corporation	8.7%	10.9%	6.6%
The Boeing Company	8.4%	5.9%	7.8%
L-3 Communications Corporation	7.5%	4.3%	2.7%
Space Systems Loral	6.5%	2.4%	1.3%
Northrop Grumman Corporation	5.9%	8.8%	11.9%
Israel Aircraft Industries Ltd.	3.3%	11.2%	6.2%

Sales to the foreign geographic area of Europe were 7.6%, 14.8% and 8.9% of net sales in fiscal years 2006, 2005 and 2004, respectively.

FMI's key customers include:

- Endwave Corporation
- Herley Industries
- Israel Aircraft Industries Ltd.
- L-3 Communications Narda Microwave East
- M/A-Com, Inc.
- Raytheon Canada Ltd.
- Trak Microwave Corporation

Both Merrimac ([www.merrimacind.com](http://www.merrimacind.com) or [www.multi-mix.com](http://www.multi-mix.com)) and FMI ([www.filtranmicro.com](http://www.filtranmicro.com)) have internet addresses. Merrimac's product catalog is available on its website.

## **EXPORT CONTROLS**

The Company's products are subject to the Export Administration Regulations ("EAR") administered by the U.S. Department of Commerce and may, in certain instances, be subject to the International Traffic in Arms Regulations ("ITAR") administered by the U.S. Department of State. EAR restricts the export of dual-use products and technical data to certain countries, while ITAR restricts the export of defense products, technical data and defense services. Merrimac believes that it has implemented internal export procedures and controls in order to achieve compliance with the applicable U.S. export control regulations. However, the U.S. government agencies responsible for administering EAR and ITAR have significant discretion in the interpretation and enforcement of these regulations, and it is possible that these regulations could adversely affect the Company's ability to sell its products to non-U.S. customers.



## **RESEARCH AND DEVELOPMENT**

During 2006, 2005 and 2004, research and development expenditures amounted to \$2,021,000, \$1,932,000 and \$1,723,000, respectively. With the exception of \$112,000 of expenses at FMI, substantially all of the research and development funds in fiscal 2006 were expended for new Multi-Mix® Microtechnology products. Merrimac plans to commit research and development funds at higher levels in fiscal 2007, and will focus its efforts on new product development for specific customer applications requiring integration of circuitry and further miniaturization, precision and volume applications.

Merrimac's research and development activities include the development of prototypes for new programs and applications and the implementation of new technologies to enhance Merrimac's competitive position. Projects focusing on surface mounted devices, multilayer, and micro-electronic assemblies are directed toward development of more circuitry in smaller, lower cost, and more reliable packaging that is easier for customers to integrate into their products. Merrimac continues to expand its use of computer aided design and manufacturing (CAD/CAM) in order to reduce design and manufacturing costs as well as development time. Current research and development programs at FMI include: laser machining, resistors on organic materials, high-resolution circuit techniques, resistor trimming, electroless nickel on aluminum housings, and filled via holes.

## **ENVIRONMENTAL REGULATION**

Federal, state and local requirements relating to the discharge of substances into the environment, the disposal of hazardous waste and other activities affecting the environment have had and will continue to have an impact on Merrimac's manufacturing operations. Thus far, compliance with current environmental requirements has been accomplished without material effect on Merrimac's liquidity and capital resources, competitive position or financial statements, and management believes that such compliance will not have a material adverse effect on Merrimac's liquidity and capital resources, competitive position or financial statements in the future. Management cannot assess the possible effect of compliance with future requirements.

## **BACKLOG**

Merrimac manufactures specialized components and subsystems pursuant to firm orders from customers and standard components for inventory. As of December 30, 2006, Merrimac had a firm backlog of orders of approximately \$12.4 million. Merrimac estimates that over 90% of the orders in its backlog as of December 30, 2006 will be shipped within one year. Merrimac does not consider its business to be seasonal.

## **COMPETITION**

Merrimac encounters competition in all aspects of its business. Merrimac competes both domestically and internationally in the military and commercial markets, specifically within the aerospace and telecommunications areas. Merrimac's competitors consist of entities of all sizes. Occasionally, smaller companies offer lower prices due to lower overhead expenses, and generally, larger companies have greater financial and operating resources than Merrimac, in addition to well-recognized brand names. Merrimac competes on the basis of technological performance, quality, reliability and dependability in meeting shipping schedules as well as on the basis of price. Merrimac believes that its performance with respect to the above factors have served it well in earning the respect and loyalty of many customers in the industry. These factors have enabled Merrimac over the years to successfully maintain a stable customer base and have directly contributed to Merrimac's ability to attract new customers.

## **MANUFACTURING, ASSEMBLY AND SOURCE OF SUPPLY**

Manufacturing operations consist principally of design, assembly and testing of components and subsystems built from purchased electronic materials and components, fabricated parts, and printed circuits. Manual and semi-automatic methods are utilized depending principally upon production volumes. Merrimac has its own machine shop employing CAD/CAM techniques and etching facilities to handle soft and hard substrate materials. In addition, Merrimac maintains testing and inspection procedures intended to monitor production controls and enhance product reliability.



Merrimac began manufacturing in Costa Rica in the second half of 1996. In February 2001, the Company entered into a five-year lease in Costa Rica for a 36,200 square-foot facility for manufacturing Multi-Mix® Microtechnology products. The lease was renewed for an additional five years in 2006. The leasehold improvements and capital equipment for this manufacturing facility were completed at a cost of approximately \$5,600,000 and this facility was opened for production in August 2002.

FMI's manufacturing facility consists of CAD/CAM, chemical and mechanical processes, quality systems and research and development of bare circuit board materials specifically selected for high frequency applications. Manual and automatic methods are utilized depending upon the circuit volumes, complexity and existing technologies available to the printed wiring board industry.

Microwave materials used in FMI's products are available from Rogers Corporation and Taconic Advanced Dielectric Division. Laminate materials are available from a small number of qualified suppliers. The suppliers that provide materials to FMI specialize in the manufacture of microwave materials. Customers often direct FMI to use a particular vendor for laminates based upon particular design specifications.

Merrimac has developed and implemented a quality system to better satisfy the needs of its customers and provide adequate assurance that its products will meet or exceed specified requirements. Merrimac continues to establish and refine procedures and supporting documentation to enable the fast transition from prototype engineering to operational manufacturing of products.

In April 2001, FM Approvals (formerly Factory Mutual) granted ISO 9001:2000 Certification to the Company's FMI manufacturing facility in Ottawa, Ontario, Canada. In October 2002, the Multi-Mix® operations in West Caldwell, New Jersey achieved certification to ISO 9001:2000. In December 2002, the Multi-Mix® facility in Costa Rica achieved certification to ISO 9001:2000. In August 2003, Merrimac's quality system was revised to incorporate the Costa Rica facility with the West Caldwell facility. During 2003, FM Approvals performed required audits and issued certificates of Registration to ISO 9001:2000 covering both facilities. In June of 2004, the West Caldwell facility was surveyed for compliance to the Aerospace standard AS9100. In December 2004, RW TUV issued a certificate of registration to the West Caldwell facility for ISO 9001:2000 and AS9100. FM Approvals in Costa Rica and Ottawa, Canada and RW TUV in West Caldwell have maintained these registrations via periodic audits through March of 2006. In October 2006, the Costa Rica facility successfully completed RW TUV's audit for AS9100 and ISO 9001:2000. In January 2007 the West Caldwell facility successfully completed RW TUV's audit for AS9100 and ISO 9001:2000.

Electronic components and raw materials used in Merrimac's products are generally available from a sufficient number of qualified suppliers. Some materials are standard items. Subcontractors manufacture certain materials to Merrimac's specifications. Merrimac is dependent on single suppliers for certain of its components or materials.

## **EMPLOYEE RELATIONS**

As of December 30, 2006, Merrimac employed approximately 230 full time employees, including 60 employees at FMI and 60 employees at Merrimac's Costa Rica facility. None of Merrimac's employees are represented by a labor organization. Management believes that relations with its employees are satisfactory.

## **PATENTS**

As of March 23, 2007, Merrimac owns 21 patents with respect to certain inventions it developed and has received a Notice of Allowance from the U.S. Patent and Trademark Office for a new patent that is expected to be issued shortly. No assurance can be given that the protection that Merrimac has acquired through patents is sufficient to deter others, legally or otherwise, from developing or marketing competitive products. There can be no assurance that any of the patents will be found valid, if validity is challenged. Although Merrimac has from time to time filed patent applications in connection with the inventions which it believes are patentable, there can be no assurance that these applications will receive patents.



## ITEM 1A. RISK FACTORS

You should carefully consider the matters described below before making an investment decision. The risks and uncertainties described below are not the only ones facing our company. Our business operations may be impaired by additional risks and uncertainties of which we are unaware or that we currently consider immaterial.

Our business, results of operations or cash flows may be adversely affected if any of the following risks actually occur. In such case, the trading price of our common stock could decline, and you may lose part or all of your investment.

*The market for our products, in particular our Multi-Mix® products, is new and rapidly evolving. If we are not able to develop or enhance our products, or to respond to customer needs, our net sales will suffer.*

Our future success depends in large part on our ability to develop and market our new line of Multi-Mix® modules, filters, couplers and delay lines products, particularly to the wireless base station and defense sectors. We will also need to continually enhance our existing core products (passive RF and microwave component assemblies, power dividers and other micro circuitry products), lower product cost and develop new products that maintain technological competitiveness. Our core products must meet changing customer, regulatory and particular technological requirements and standards, and our Multi-Mix® products especially must respond to the changing needs of our customers, particularly our OEM customers. These customer requirements might or might not be compatible with our current or future product offerings. We might not be successful in modifying our products and services to address these requirements and standards and our business could suffer.

*We have incurred losses this past fiscal year and may incur losses in the future.*

We recorded a net loss of \$2,225,000 for the year ended December 30, 2006. The Company experienced a declining level of sales and operating income for 2006, primarily resulting from materially decreased bookings in 2006 and resulting lower backlog of the Company's traditional products, particularly products sold by its Filtran subsidiary. The Company also experienced the loss of certain anticipated orders as well as delays in space and defense program orders, including Multi-Mix® products, during the past fiscal year. We may incur losses in any of our future periods. Even if we do achieve profitability in future periods, we may not be able to sustain or increase our profitability in the short-term or long-term, on a quarterly or an annual basis, in subsequent periods. If our financial results fall below the expectations of investors, the price of our common stock may suffer.

*Multi-Mix® Microtechnology and Multi-Mix PICO® Products.*

We have made capital investments of approximately \$15.0 million in our proprietary line of Multi-Mix® Microtechnology products.

While we have generated sales and developed a customer base for our Multi-Mix® products, if a competitive product or decreased consumer demand for our Multi-Mix® products resulted in significant decrease in those sales, our ability to recover our investment in our Multi-Mix® Microtechnology product assets could be negatively impacted and result in a write off of the carrying value of these assets and an impairment charge to our earnings.

In addition, we have invested significant engineering, research and development, personnel and other resources in developing our Multi-Mix Zapper® product line, introduced in June 2004. While sales to date have not been material, we intend to incur significant additional expenses, including sales and marketing costs, in implementing our strategic plan to commercialize various applications of our Multi-Mix® technologies. These products are direct drop-in replacements for competing technologies used in virtually all wireless base stations. There are competing technologies already in the marketplace, and in order to obtain market share we will have to convince customers to convert to our products from those that are already in use.

We may seek to enter into joint ventures, research and development, distribution and other arrangements with third party OEM's, defense contractors, universities and research institutions and others in order to successfully market our Multi-Mix® products. In fact, we may find it necessary to enter into such arrangements if our own resources are inadequate to develop recurring sales and a sustained commercial market for these products. There can be no assurance we will be able to enter into such arrangements, or do so on commercially attractive terms, if necessary.

Our business plan anticipates significant future sales from our Multi-Mix® products. Due to economic and market conditions in the wireless industry over the past several years, telecommunications system service providers substantially reduced their capital equipment purchases from our customers. While these circumstances have resulted in the delay or cancellation of Multi-Mix® Microtechnology product purchases that had been anticipated from certain specific customers or programs, in connection with the improved conditions in the industry, the Company has implemented a strategic plan utilizing product knowledge and customer focus to expand specific sales opportunities. Continued extended delay or reduction from planned levels in new orders expected from customers for these products could require the Company to pursue alternatives related to the utilization or realization of these assets and commitments. If we are unable to generate significant future sales from these Multi-Mix® products or identify alternative uses, sufficient to recover our investment, we could have to write down the carrying value of these assets, thereby incurring an impairment charge to earnings, which would significantly harm our operations and financial condition.

*We rely on a small number of customers for a substantial portion of our net sales, and declines in sales to these customers could adversely affect our operating results.*

Sales to our five largest customers accounted for 42.1% of our net sales in the fiscal year ended December 30, 2006 and our largest customer, Raytheon Company, accounted for 11.1% of our 2006 sales. For 2005, Israel Aircraft Industries Ltd., Lockheed Martin Corporation and Raytheon Company, accounted for 11.2%, 10.9% and 10.5%, respectively, of our net sales for that period. We depend on the continued growth, viability and financial stability of our customers, substantially all of which operate in an environment characterized by rapid technological change, short product life cycle, consolidation, and pricing and margin pressures. We expect to continue to depend upon a relatively small number of customers for a significant percentage of our revenue. Consolidation among our customers may further concentrate our business in a limited number of customers and expose us to increased risks relating to dependence on a small number of customers. In addition, a significant reduction in sales to any of our large customers or significant pricing and margin pressures exerted by a key customer would adversely affect our operating results. In the past, some of our large customers have significantly reduced or delayed the volume of products ordered from us as a result of changes in their business, consolidation or divestitures or for other reasons. We cannot be certain that present or future large customers will not terminate their arrangements with us or significantly change, reduce or delay the amount of products ordered from us, any of which would adversely affect our operating results.

A substantial portion of our sales are related to the defense and military communications sectors. However, in times of armed conflict or war, military spending is concentrated on armaments build up, maintenance and troop support, and not on the research and development and specialty applications that are the Company's core strengths and revenue generators. Accordingly, our defense and military product sales may decrease, and should not be expected to increase, at times of armed conflicts or war.

*Our products are intended for use in various sectors of the satellite, defense and telecommunications industries, which produces technologically advanced products with short life cycles.*

Factors affecting the satellite, defense and telecommunications industries, in particular the short life cycle of certain products, could seriously harm our customers and reduce the volume of products they purchase from us. These factors include:

- the inability of our customers to adapt to rapidly changing technology and evolving industry standards that result in short product life cycles;

- the inability of our customers to develop and market their products, some of which are new and untested; and
- the potential that our customers' products may become obsolete or the failure of our customers' products to gain widespread commercial acceptance.

*The expenses relating to our products might increase, which could reduce our gross margins.*

In the past, developing engineering solutions, meeting research and development challenges and overcoming production and manufacturing issues have resulted in additional expenses. These expenses create pressure on our average selling prices and may result in decreased margins of our products. We expect that this will continue. In the future, competition could increase, and we anticipate this may result in additional pressure on our pricing. We also may not be able to increase the price of our products in the event that the cost of components or overhead increase. Changes in exchange rates between the United States and Canadian dollars, and other currencies, might result in further disparity between our costs and selling price and hurt our ability to maintain gross margins.

*We carry inventory and there is a risk we may be unable to dispose of certain items.*

We procure inventory based on specific customer orders and forecasts. Customers have certain rights of modification with respect to these orders and forecasts. As a result, customer modifications to orders and forecasts affecting inventory previously procured by us and our purchases of inventory beyond customer needs may result in excess and obsolete inventory for the related customers. Although we may be able to use some of these excess components and raw materials in other products we manufacture, a portion of the cost of this excess inventory may not be recoverable from customers, nor may any excess quantities be returned to the vendors. We also may not be able to recover the cost of obsolete inventory from vendors or customers.

Write offs or write downs of inventory generally arise from:

- declines in the market value of inventory;
- changes in customer demand for inventory, such as cancellation of orders; and
- our purchases of inventory beyond customer needs that result in excess quantities on hand and that we are not able to return to the vendor or charge back to the customer.

Our products and therefore our inventories are subject to technological risk. At any time either new products may enter the market or prices of competitive products may be introduced with more attractive features or at lower prices than ours. There is a risk we may be unable to sell our inventory in a timely manner and avoid it becoming obsolete. As of December 30, 2006, our inventories including raw materials, work-in-process and finished goods, were valued at \$3.9 million reflecting reductions due to valuation allowances for obsolescence and cost overruns of approximately \$1.2 million against these inventories. In the event we are required to substantially discount our inventory or are unable to sell our inventory in a timely manner, we would be required to increase our valuation allowances and our operating results could be substantially adversely affected.

*We depend on a limited number of suppliers.*

Electronic devices, components and made-to-order assemblies used in our traditional (i.e., non-Multi-Mix) products are generally obtained from a number of suppliers, although certain components are obtained from a limited number of suppliers. Some devices or components are standard items while others are manufactured to our specifications by our suppliers.

Except as described below, we believe that most raw materials used in manufacturing our products are available from alternative suppliers. We do not have binding agreements or commitments with our suppliers for the quantity and prices of our raw materials. Our reliance on suppliers, especially sole source or limited suppliers, involves the risks of adequate capacity and reduced control over delivery schedules and costs. While there may be alternative qualified suppliers for some of these components, substitutes for certain materials are not readily available. Any significant interruption in delivery of such items could have an adverse effect on our operations.



Manufacturing of our Multi-Mix products requires certain components and raw materials that currently are only available from a sole supplier or limited number of suppliers, particularly for products intended for specific applications. Our Multi-Mix products utilize certain substrate materials in the fusion bonding process, currently obtained from a single vendor. Although there may be alternative types of substrates that are under evaluation, we have designed its current Multi-Mix products utilizing the current source of supply, and use of alternative substrates could result in design, engineering, manufacturing, performance and cost challenges and delays.

In addition, certain Multi-Mix products utilizing high power RF circuitry designed for telecommunications/wireless base station infrastructure applications require the use of LDMOS transistors which are not currently generally commercially available in the configurations required by us. Our Multi-Mix Resource Module would require such commercially unavailable components when used for commercial high power amplifier base station infrastructure applications but does not depend on these components for military and other commercial applications for which a variety of components are available in the proper configuration from a number of alternative sources. In order to commercialize this high power base station LDMOS application of the Multi-Mix Resource Module, we would need to establish a supply relationship with a vendor willing to provide commercial quantities of the needed components in a configuration that would maximize the value of the patented Multi-Mix Resource Module for this market. The Company continues to seek to establish a supply relationship with an LDMOS transistor provider able to provide such components, and is also considering alternative configurations and components. There is no assurance we will be able to establish such a vendor relationship or alternatives, in which case we would be unable to manufacture commercial quantities of Multi-Mix products for high power base station infrastructure applications, which would have a material adverse effect on our value proposition and marketing efforts with potential customers and our results of operations and profitability.

Any difficulty in obtaining sufficient quantities of such raw materials on a timely basis, and at economic prices, could result in design and engineering changes and expenses, shipment delays and/or an inability to manufacture certain Multi-Mix products. Significant increases in the costs of such materials could also have a material adverse effect on our value proposition and marketing efforts with potential customers and our results of operations and profitability.

*We generally do not obtain long-term volume purchase commitments from customers, and, therefore, cancellations, reductions in production quantities and delays in production by our customers could adversely affect our operating results.*

We generally do not obtain firm, long-term purchase commitments from our customers. Customers may cancel their orders, choose not to exercise options for further product purchases, reduce production quantities or delay production for a number of reasons. In the event our customers experience significant decreases in demand for their products and services, our customers may cancel orders, delay the delivery of some of the products that we manufactured or place purchase orders for fewer products than we previously anticipated. Even when our customers are contractually obligated to purchase products from us, we may be unable or, for other business reasons, choose not to enforce our contractual rights. Cancellations, reductions or delays of orders by customers would:

- adversely affect our operating results by reducing the volumes of products that we manufacture for our customers;
- delay or eliminate recoupment of our expenditures for inventory purchased in preparation for customer orders; and
- lower our asset utilization, which would result in lower gross margins.

*Products we manufacture may contain design or manufacturing defects that could result in reduced demand for our services and liability claims against us.*

We manufacture products to our customers' specifications that are highly complex and may at times contain design or manufacturing defects. Defects have been discovered in products we manufactured in the past and despite our quality control and quality assurance efforts, defects may



occur in the future. Defects in the products we manufacture, whether caused by design, manufacturing or component defects, may result in delayed shipments to customers or reduced or cancelled customer orders. Should these defects occur in large quantities or frequently, our business reputation may also be tarnished. In addition, these defects may result in liability claims against us. Even if customers are responsible for the defects, we may assume responsibility for any costs or payments.

*We are subject to risks of currency fluctuations.*

A portion of our business is conducted in currencies other than the U.S. dollar. Changes in exchange rates among other currencies and the U.S. dollar will affect our cost of sales, operating margins and sales. Our Canadian operations were adversely impacted in fiscal 2005 as a result of changes in the Canadian and U.S. Dollar exchange rates. We cannot predict the impact of future exchange rate fluctuations. In addition, certain of our subsidiaries that have non-U.S. dollar functional currencies transact business in U.S. dollars.

*Variations in our quarterly operating results could occur due to factors including changes in demand for our products, the timing of shipments and changes in our mix of net sales.*

Our quarterly net sales, expenses and operating results have varied in the past and might vary significantly from quarter to quarter in the future. Quarter-to-quarter comparisons of our operating results are not a good indication of our future performance, and should not be relied on to predict our future performance. Our short-term expense levels and manufacturing and production facilities infrastructure overhead are relatively fixed and are based on our expectations of future net sales. If we were to experience a reduction in net sales in a quarter, we could have difficulty adjusting our short-term expenditures and absorbing our excess capacity expenses. If this were to occur, our operating results for that quarter would be negatively impacted. Other factors that might cause our operating results to fluctuate on a quarterly basis include:

- customer decisions to defer, accelerate or cancel orders;
- timing of shipments of orders for our products;
- changes in the mix of net sales attributable to higher-margin and lower-margin products;
- changes in product mix which could cause unexpected engineering or research and development costs;
- announcements or introductions of new products by our competitors;
- engineering or production delays due to product defects or quality problems and production yield issues; and
- dynamic defense budgets which could cause military program delays or cancellations.

*Recent changes in accounting for equity-related compensation could impact our financial statements.*

On December 16, 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 123 (Revised 2004), "*Share-Based Payment*" ("SFAS 123R"). SFAS 123R is a revision of Financial Accounting Standards No. 123, as amended, "*Accounting for Stock-Based Compensation*" ("SFAS 123") and supercedes Accounting Principles Board Opinion No. 25, "*Accounting for Stock Issued to Employees*". SFAS 123R eliminates the alternative to use the intrinsic value method of accounting that was provided in SFAS 123, which generally resulted in no compensation expense being recorded in the financial statements related to the issuance of equity awards to employees. SFAS 123R requires us to measure all employee share-based compensation awards using a fair value method and to record such expense in the consolidated financial statements, as opposed to the pro forma note presentation previously used. We adopted SFAS 123R at the beginning of its first quarter in fiscal 2006, and will apply the provisions of the statement prospectively for any newly issued, modified or settled award after the date of initial adoption, as well as for any awards that were granted prior to the adoption date for which the requisite service period has not



been provided as of the adoption date. We continue to use the Black–Scholes option pricing model to calculate total stock compensation expense. The adoption of this statement resulted in a non–cash charge of \$189,000 to its operations. As of December 30, 2006 the total future compensation cost related to non–vested stock options and the employee stock purchase plan not yet recognized in the statement of operations was \$287,000. Of that total, \$154,000, \$102,000 and \$31,000 are expected to be recognized in 2007, 2008 and 2009, respectively.

*We have significant competition in our industry.*

The microwave component and subsystems industry continues to be highly competitive. We compete against many companies, both foreign and domestic, many of which are larger and have greater financial and other resources. Our direct competitors in the commercial market are Anaren, Sirenza, Vari–L, Radiall and Sochen. Our major competitors in the military market are Anaren, M/A Com, L–3 Communications (Narda), Sage, TRM and KW Microwave. Major competitors for our Filtran subsidiary in the microwave micro–circuitry market are Labtech, MPC and Precision Instruments. As a direct supplier to OEMs, we also face significant competition from the in–house capabilities of our customers. However, the current trend in the wireless marketplace has been for the OEMs to outsource more design and production work, thereby freeing up their internal resources for other use. Thus, we believe that internal customer competition exists predominantly in our defense and satellite businesses.

In the wireless market, increased price pressure from our customers is a continuing challenge. It is anticipated that this pricing pressure will continue indefinitely.

The principal competitive factors are technical performance, reliability, ability to produce in volume, on–time delivery and price. Based on these factors, we believe that it competes favorably in its markets. We believe that it is particularly strong in the areas of technical performance and on–time delivery in the wireless marketplace. We believe that it competes favorably on price as well.

The RF Microwave components industry is highly competitive and has become more so as defense spending has changed program–spending profiles. Furthermore, current Department of Defense efforts are shifting funds to support troops engaged in existing hostilities around the world. We compete against numerous U.S. and foreign providers with global operations, as well as those who operate on a local or regional basis. In addition, current and prospective customers continually evaluate the merits of manufacturing products internally. Changes in the industries and sectors we service could significantly harm our ability to compete, and consolidation trends could result in larger competitors that may have significantly greater resources with which to compete against us.

We may be operating at a cost disadvantage compared to manufacturers who have greater direct buying power from component suppliers, distributors and raw material suppliers or who have lower cost structures. Our manufacturing processes are generally not subject to significant proprietary protection, and companies with greater resources or a greater market presence may enter our market or increase their competition with us. Increased competition could result in price reductions, reduced sales and margins or loss of market share.

*Intellectual property rights in our industry are commonly subject to challenge.*

Substantial litigation regarding intellectual property rights exists in our industry. We do not believe our intellectual properties infringe those of others, and are not aware that any third party is infringing our intellectual property rights. A risk always exists that third parties, including current and potential competitors, could claim that our products, or our customers' products, infringe on their intellectual property rights or that we have misappropriated their intellectual property. We may discover that a third party is infringing upon our intellectual property rights, or has been issued an infringing patent.

Infringement suits are time consuming, complex, and expensive to litigate. Such litigation could cause a delay in the introduction of new products, require us to develop non–infringing technology, require us to enter into royalty or license agreements, if available, or require us to pay substantial



damages. We have agreed to indemnify certain customers for infringement of third-party intellectual property rights. We could incur substantial expenses and costs in case of a successful indemnification claim. A significant negative impact would result if a successful claim of infringement were made against us and we could not develop non-infringing technology or license the infringed or similar technology on a timely and cost-effective basis.

Our success depends to a significant degree upon the preservation and protection of our product and manufacturing process designs and other proprietary technology. To protect our proprietary technology, we generally limit access to our technology, treat portions of such technology as trade secrets, and obtain confidentiality or non-disclosure agreements from persons with access to the technology. Our agreements with our employees prohibit employees from disclosing any confidential information, technology developments and business practices, and from disclosing any confidential information entrusted to us by other parties. Consultants engaged by us who have access to confidential information generally sign an agreement requiring them to keep confidential and not disclose any non-public confidential information.

We currently have 21 active patents. We plan to pursue intellectual property protection in foreign countries, primarily in the form of international patents, in instances where the technology covered is considered important enough to justify the added expense. By agreement, our employees who initiate or contribute to a patentable design or process are obligated to assign their interest in any potential patent to us.

*Our executive officers, engineers, research and development and technical personnel are critical to our business, and without them we might not be able to execute our business strategy.*

Our financial performance depends substantially on the performance of our executive officers and key employees. We are dependent in particular on Mason N. Carter, who serves as our Chief Executive Officer, Reynold Green, our Chief Operating Officer, Robert Condon, who serves as our Chief Financial Officer and James Logothetis, our Chief Technology Officer. We are also dependent upon our other highly skilled engineering, research and development and technical personnel, due to the specialized technical nature of our business. If we lose the services of any of our key personnel and are not able to find replacements in a timely manner, our business could be disrupted, other key personnel might decide to leave, and we might incur increased operating expenses associated with finding and compensating replacements.

*Our industry is subject to numerous government regulations.*

Our products are incorporated into telecom and wireless communications systems that are subject to regulation domestically by various government agencies, including the Federal Communications Commission and internationally by other government agencies. In addition, because of our participation in the satellite and defense industry, we are subject to audit from time to time for compliance with government regulations by various governmental agencies. We are also subject to a variety of local, state and federal government regulations relating to environmental laws, as they relate to toxic or other hazardous substances used to manufacture our products. We believe that we operate our business in material compliance with applicable laws and regulations. However, any failure to comply with existing or future laws or regulations could have a material adverse affect on our business, financial condition and results of operations.

*Export controls.*

Our products are subject to the Export Administration Regulations ("EAR") administered by the U.S. Department of Commerce and may, in certain instances, be subject to the International Traffic in Arms Regulations ("ITAR") administered by the U.S. Department of State. EAR restricts the export of dual-use products and technical data to certain countries, while ITAR restricts the export of defense products, technical data and defense services. We believe that it has implemented internal export procedures and controls in order to achieve compliance with the applicable U.S. export control regulations. However, the U.S. government agencies responsible for administering EAR and ITAR

have significant discretion in the interpretation and enforcement of these regulations, and it is possible that these regulations could adversely affect the Company's ability to sell its products to non-U.S. customers.

*Some of our operations are outside the United States, which poses risks to our business operations.*

A significant percentage of our sales is derived from the operations of its wholly-owned subsidiaries in Costa Rica and Canada. These sales are subject to the risks normally associated with international operations which include, without limitation, fluctuating currency exchange rates, changing political and economic conditions, difficulties in staffing and managing foreign operations, greater difficulty and expense in administering business abroad, complications in complying with foreign laws and changes in regulatory requirements, and cultural differences in the conduct of business.

While we believe that current political and economic conditions in Canada and Costa Rica are relatively stable, such conditions may adversely change so as to effect underlying business assumptions about the current opportunities which exist for doing business in those countries. In particular, the government in Costa Rica could change, the currency exchange rate between the U.S. and Canadian dollars may change adversely (as occurred in 2005 and 2004), or the cost of labor and/or goods and services necessary to our operations may increase.

*In future periods, we may be required to record an impairment charge against goodwill, which would have a material adverse effect on our results of operations.*

As of December 30, 2006, we had approximately \$3,500,000 of goodwill on its balance sheet. This amount represents the remaining excess of the total purchase price over the fair value of net assets acquired of our acquisition of FMI. Goodwill is subject to at least an annual assessment for impairment and more frequently if circumstances indicate a possible impairment. If we are required to record impairment charges related to goodwill, such charges would have the effect of decreasing our net income or increasing losses in such period. If we are required to take a substantial impairment charge, net income per share or net loss per share could be materially adversely affected in such period.

*If we are unable to assess that our internal controls over financial reporting are effective as of the end of our 2007 fiscal year or if we receive other than an unqualified opinion on the adequacy of our internal control over financial reporting as of January 3, 2009 and future year-ends as required by Section 404 of the Sarbanes-Oxley Act, investors could lose confidence in the reliability of our financial statements, which could result in a decrease in the value of our common stock.*

As required by Section 404 of the Sarbanes-Oxley Act, the SEC adopted rules requiring public companies to include a report of management on the company's internal control over financial reporting in their annual reports that contains an assessment by management of the effectiveness of our internal control over financial reporting. In addition, the public accounting firm auditing a company's financial statements must attest to and report on both management's assessment as to whether the company maintained effective internal control over financial reporting and on the effectiveness of the company's internal control over financial reporting.

We are currently undergoing a comprehensive effort to comply with Section 404 of Sarbanes-Oxley. As of the end of our 2007 fiscal year, we are required to provide the report of management on the Company's internal control over financial reporting in our annual report containing the assessment by management of the effectiveness of our internal control over financial reporting. If, at the end of fiscal year 2007, management is unable to conclude that our internal controls over financial reporting are effective and if our independent auditors issue other than an unqualified opinion on the design, operating effectiveness or management's assessment of internal control over financial reporting for fiscal year 2008, this could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements, which could cause the market price of our shares to decline.

## **ITEM 2. PROPERTIES.**

### **United States**

Merrimac's administrative offices, research and principal production facilities are located in West Caldwell, New Jersey, on a five-acre parcel owned by Merrimac. The West Caldwell plant comprises 71,200 square feet.

Merrimac owns all of its land, buildings, laboratories, production and office equipment, as well as its furniture and fixtures in West Caldwell, New Jersey. Merrimac believes that its plant and facilities are well suited for Merrimac's business and are properly utilized, suitably located and in good condition.

### **Canada**

In February 1999, Merrimac entered into a seven-year lease for a 20,000 square-foot manufacturing facility in Ottawa, Ontario, Canada in connection with Merrimac's acquisition of FMI. Merrimac extended the lease for an additional three-year term in February 2006.

### **Costa Rica**

The Company currently leases a 36,200 square-foot facility in San Jose, Costa Rica under a five-year lease which expired in February 2006 (with a five-year renewal option). The renewal option was exercised in February 2006. This facility, which opened for production in August 2002, is used for manufacturing the Company's products.

## **ITEM 3. LEGAL PROCEEDINGS.**

Merrimac is a party to lawsuits, arising in the normal course of business. It is the opinion of Merrimac's management that the disposition of these various lawsuits will not individually or in the aggregate have a material adverse effect on the consolidated financial position or the results of operations of Merrimac.

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

No matters were submitted to a vote of Merrimac's stockholders during the fourth quarter of fiscal 2006.

## PART II

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

Merrimac's Common Stock has been listed and traded on The American Stock Exchange since July 11, 1988, under the symbol MRM. As of March 23, 2007 Merrimac had approximately 200 holders of record. Merrimac believes there are approximately 800 additional holders in "street name" through broker nominees.

The following table sets forth the range of the high and low trading prices as reported by the AMEX for the period from January 1, 2005 to December 30, 2006.

<b>Fiscal Year Ended December 30, 2006</b>	<b>High</b>	<b>Low</b>
First Quarter	\$ 10.20	\$ 8.81
Second Quarter	\$ 9.90	\$ 8.70
Third Quarter	\$ 10.40	\$ 9.75
Fourth Quarter	\$ 10.40	\$ 9.75

<b>Fiscal Year Ended December 31, 2005</b>	<b>High</b>	<b>Low</b>
First Quarter	\$ 10.25	\$ 8.70
Second Quarter	\$ 9.40	\$ 8.44
Third Quarter	\$ 9.32	\$ 8.55
Fourth Quarter	\$ 9.25	\$ 8.80

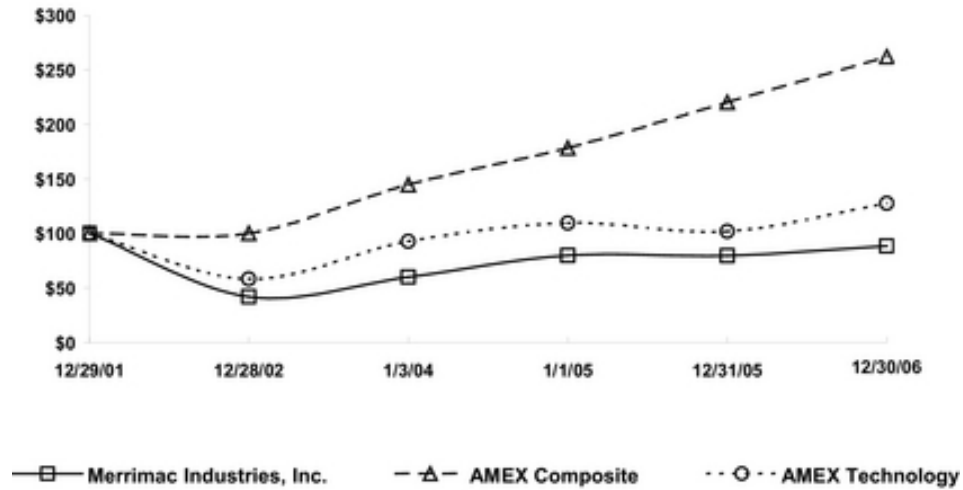
Merrimac has not paid any cash dividends to its stockholders since the third quarter of 1997.

#### Stock Performance Chart

The following performance graph is a line graph comparing the yearly change in the cumulative total stockholder return on the Common Stock against the cumulative return of the AMEX Stock Market (U.S. Companies), and a line of business index comprised of the AMEX Technologies Index for the five fiscal years ended December 30, 2006.

### COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\*

Among Merrimac Industries, Inc., The AMEX Composite Index  
And The AMEX Technology Index



\* \$100 invested on 12/29/01 in stock or on 12/31/01 in index-including reinvestment of dividends.  
Indexes calculated month-end basis.

	<u>12/29/01</u>	<u>12/28/02</u>	<u>1/3/04</u>	<u>1/1/05</u>	<u>12/31/05</u>	<u>12/30/06</u>
Merrimac Industries, Inc.	100.00	41.96	60.07	79.86	79.51	88.34
AMEX Composite	100.00	100.08	144.57	178.46	220.35	262.17
AMEX Technology	100.00	58.27	92.62	109.44	101.88	127.50

### Equity Compensation Plan Information

The following table gives information as of December 30, 2006, about the Company's common stock that may be issued upon the exercise of options, warrants and rights under the Company's existing equity compensation plans:

<u>Plan category</u>	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>
	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</u>
Equity compensation plans approved by security holders	407,092	\$ 9.55	414,500
Equity compensation plans not approved by security holders	<u>—</u>	<u>—</u>	<u>—</u>
Total	<u>407,092</u>	<u>\$ 9.55</u>	<u>414,500</u>

**ITEM 6. SELECTED FINANCIAL DATA.**

The following selected financial information is qualified by reference to, and should be read in conjunction with, the Company's consolidated financial statements and the notes thereto, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained elsewhere herein. The selected consolidated statement of operations data for the fiscal years ended December 30, 2006, December 31, 2005 and January 1, 2005 (each audited by Grant Thornton LLP) and the selected consolidated balance sheet data as of December 30, 2006 and December 31, 2005 are derived from the Company's audited consolidated financial statements which are included elsewhere herein. The selected consolidated balance sheet data as of January 1, 2005 (audited by Grant Thornton LLP) and the selected consolidated statement of operations data for the fiscal years ended January 3, 2004 and December 28, 2002 and the selected consolidated balance sheet data as of January 3, 2004 and December 28, 2002 (audited by Ernst & Young LLP) are derived from the Company's audited consolidated financial statements not included herein.

	<b>Fiscal Years Ended</b>				
	<b>December 30, 2006 (52 weeks)</b>	<b>December 31, 2005 (52 weeks)</b>	<b>January 1, 2005 (52 weeks)</b>	<b>January 3, 2004 (53 weeks)</b>	<b>December 28, 2002 (52 weeks)</b>
<b>Consolidated Statement of Operations Data:</b>					
Net sales	\$ 27,421	\$ 29,719	\$ 30,949	\$ 27,322	\$ 24,570
Gross profit	10,134	12,214	12,910	10,577	10,466
Selling, general and administrative	9,864	9,540	9,820	9,536	8,950
Research and development	2,021	1,932	1,723	1,737	2,728
Restructuring charges	286	-	-	160	510
Operating income (loss)	(2,037)	742	1,367	(856)	(1,722)
Interest and other (expense) income, net	(257)	(218)	(265)	(271)	(176)
(Loss) gain on disposition of assets	-	(43)	-	104	-
Income taxes (benefit)	(69)	(280)	(96)	(109)	237
Net income (loss)	(2,225)	761	1,198	(914)	(2,135)
Net income (loss) per common share:					
Basic	(.71)	.24	.38	(.29)	(.69)
Diluted	(.71)	.24	.38	(.29)	(.69)
Weighted average number of common shares outstanding:					
Basic	3,142	3,142	3,127	3,121	3,074
Diluted	3,142	3,177	3,154	3,121	3,074
Cash dividends declared per common share	-	-	-	-	-
<b>Consolidated Balance Sheet Data (at year end):</b>					
Working capital	\$ 13,354	\$ 9,854	\$ 8,464	\$ 6,805	\$ 3,615
Property, plant and equipment, net	12,985	13,973	15,584	17,222	19,282
Total assets	34,254	34,422	34,575	34,020	36,487
Current portion of long-term debt	649	908	905	954	6,240
Long-term debt, net of current portion	4,564	2,071	2,778	4,208	429
Stockholders' equity	26,284	27,690	26,598	24,838	24,702

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

### OVERVIEW

Merrimac Industries, Inc. is involved in the design, manufacture and sale of electronic component devices offering extremely broad frequency coverage and high performance characteristics, and microstrip, bonded stripline and thick metal-backed Teflon® (PTFE) and mixed dielectric multilayer circuits for communications, defense and aerospace applications. The Company's operations are conducted primarily through two business segments: (1) electronic components and subsystems and (2) microwave micro-circuitry (through its subsidiary, Filtran Microcircuits Inc.).

The following table provides a breakdown of our sales between these segments:

	2006		2005	
	\$	% of sales	\$	% of sales
Electronic components and Subsystems	\$ 22,531,000	82.2%	\$ 22,483,000	75.7%
Microwave micro-circuitry(1)	\$ 5,045,000	18.4%	\$ 7,372,000	24.8%
Less intersegment sales	\$ (155,000)	(0.6)%	\$ (136,000)	(0.5)%
Consolidated	\$ 27,421,000	100.0%	\$ 29,719,000	100.0%

(1) Substantially all conducted by our Canadian subsidiary, Filtran Microcircuits Inc.

Merrimac is a versatile technologically oriented company specializing in miniature radio frequency lumped-element components, integrated networks, microstrip and stripline microwave components, integrated multifunction subsystems, and ferrite attenuators. Of special significance has been the combination of two or more of these technologies into single components to achieve superior performance and reliability while minimizing package size and weight. Merrimac components are today found in applications as diverse as satellites, military and commercial aircraft, radar, cellular radio systems, medical and dental diagnostic instruments, personal communications systems ("PCS") and wireless internet connectivity. Merrimac's components range in price from \$0.50 to more than \$10,000 and its subsystems range from \$500 to more than \$1,500,000.

The following table presents our key customers and the percentage of net sales made to such customers:

	2006	2005	2004
Raytheon Company	11.1%	10.5%	13.9%
Lockheed Martin Corporation	8.7%	10.9%	6.6%
The Boeing Company	8.4%	5.9%	7.8%
L-3 Communications Corporation	7.5%	4.3%	2.7%
Space Systems Loral	6.5%	2.4%	1.3%
Northrop Grumman Corporation	5.9%	8.8%	11.9%
Israel Aircraft Industries Ltd.	3.3%	11.2%	6.2%

Sales to the foreign geographic area of Europe were 7.6%, 14.8% and 8.9% of net sales in fiscal years 2006, 2005 and 2004, respectively.

The following table provides a breakdown of the net sales by customer industry segment and geographic area:

	2006				2005			
	North America		Rest of World		North America		Rest of World	
	\$	%	\$	%	\$	%	\$	%
Military and commercial satellites	\$ 9,475,000	34.5%	\$ 602,000	2.2%	\$ 6,960,000	23.4%	\$ 933,000	3.1%
Defense	\$ 7,202,000	26.3%	\$ 1,554,000	5.7%	\$ 7,246,000	24.4%	\$ 3,899,000	13.1%
Commercial	\$ 8,029,000	29.3%	\$ 559,000	2.0%	\$ 9,746,000	32.8%	\$ 935,000	3.2%

The Company markets and sells its products domestically and internationally through a direct sales force and manufacturers' representatives. Merrimac has traditionally developed and offered for sale products built to specific customer needs, as well as standard catalog items. The following table provides a breakdown of electronic components sales as derived from initial orders for products custom designed for specific customer applications, repeat orders for such products and from catalog sales:

	2006	2005	2004
Initial designs	23%	27%	27%
Repeat designs	63%	57%	58%
Catalog sales	14%	16%	15%

The Company believes that while its wireless subscriber base continues to grow, the recent economic downturn, resulting in reduced spending by wireless telecommunications service providers, has caused many wireless telecommunications equipment manufacturers to delay or forego purchases of the Company's products. The Company expects that its defense and satellite customers should continue to maintain their approximate current levels of orders during fiscal year 2007, though there are no assurances they will do so. Nevertheless, in times of armed conflict or war, military spending is concentrated on armaments build up, maintenance and troop support, and not on the research and development and specialty applications that are the Company's core strengths and revenue generators. Accordingly, our defense and military product sales may decrease and should not be expected to increase, at times of armed conflicts or war. The Company also anticipates increased levels of orders during fiscal year 2007 for its Multi-Mix<sup>®</sup> Microtechnology products, based on inquiries from existing customers, requests to quote from new and existing customers and market research. FMI is working to restore orders for automotive and defense applications that were delayed in 2006.

The Company incurred an operating loss in 2006 due to declines in the microwave micro-circuitry segment's defense orders that had been expected to renew in 2006 and reduced orders from delays in space and defense programs for the electronic components and subsystems segment. The Company has made and will be making operating changes to Filtran to stimulate their sales growth and reduce their costs. The Company has also reduced the cost structure of the electronic components and subsystems segment due to the order delays discussed above. There can be no assurance as to whether or when the Company will become profitable again.

Because of the declining level of orders and sales, the Company reduced its headcount by 15 persons, principally involved in production, manufacturing support, sales and administration. The Company recorded personnel restructuring charges of \$286,000, consisting of severance and certain other personnel costs, during the fourth quarter of 2006. The Company anticipates annual savings of \$1,500,000 to begin in the first quarter of 2007 from the restructuring and other cost reduction and containment measures to be implemented.

Recently the Company became aware of a problem with purchased material that was utilized in certain products. The Company has evaluated the material and found the problem with the material does not affect the functionality and reliability of the products. This problem did cause shipment



delays of approximately \$1,000,000 of products that were expected to be sold in the first quarter of 2007. The delay in shipments will have a significant negative impact on the results of operations for the first quarter of 2007.

Cost of sales for the Company consists of materials, salaries and related expenses, and outside services for manufacturing and certain engineering personnel and manufacturing overhead. Our products are designed and manufactured in the Company's facilities. The Company's manufacturing and production facilities infrastructure overhead are relatively fixed and are based on its expectations of future net sales. Should the Company experience a reduction in net sales in a quarter, it could have difficulty adjusting short-term expenditures and absorbing any excess capacity expenses. If this were to occur, the Company's operating results for that quarter would be negatively impacted. In order to remain competitive, the Company must continually reduce its manufacturing costs through design and engineering innovations and increases in manufacturing efficiencies. There can be no assurance that the Company will be able to reduce its manufacturing costs.

Depreciation and amortization expenses exceeded capital expenditures for new projects and production equipment during 2006 by approximately \$900,000, and the Company anticipates that depreciation and amortization expenses will exceed capital expenditures in fiscal year 2007 by approximately \$300,000. The Company intends to issue up to \$2,400,000 of purchase order commitments for capital equipment from various vendors. The Company anticipates that such equipment will be purchased and become operational during fiscal year 2007. The Company's planned equipment purchases and other commitments are expected to be funded through cash resources and cash flows expected to be generated from operations, and supplemented by the Company's \$5,000,000 revolving credit facility, which expires October 18, 2008.

Selling, general and administrative expenses consist of personnel costs for administrative, selling and marketing groups, sales commissions to employees and manufacturing representatives, travel, product marketing and promotion costs, as well as legal, accounting, information technology and other administrative costs. The Company expects to continue to make significant and increasing expenditures for selling, general and administrative expenses, especially in connection with implementation of its strategic plan for generating and expanding sales of Multi-Mix® products.

Research and development expenses consist of materials, salaries and related expenses of certain engineering personnel, and outside services related to product development projects. The Company charges all research and development expenses to operations as incurred. The Company believes that continued investment in research and development is critical to the Company's long-term business success. We intend to continue to invest in research and development programs in future periods, and expect that these costs will increase over time, in order to develop new products, enhance performance of existing products and reduce the cost of current or new products.

## **CRITICAL ACCOUNTING ESTIMATES AND POLICIES**

The Company's management makes certain assumptions and estimates that impact the reported amounts of assets, liabilities and stockholders' equity, and sales and expenses. These assumptions and estimates are inherently uncertain. The management judgments that are currently the most critical are related to the accounting for the Company's investments in Multi-Mix® Microtechnology, contract revenue recognition, inventory valuation, valuation of goodwill and valuation of deferred tax assets. Below is a further description of these policies as well as the estimates involved.

## Impairment of long-lived assets

The following is a summary of the carrying amounts of the Multi-Mix® Microtechnology net assets included in the Company's consolidated financial statements at December 30, 2006 and the related future planned purchases and lease obligation commitments through January 2011.

Net assets:	
Property, plant and equipment, at cost	\$ 14,954,000
Less accumulated depreciation and amortization	<u>8,207,000</u>
Property, plant and equipment, net	6,747,000
Inventories	494,000
Other assets, net	<u>130,000</u>
Total net assets at December 30, 2006	<u>\$ 7,371,000</u>
Commitments:	
Planned equipment purchases for 2007	\$ 750,000
Lease obligations through January 2011	<u>775,000</u>
Total commitments	<u>\$ 1,525,000</u>
Total net assets and commitments	<u>\$ 8,896,000</u>

Approximately 35% of the property, plant and equipment may be utilized in other areas of our electronic components and subsystems operations.

The Company anticipates receiving additional orders during 2007 for its Multi-Mix® Microtechnology products, based on inquiries from existing customers, requests to quote from new and existing customers and market research, for which substantial research and development costs have also been incurred. Due to economic and market conditions in the wireless industry since 2000, wireless telecommunications system service providers substantially reduced their capital equipment purchases from our customers. While these circumstances have resulted in the delay or cancellation of Multi-Mix® Microtechnology product purchases that had been anticipated from certain specific customers or programs, in connection with the improved conditions in the industry, the Company has implemented a strategic plan utilizing product knowledge and customer focus to expand specific sales opportunities. Continued extended delay or reduction from planned levels in new orders expected from customers for these products could require the Company to pursue alternatives related to the utilization or realization of these assets and commitments. Should these alternatives not be realized, the Company would have to write down the value of these assets, thereby incurring an impairment charge to earnings, the net result of which would be materially adverse to the financial results and condition of the Company. In accordance with the Company's evaluation of Multi-Mix® under SFAS No. 144, the Company has determined no provision for impairment is required at this time. Management will continue to monitor the recoverability of the Multi-Mix® assets.

## Contract Revenue Recognition

The Company recognizes revenue in accordance with the provisions of Staff Accounting Bulletin No. 104. Contract revenue and related costs on fixed-price and cost-reimbursement contracts that require customization of products to customer specifications are recorded when title transfers to the customer, which is generally on the date of shipment. Prior to shipment, manufacturing costs incurred on such contracts are recorded as work-in-process inventory. Anticipated losses on contracts are charged to operations when identified. Revenue related to non-recurring engineering charges is generally recognized upon shipment of the related initial units produced or based upon contractually established stages of completion.

The cost rates utilized for cost-reimbursement contracts are subject to review by third parties and can be revised, which can result in additions to or reductions from revenue. Revisions which result in reductions to revenue are recognized in the period that the rates are reviewed and finalized; additions



to revenue are recognized in the period that the rates are reviewed, finalized, accepted by the customer, and collectability from the customer is assured. The Company submits financial information regarding the cost rates on cost-reimbursement contracts for each fiscal year in which the Company performed work on cost-reimbursement contracts. The Company does not record any estimates on a regular basis for potential revenue adjustments, as there currently is no reasonable basis on which to estimate such adjustments given the Company's very limited experience with these contracts. During 2004, the Company recognized a revenue reduction of \$12,000 related to a cost-reimbursement contract. The Company recognized revenue of \$715,000 and \$106,000 related to cost-reimbursement contracts in 2006 and 2005, respectively.

## **Inventory Valuation**

Inventories are valued at the lower of average cost or market. Inventories are periodically reviewed for their projected manufacturing usage utilization and, when slow-moving or obsolete inventories are identified, a provision for a potential loss is made and charged to operations. Total inventories are net of valuation allowances for obsolescence and cost overruns of \$1,174,000 at December 30, 2006 and \$1,084,000 at December 31, 2005, of which \$85,000 and \$50,000, respectively, represented cost overruns.

Procurement of inventory is based on specific customer orders and forecasts. Customers have certain rights of modification with respect to these orders and forecasts. As a result, customer modifications to orders and forecasts affecting inventory previously procured by us and our purchases of inventory beyond customer needs may result in excess and obsolete inventory for the related customers. Although we may be able to use some of these excess components and raw materials in other products we manufacture, a portion of the cost of this excess inventory may not be recoverable from customers, nor may any excess quantities be returned to the vendors. We also may not be able to recover the cost of obsolete inventory from vendors or customers.

Write offs or write downs of inventory generally arise from:

- declines in the market value of inventory; and
- changes in customer demand for inventory, such as cancellation of orders; and
- our purchases of inventory beyond customer needs that result in excess quantities on hand and that we are not able to return to the vendor or charge back to the customer.

## **Valuation of Goodwill**

With the adoption of SFAS No. 142 by the Company on December 30, 2001, goodwill is no longer subject to amortization over its estimated useful life. However, goodwill is subject to at least an annual assessment for impairment and more frequently if circumstances indicate a possible impairment. The Company performed the annual assessment during the fourth quarter of 2006 and determined there was no impairment.

As shown in footnote 9 of the consolidated financial statements, the sales and operating income of the Company's microwave micro-circuitry segment, conducted through its Filtran Microcircuits, Inc. subsidiary, declined during 2006. The segment's backlog decreased approximately \$1,500,000 since the end of fiscal year 2004 and \$200,000 since the end of fiscal year 2005. The principal reason for the reduction in sales was due to declines in the segment's defense orders that had been expected to renew in 2006. Operating income declined due to the decreased sales, a higher cost structure and reductions in production yields during 2006.

In response to the decline in FMI's results, the Company instituted management changes at Filtran during the fourth quarter of 2006. The Company has begun manufacturing certain Filtran products and is currently evaluating plans to move the manufacturing of other Filtran products to its Costa Rica facility to utilize the benefits of the more efficient production equipment and the lower direct labor costs at that facility. If the performance of FMI does not improve after making the changes listed above, the Company may be required to record an impairment charge to its goodwill.



## Valuation of Deferred Tax Assets

The Company currently has significant deferred tax assets resulting from net operating loss carryforwards, tax credit carryforwards and deductible temporary differences, which should reduce taxable income in future periods. A valuation allowance is required when it is more likely than not that all or a portion of a deferred tax asset will not be realized. The Company's 2002, 2003 and 2006 net losses weighed heavily in the Company's overall assessment. As a result of the assessment, the Company established a full valuation allowance for its remaining net domestic deferred tax assets at December 28, 2002. This assessment continued unchanged from 2003 through 2006. In 2006 and 2005 the Company recorded additional valuation allowances for certain Canadian deferred tax assets of \$427,000 and \$270,000, respectively, because it believed that the probability of realization of such assets was uncertain. Management believes that a valuation allowance is not required for the remainder of FMI's recorded deferred tax assets as they are more likely than not to be realized.

## CONSOLIDATED STATEMENTS OF OPERATIONS SUMMARY

The following table displays line items in the Consolidated Statements of Operations as a percentage of net sales.

	Percentage of Net Sales		
	Years Ended		
	December 30, 2006	December 31, 2005	January 1, 2005
Net sales	100.0%	100.0%	100.0%
Costs and expenses:			
Cost of sales	63.0	58.9	58.3
Selling, general and administrative	36.0	32.1	31.7
Research and development	7.4	6.5	5.6
Restructuring charge	1.0	—	—
	<u>(107.4)</u>	<u>97.5</u>	<u>95.6</u>
Operating income (loss)	(7.4)	2.5	4.4
Interest and other expense, net	(.9)	(.7)	(.8)
(Loss) gain on disposition of assets	—	(.1)	—
Income (loss) before income taxes	(8.3)	1.7	3.6
Benefit for income taxes	(.2)	(.9)	(.3)
Net income (loss)	<u>(8.1)%</u>	<u>2.6%</u>	<u>3.9%</u>

## 2006 COMPARED TO 2005

### *Net sales.*

Consolidated results of operations for 2006 reflect a decrease in net sales from 2005 of \$2,297,000 or 7.7% to \$27,421,000. This decrease was attributable to a \$2,327,000 decrease in net sales of microwave micro-circuitry products from the Company's Filtran business offset in part by a \$48,000 increase in sales for the electronic components and subsystems segment. The decrease in sales of the microwave micro-circuitry segment for 2006 was due to declines in the segment's defense orders that had been expected to renew in 2006. Net sales for the electronic components and subsystems segment for 2006 were essentially flat, but below expectation due to reduced orders from delays in space and defense programs. Sales for 2006 for the electronic components and subsystems segment included \$1,200,000 of revenue recognized in connection with the early close out of a fixed price customer contract during the second quarter.

Backlog represents the amount of orders the Company has received that have not been shipped as of the end of a particular fiscal period. The orders in backlog are a measure of future sales and



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determine the Company's upcoming material, labor and service requirements. The book-to-bill ratio for a particular period represents orders received for that period divided by net sales for the same period. The Company looks for this ratio to exceed 1.0, indicating the backlog is being replenished at a higher rate than the sales being removed from the backlog.

The following table presents key performance measures that we use to monitor our operating results:

	2006	2005
Beginning Backlog	\$ 13,139,000	\$ 12,945,000
Plus Bookings	\$ 26,667,000	\$ 29,913,000
Less Net Sales	\$ 27,421,000	\$ 29,719,000
Ending Backlog	\$ 12,385,000	\$ 13,139,000
Book-to-Bill Ratio	0.97	1.01

Orders of \$26,667,000 were received for 2006, a decrease of \$3,246,000 or 10.9% compared to \$29,913,000 in orders received for 2005. The decrease in orders for fiscal year 2006 as compared to fiscal year 2005 was due to our key account customers loss of significant orders that were to include Merrimac products as well as from delays in expected satellite and defense programs for all product lines, including our Multi-Mix® products. Backlog decreased by \$754,000 to \$12,385,000 at the end of 2006 compared to \$13,139,000 at year-end 2005.

*Cost of sales and gross profit.*

The following table provides comparative gross profit information, by product segment, for the past two years.

	\$	Increase/ (Decrease) From Prior Year	% of Segment Net Sales	\$	Increase/ (Decrease) From Prior Year	% of Segment Net Sales
Electronic Components and Subsystems gross profit	\$ 9,175,000	\$ (1,107,000)	40.7%	\$ 10,281,000	\$ (1,060,000)	45.7%
Microwave Micro-Circuitry gross profit	\$ 959,000	\$ (973,000)	19.0%	\$ 1,933,000	\$ 364,000	26.2%
Consolidated gross profit	\$ 10,134,000	\$ (2,080,000)	37.0%	\$ 12,214,000	\$ (696,000)	41.1%

The decrease in gross profit for 2006 for the electronic components and subsystems segment was due to higher warranty costs from the Company's transition from components to a designer and provider of integrated assemblies and subsystems, more competitive pricing on certain products and higher fixed manufacturing costs.

Depreciation and amortization expense included in 2006 consolidated cost of sales was \$2,333,000, a decrease of \$529,000 compared to 2005. The decrease in depreciation and amortization expense was due to certain production and testing equipment becoming fully depreciated during 2005 and 2006. For 2006, approximately \$1,490,000 of depreciation and amortization expense was associated with Multi-Mix® Microtechnology capital assets.

FMI sales include intersegment sales of \$155,000 and \$136,000 in 2006 and 2005, respectively. The decrease in gross margin percent for 2006 is due to higher material and overhead costs and lower production yields.

*Selling, general and administrative expenses.*

Selling, general and administrative expenses of \$9,864,000 for 2006 increased by \$324,000 or 3.4%, and when expressed as a percentage of net sales, increased by 3.9 percentage points to 36.0%



compared to 2005. The 2006 selling, general and administrative expenses increased due to higher selling, marketing and administrative expenses related to higher compensation partially offset by lower commissions on the lower sales level.

*Research and development expenses.*

Research and development expenses for new products were \$2,021,000 for 2006, an increase of \$89,000 or 4.6% and when expressed as a percentage of net sales, an increase of 0.9 percentage points to 7.4% compared to 2005. Except for \$112,000 of expenses at FMI (a decrease of \$42,000 from such FMI expenses in 2005) substantially all of the research and development expenses were related to Multi-Mix® Microtechnology, Multi-Mix PICO® and power amplifier products. The Company anticipates that these expenses will increase in future periods in connection with further implementation of our strategic plan for Multi-Mix®.

*Restructuring charge.*

Because of the declining level of orders and sales, the Company reduced its headcount by 15 persons, principally involved in production, manufacturing support, sales and administration. The Company recorded a personnel restructuring charge of \$286,000, consisting of severance and certain other personnel costs, during the fourth quarter of 2006. Such charges increased the net loss by \$.09 per share. The Company paid \$146,000 of these restructuring charge in 2006. Substantially all of the remaining 2006 restructuring charge will be paid in 2007. The Company anticipates annual savings of \$1,500,000 to begin in the first quarter of 2007 from the restructuring and other cost reduction and containment measures to be implemented.

*Operating income (loss).*

Consolidated operating loss for 2006 was \$2,038,000 compared to consolidated operating income of \$742,000 for 2005. Consolidated operating loss for 2006 included a non-cash charge of \$189,000 for share-based compensation resulting from the adoption of SFAS No. 123R.

For 2006, the Company's operating loss for its electronic components and subsystems segment was \$1,526,000 compared to operating income of \$280,000 for 2005. The lower operating income for the electronic components and subsystems segment was due to the segment's lower gross profit, restructuring charges, higher research and development costs and higher selling, marketing and administrative costs compared to 2005. For 2006, operating loss for the microwave micro-circuitry segment was \$511,000 compared to operating income of \$462,000 for 2005 due to the lower gross profit from the reduced 2006 sales level.

*Interest and other expense, net.*

Interest and other expense, net was \$257,000 for 2006 compared to interest and other expense, net of \$218,000 for 2005. Interest expense for 2006 includes the write-off of \$167,000 of unamortized deferred debt costs related to its prior financing agreement. Interest expense for 2006 and 2005 was principally incurred on borrowings under the term loans which the Company consummated during the fourth quarter of 2003 and refinanced in October 2006. The Company instituted a cash management program in the fourth quarter of 2005 that generated increased interest income on the Company's free cash balances during 2006 as compared to 2005.

*Income taxes.*

The Company's effective tax rate for the year ended December 31, 2005 reflects U.S. Federal Alternative Minimum Tax and State income taxes for the respective years. The current foreign tax benefit for the year ended December 30, 2006 represents refundable Canadian provincial tax credits for which FMI, as a technology company, has qualified. The 2005 current benefit reflects a \$30,000 domestic tax benefit related to tax planning on the 2004 returns. The current foreign tax benefit for the year ended December 31, 2005 represents refundable Canadian provincial tax credits as described above for FMI.



Internal Revenue Service Code Section 382 places a limitation on the utilization of net operating loss carryforwards when an ownership change, as defined in the tax law, occurs. Generally, an ownership change occurs when there is a greater than 50 percent change in ownership. If such change should occur, the actual utilization of net operating loss carryforwards, for tax purposes, would be limited annually to a percentage of the fair market value of the Company at the time of such change. The Company may become subject to these limitations depending on change in ownership.

*Net income (loss).*

Net loss for 2006 was \$2,225,000 compared to net income of \$761,000 for 2005 for the reasons described above. Net loss per share for 2006 was \$.71 compared to net income per diluted share of \$.24 per share for 2005.

## 2005 COMPARED TO 2004

*Net sales.*

Consolidated results of operations for 2005 reflect a decrease in net sales from 2004 of \$1,230,000 or 4.0% to \$29,719,000. This decrease was attributable to a \$2,657,000 decrease in net sales of electronic components and subsystems offset in part by a \$1,416,000 increase in sales of microwave micro-circuitry products from the Company's wholly-owned subsidiary FMI. The decrease in net sales for the electronic components and subsystems segment for 2005 is due to reduced orders from delays in space and defense programs. In times of armed conflict or war, military spending is concentrated on armaments build up, maintenance and troop support, and not on the research and development and specialty applications that are the Company's core strengths and revenue generators. The increase in sales of the microwave micro-circuitry segment for 2005 was due to new orders from both existing and new customers due to the continued efforts to diversify FMI into wireless base stations, automotive and defense applications.

Backlog represents the amount of orders the Company has received that have not been shipped as of the end of a particular fiscal period. The orders in backlog are a measure of future sales and determine the Company's upcoming material, labor and service requirements. The book-to-bill ratio for a particular period represents orders received for that period divided by net sales for the same period. The Company looks for this ratio to exceed 1.0, indicating the backlog is being replenished at a higher rate than the sales being removed from the backlog.

The following table presents key performance measures that we use to monitor our operating results:

	2005	2004
Beginning Backlog	\$ 12,945,000	\$ 12,395,000
Plus Bookings	\$ 29,913,000	\$ 31,499,000
Less Net Sales	\$ 29,719,000	\$ 30,949,000
Ending Backlog	\$ 13,139,000	\$ 12,945,000
Book-to-Bill Ratio	1.01	1.02

Orders of \$29,913,000 were received for 2005, a decrease of \$1,586,000 or 5.0% compared to \$31,499,000 in orders received for 2004. Backlog increased by \$194,000 to \$13,139,000 at the end of 2005 compared to \$12,945,000 at year-end 2004.

*Cost of sales and gross profit.*

The following table provides comparative gross profit information, by product segment, for the past two years.

	\$	Increase/ (Decrease) From Prior Year	% of Segment Net Sales	\$	Increase/ (Decrease) From Prior Year	% of Segment Net Sales
Electronic Components and Subsystems gross profit	\$ 10,281,000	\$ (1,060,000)	45.7%	\$ 11,341,000	\$ 1,841,000	45.1%
Microwave Micro-Circuitry gross profit	\$ 1,933,000	\$ 364,000	26.2%	\$ 1,569,000	\$ 492,000	26.3%
Consolidated gross profit	\$ 12,214,000	\$ (696,000)	41.1%	\$ 12,910,000	\$ 2,333,000	41.7%

The decrease in gross profit for 2005 for the electronic components and subsystems segment was due to the overall decrease in segment sales. Cost of sales for the electronic components and subsystems segment also reflects a reduction of intersegment purchases from FMI of \$12,000 for 2005.

Depreciation expense included in 2005 consolidated cost of sales was \$2,862,000, a decrease of \$8,000 compared to 2004. For 2005, approximately \$1,641,000 of depreciation expense was associated with Multi-Mix® Microtechnology capital assets.

FMI sales include intersegment sales of \$136,000 and \$148,000 in 2005 and 2004, respectively. The decrease in gross margin percent for 2005 is due to higher material and overhead costs, including additional overtime, related to the new defense orders booked in 2004. During the second half of 2004, gross profit margin at FMI was negatively impacted by the weakness of the U.S. dollar against the Canadian dollar. The higher material and overtime costs for such defense orders are not expected to continue into future periods, but certain additional overhead costs may affect future results.

*Selling, general and administrative expenses.*

Selling, general and administrative expenses of \$9,540,000 for 2005 decreased by \$280,000 or 2.8%, and when expressed as a percentage of net sales, increased by 0.4 percentage points to 32.1% compared to 2004. The 2005 selling, general and administrative expenses decreased due to lower commissions related to the lower sales level in 2005.

*Research and development expenses.*

Research and development expenses for new products were \$1,932,000 for 2005, an increase of \$209,000 or 12.1% and when expressed as a percentage of net sales, an increase of 0.9 percentage points to 6.5% compared to 2004. Except for \$154,000 of expenses at FMI (a decrease of \$44,000 from such FMI expenses in 2004) substantially all of the research and development expenses were related to Multi-Mix® Microtechnology, Multi-Mix PICO® and power amplifier products. The Company anticipates that these expenses will increase in future periods in connection with further implementation of our strategic plan for Multi-Mix®.

*Operating income.*

Consolidated operating income for 2005 was \$742,000 compared to consolidated operating income of \$1,367,000 for 2004. Two expenses which reduced operating income for 2004 were \$150,000 for employee incentive compensation payments and \$75,000 for a profit-sharing contribution to the Company's 401(k) Plan, did not recur in 2005.

For 2005, the Company's operating income for its electronic components and subsystems segment was \$280,000 compared to operating income of \$1,178,000 for 2004. The lower operating income for the electronic components and subsystems segment was due to the segment's lower gross profit from lower sales, partially

offset by lower operating expenses compared to 2004. For 2005, operating income for the microwave micro-circuitry segment was \$462,000 compared to operating income of \$189,000 for 2004 due to the increase in gross margin from the higher sales level.

*Interest and other expense, net.*

Interest and other expense, net was \$218,000 for 2005 compared to interest and other expense, net of \$265,000 for 2004. Interest expense for 2005 and 2004 was principally incurred on borrowings under the revolving line of credit and term loans which the Company consummated during the fourth quarter of 2003. The reduction of interest and other expense was due to lower outstanding debt balances during 2005 as the Company repaid \$1,502,000 throughout 2004.

*Income taxes.*

The Company's effective tax rate for the years ended December 31, 2005 and January 1, 2005 reflects U.S. Federal Alternative Minimum Tax and State income taxes for the respective years. The 2005 current benefit reflects a \$30,000 domestic tax benefit related to tax planning on the 2004 returns. The current foreign tax benefit for the year ended December 31, 2005 represents refundable Canadian provincial tax credits for which FMI, as a technology company, has qualified. The 2004 current tax provision in the amount of \$122,000 was based on certain statutory limitations on the use of the Company's net operating loss carryforwards. Tax benefits were recorded in the amount of \$218,000 in 2004 primarily associated with FMI's research and development expenses incurred in Canada.

Internal Revenue Service Code Section 382 places a limitation on the utilization of net operating loss carryforwards when an ownership change, as defined in the tax law, occurs. Generally, an ownership change occurs when there is a greater than 50 percent change in ownership. If such change should occur, the actual utilization of net operating loss carryforwards, for tax purposes, would be limited annually to a percentage of the fair market value of the Company at the time of such change. The Company may become subject to these limitations depending on change in ownership.

*Net income.*

Net income for 2005 was \$761,000 compared to net income of \$1,198,000 for 2004. Net income per diluted share for 2005 was \$.24 compared to net income per diluted share of \$.38 per share for 2004.

**Quarterly Results**

The following table sets forth unaudited financial data for each of the Company's last eight fiscal quarters.

	<b>Fiscal Year Ended December 30, 2006</b>				<b>Fiscal Year Ended December 31, 2005</b>			
	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>
	(Dollars in thousands) (Unaudited)							
<b>Consolidated Statement of Operations Data:</b>								
Net sales	\$ 6,230	\$ 8,251	\$ 6,748	\$ 6,192	\$ 7,258	\$ 7,568	\$ 7,890	\$ 7,002
Gross profit	2,401	3,711	2,498	1,524	3,034	3,268	3,250	2,662
Operating income (loss)	(457)	550	(604)	(1,526)	182	416	291	(147)
Net income (loss)	(440)	529	(599)	(1,716)	84	332	228	117
Net income (loss) per share:								
Basic	(.14)	.17	(.19)	(.55)	.03	.11	.07	.04
Diluted	(.14)	.17	(.19)	(.55)	.03	.10	.07	.04

**LIQUIDITY AND CAPITAL RESOURCES**

The Company had liquid resources comprised of cash and cash equivalents totaling approximately \$6,000,000 at the end of 2006 compared to approximately \$4,100,000 at the end of 2005. The Company's working capital was approximately \$13,300,000 and its current ratio was 4.9 to 1 at the end of 2006 compared to \$9,800,000 and 3.2 to 1, respectively, at the end of 2005. At December 31, 2006 the Company had available borrowing capacity under its revolving line of credit of \$3,300,000.



The Company's liquidity needs for the next year plus its planned equipment purchases and other commitments are expected to be funded through cash resources and cash flows expected to be generated from operations, and supplemented, if necessary, by the Company's \$5,000,000 revolving credit facility, which expires October 18, 2008.

On March 14, 2007, the Company repurchased in a private transaction 238,700 shares of its Common Stock for the treasury at \$9.00 per share for an aggregate total of \$2,148,300 from a group of investors.

The Company's operating activities used operating cash flows \$396,000 during 2006 compared to positive cash flows of \$4,029,000 during 2005. The primary uses of operating cash flows for 2006 were the net loss of \$2,225,000 which was reduced by depreciation and amortization of \$2,592,000 and share-based compensation of \$189,000, increases in accounts receivable of \$515,000, inventory of \$145,000 and an aggregate decrease in accounts payable, customer deposits and accrued liabilities of \$586,000 offset by income tax refunds of \$324,000. The primary sources of operating cash flows for 2005 were the net income of \$761,000 which was reduced by depreciation and amortization of \$3,155,000; a decrease in accounts receivable of \$1,202,000 and an increase in customer deposits of \$630,000, offset by an increase in inventories of \$774,000, an increase in income taxes receivable of \$312,000, an aggregate decrease in accounts payable and accrued liabilities of \$627,000 and the reduction of income taxes payable of \$83,000.

The Company made net capital investments in property, plant and equipment of \$1,676,000 during 2006, compared to net capital investments made in property, plant and equipment of \$1,474,000 during 2005. These capital expenditures are related to new production and test equipment capabilities in connection with the introduction of new products and enhancements to existing products. The depreciated cost of capital equipment associated with Multi-Mix® Microtechnology was \$6,747,000 at the end of 2006, a decrease of \$699,000 compared to \$7,446,000 at the end of fiscal year 2005.

On October 18, 2006, the Company entered into a new financing agreement with North Fork Bank which consists of a two-year \$5,000,000 revolving line of credit, a five-year \$2,000,000 machinery and equipment term loan due October 1, 2011 ("Term Loan") and a ten-year \$3,000,000 real estate term loan due October 1, 2016 ("Mortgage Loan"). This financing agreement replaced the prior financing agreement with CIT. Completion of the new financing agreement resulted in additional cash loan proceeds of approximately \$2,900,000 plus the release of previously restricted cash of \$1,500,000. The revolving line of credit is subject to an availability limit under a borrowing base calculation (85% of eligible accounts receivable plus up to 50% of eligible raw materials inventory plus up to 25% of eligible electronic components, with an inventory advance sublimit not to exceed \$1,500,000, as defined in the financing agreement). The revolving line of credit expires October 18, 2008. At December 30, 2006, the Company had available borrowing capacity under its revolving line of credit of \$3,300,000. The revolving line of credit bears interest at the prime rate less 0.50% (currently 7.75%) or LIBOR plus 2.00%. The principal amount of the Term Loan is payable in 59 equal monthly installments of \$33,333 and one final payment of the remaining principal balance. The Term Loan bears interest at the prime rate less 0.50% (currently 7.75%) or LIBOR plus 2.25%. The principal amount of the Mortgage Loan is payable in 119 equal monthly installments of \$12,500 and one final payment of the remaining principal balance. The Mortgage Loan bears interest at the prime rate less 0.50% (currently 7.75%) or LIBOR plus 2.25%. At December 30, 2006, the Company, under the terms of its agreement with North Fork Bank, elected to convert \$1,875,000 of the Term Loan and \$2,950,000 of the Mortgage Loan from their prime rate base to LIBOR-based interest rate loans for one month at an interest rate of 7.60%, which expire January 16, 2007. The revolving line of credit, the Term Loan and the Mortgage Loan are secured by substantially all assets located within the United States and the pledge of 65% of the stock of the Company's subsidiaries located in Costa Rica and Canada. The provisions of the financing agreement require the Company to maintain certain financial covenants. The Company was in compliance with these covenants at December 30, 2006.

The financing agreement with CIT consisted of a \$5,000,000 revolving line of credit, that was temporarily reduced by \$250,000 until certain conditions were met; a \$1,500,000 machinery and equipment term loan ("Term Loan A") and a \$2,750,000 real estate term loan ("Term Loan B"). In

connection with this financing agreement, the Company was required to place, over the life of the loan, \$1,500,000 restricted cash collateral with CIT. As further discussed above, the financing agreement was terminated on October 18, 2006, the loans were repaid and the restricted cash was returned by CIT to the Company. The revolving line of credit, which expired October 18, 2006, was subject to an availability limit under a borrowing base calculation (85% of eligible accounts receivable as defined in the financing agreement plus 100% of the \$1,500,000 restricted cash). The revolving line of credit bore interest at the prime rate plus 0.50% (currently 8.75%). The principal amount of Term Loan A was payable in 60 equal monthly installments of \$25,000 and bore interest at the prime rate plus 1% (currently 9.25%). The principal amount of Term Loan B was payable in 84 equal monthly installments of \$32,738 and bore interest at the prime rate plus 1% (currently 9.25%). The revolving line of credit and the term loans were secured by substantially all of the Company's assets located within the United States and the pledge of 65% of the stock of the Company's subsidiaries located in Costa Rica and Canada.

FMI has a revolving credit agreement in place with The Bank of Nova Scotia for up to \$500,000 (Canadian) at the prime rate plus 3/4%. No borrowings were outstanding under this agreement at December 30, 2006.

FMI has a \$1,800,000 (Canadian) (approximately \$1,600,000 US) revolving lease line with the Bank of Nova Scotia, whereby the Company can obtain funding for previous production equipment purchases via a sale/leaseback transaction. As of December 30, 2006, \$350,000 had been utilized under this facility. Such leases are payable in monthly installments for up to five years and are secured by the related production equipment. Interest rates (typically prime rate plus one percent) are set at the closing of each respective sale/leaseback transaction. During the first quarter of 2006, FMI obtained \$160,000 in connection with the sale/leaseback of certain production equipment. The related equipment was originally purchased by the Company in 2005. During the first quarter of 2005, FMI obtained \$231,000 in connection with the sale/leaseback of certain production equipment. The related equipment was originally purchased by the Company in 2004.

Assets securing capital leases included in property, plant and equipment, net, have a depreciated cost of approximately \$703,000 at December 30, 2006 and \$678,000 at December 31, 2005.

The Company's contractual obligations as of December 30, 2006 are as follows:

<b>Contractual Obligations</b>	<b>Payment due by period (in thousands)</b>				
	<b>Total</b>	<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>More than 5 years</b>
Long-Term Debt Obligations	\$ 5,213	\$ 649	\$ 1,237	\$ 1,114	\$ 2,213
Operating Lease Obligations	1,945	572	962	411	-
Total	<u>\$ 7,158</u>	<u>\$ 1,221</u>	<u>\$ 2,199</u>	<u>\$ 1,525</u>	<u>\$ 2,213</u>

Depreciation and amortization expenses exceeded capital expenditures for new projects and production equipment during 2006 by approximately \$900,000, and the Company anticipates that depreciation and amortization expenses will exceed capital expenditures in fiscal year 2007 by approximately \$300,000. The Company intends to issue up to \$2,400,000 of purchase order commitments for capital equipment from various vendors. The Company anticipates that such equipment will be purchased and become operational during fiscal year 2007.

The functional currency for the Company's wholly-owned subsidiary FMI is the Canadian dollar. The change in accumulated other comprehensive income for 2006 and 2005 reflect the changes in the exchange rates between the Canadian dollar and the United States dollar for those respective periods. The functional currency for the Company's Costa Rica operations is the United States dollar.

## RELATED PARTY TRANSACTIONS

In May 1998, the Company sold 22,000 shares of Common Stock to Mason N. Carter, Chairman, President and Chief Executive Officer of the Company, at a price of \$11.60 per share, which approximated the average closing price of the Company's Common Stock during the first quarter of 1998. The Company lent Mr. Carter \$255,000 in connection with the purchase of these shares and combined that loan with a prior loan to Mr. Carter in the amount of \$105,000. The resulting total principal amount of \$360,000 was payable May 4, 2003 and bore interest at a variable interest rate based on the prime rate. This loan was further amended on July 29, 2002. Accrued interest of \$40,000 was added to the principal, bringing the new principal amount of the loan to \$400,000, the due date was extended to May 4, 2006, and interest (at the same rate as was previously applicable) was payable monthly. Mr. Carter pledged 33,000 shares of Common Stock as security for this loan, which was a full-recourse loan.

On August 31, 2000, in connection with an amendment of Mr. Carter's employment agreement, the Company loaned Mr. Carter an additional \$280,000. Interest on the loan varies and is based on the prime rate, payable in accordance with Mr. Carter's employment agreement. Each year the Company is required to forgive 20% of the amount due under this loan and the accrued interest thereon. During 2005, the Company forgave \$56,000 of principal and \$3,000 of accrued interest and paid a tax gross-up benefit of \$4,300. This loan was fully satisfied in 2005.

On March 29, 2006, the Company entered into an agreement with Mr. Carter to purchase 42,105 shares of the Company's common stock owned by Mr. Carter at a purchase price of \$9.50 per share (the closing price of the common stock on March 29, 2006) resulting in a total purchase price for the shares of \$399,998. As a condition to the Company's obligation to purchase the shares, concurrent with the Company's payment of the purchase price Mr. Carter paid to the Company \$400,000 (plus any accrued and unpaid interest) in full satisfaction of Mr. Carter's promissory note in favor of the Company dated July 29, 2002. This transaction was closed on April 24, 2006.

During fiscal years 2006, 2005 and 2004, respectively, the Company's General Counsel, Katten Muchin Rosenman LLP, was paid \$402,000, \$243,000 and \$288,000 for providing legal services to the Company. A director of the Company is Counsel to the firm of Katten Muchin Rosenman LLP but does not share in any fees paid by the Company to the law firm.

During fiscal years 2006, 2005 and 2004, the Company retained Career Consultants, Inc. and SK Associates to perform executive searches and to provide other services to the Company. The Company paid an aggregate of \$10,000, \$5,000 and \$8,000 to these companies during 2006, 2005 and 2004, respectively. A director of the Company is the Chairman and Chief Executive Officer of each of these companies.

During each of fiscal years 2006, 2005 and 2004, a director of the Company was paid \$36,000 for providing technology-related consulting services to the Company.

During fiscal years 2006, 2005 and 2004, respectively, DuPont Electronic Technologies ("DuPont"), a stockholder, was paid \$32,000, \$54,000 and \$84,000 for providing technological and marketing-related personnel and services on a cost-sharing basis to the Company under the Technology Agreement dated February 28, 2002. A director of the Company is an officer of DuPont, but does not share in any of these payments.

Each director who is not an employee of the Company receives a monthly director's fee of \$1,500, plus an additional \$500 for each meeting of the Board and of any Committees of the Board attended. In addition, the Chair of the Audit Committee receives an annual fee of \$2,500 for his services in such capacity. The directors are also reimbursed for reasonable travel expenses incurred in attending Board and Committee meetings. In addition, pursuant to the 2006 Stock Option Plan, each non-employee director is granted an option to purchase 2,500 shares of the Common Stock of the Company on the date of each Annual Meeting of Stockholders. Such options have a three-year vesting period. Each such grant has an exercise price equal to the fair market value on the date of such grant and will expire on the tenth anniversary of the date of the grant. On June 22, 2006, non-qualified stock options to purchase an aggregate of 17,500 shares were issued to seven directors at an exercise price of \$9.52.



per share. Also on June 22, 2006, pursuant to the 2006 Non–Employee Directors' Stock Plan, 9,000 shares of restricted stock were granted to six directors at a fair market value of \$9.52 per share. One third of such restricted stock vests on the anniversary of the grant date over a three–year period.

On December 13, 2004 Infineon Technologies AG ("Infineon"), at such time the beneficial owner of approximately 15% of the Company's common stock, sold 475,000 shares of the Company's common stock to four purchasers in a privately–negotiated transaction. Two purchasers in such transaction, K Holdings, LLC and Hampshire Investments, Limited, each of which is affiliated with Ludwig G. Kuttner, who was President and Chief Executive Officer of Hampshire Group, Limited ("Hampshire"), purchased 300,000 shares representing an aggregate of approximately 9.6% of the Company's common stock. Mr. Kuttner was elected to the Company's Board of Directors at its 2006 Annual Meeting of Stockholders. As a result of an ongoing investigation by Hampshire's audit committee of allegations of certain improprieties and possibly unlawful conduct involving Mr. Kuttner and other Hampshire executives, Mr. Kuttner's employment with Hampshire has been terminated. Mr. Kuttner has taken a leave of absence from his position as a director of Merrimac since the date of his election until the resolution of the investigation. During his leave of absence, Mr. Kuttner is not entitled to any compensation from the Company. Infineon also assigned to each purchaser certain registration rights to such shares under the existing registration rights agreements Infineon had with the Company. In connection with the transaction, the Company and Infineon terminated the Stock Purchase and Exclusivity Letter Agreement dated April 7, 2000, as amended, which provided that the Company would design, develop and produce exclusively for Infineon certain Multi–Mix® products that incorporate active RF power transistors for use in certain wireless base station applications, television transmitters and certain other applications that are intended for Bluetooth transceivers.

DuPont and the four purchasers above hold registration rights which currently give them the right to register an aggregate of 1,003,413 shares of Common Stock of the Company.

## **RECENT ACCOUNTING PRONOUNCEMENTS**

In November 2004, SFAS No. 151, "Inventory Costs (An amendment of ARB No. 43, Chapter 4)," was issued. SFAS No. 151 amends Accounting Research Bulletin ("ARB") No. 43, Chapter 4, to clarify that abnormal amounts of idle facility expense, freight, handling costs and wasted materials (spoilage) should be recognized as current–period charges. In addition, SFAS No. 151 requires that allocation of fixed production overhead to inventory be based on normal capacity of the production facilities. The Company adopted SFAS No. 151 on January 1, 2006. The adoption of SFAS No. 151 did not have a material impact on its financial position and results of operations.

On November 10, 2005, the FASB issued FASB Staff Position 123(R)–3 ("FSP 123R–3"), "Transition Election Related to Accounting for the Tax Effects of Share–based Payment Awards," that provides an elective alternative transition method of calculating the pool of excess tax benefits available to absorb tax deficiencies recognized subsequent to the adoption of SFAS 123R (the "APIC Pool") to the method otherwise required by paragraph 81 of SFAS 123R. The Company may take up to one year from the effective date of this FSP to evaluate its available alternatives and make its one–time election. The Company will use the regular method to calculate the APIC Pool. The regular method will not have an impact on the Company's results of operations or financial condition for the year ended December 30, 2006, due to the fact that the Company is currently using prior period net operating losses and has not realized any tax benefits under SFAS 123R.

In June 2006, the FASB issued FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes", ("FIN 48"). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109 "Accounting for Income Taxes". FIN 48 prescribes a recognition threshold and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006. The Company is currently evaluating the effect that the adoption of FIN 48 will have on its consolidated results of operations and financial position and has not yet reached final conclusions.

In September 2006, the SEC issued Staff Accounting Bulletin No. 108 ("SAB 108") to provide guidance on Quantifying Financial Statement Misstatements. SAB 108 addresses how the effects of prior-year uncorrected misstatements should be considered when quantifying misstatements in current-year financial statements. SAB 108 requires registrants to quantify misstatements using both the balance sheet and income statement approaches and to evaluate whether either approach results in quantifying an error that is material in light of relevant quantitative and qualitative factors. SAB 108 does not change the SEC staff's guidance in SAB 99 on evaluating the materiality of misstatements.

When the effect of initial adoption of SAB 108 is determined to be material, SAB 108 allows registrants to record that effect as a cumulative effect adjustment to beginning-of-year retained earnings. SAB 108 is effective for the first fiscal year ending after November 15, 2006. During 2006 the Company adopted the provisions of SAB 108 and recorded a cumulative credit adjustment of \$384,000 to beginning retained earnings related to inventory reserves and year-end audit, tax and annual report costs.

In September 2006, the FASB issued Statement of Financial Accounting Standards No. 157 "Fair Value Measurements". SFAS No. 157 establishes a single authoritative definition of fair value, sets out a framework for measuring fair value and requires additional disclosures about fair-value measurements. SFAS No. 157 applies only to fair-value measurements that are already required or permitted by other accounting standards and is expected to increase the consistency of those measurements. It will also affect current practices by nullifying Emerging Issues Task Force guidance that prohibited recognition of gains or losses at the inception of derivative transactions whose fair value is estimated by applying a model and by eliminating the use of "blockage" factors by brokers, dealers and investment companies that have been applying AICPA Guides. SFAS No. 157 is effective for fiscal years beginning after November 15, 2007. The Company is currently evaluating the impact that SFAS No. 157 will have on its financial position and results of operations.

In February 2007, the FASB issued Statement of Financial Accounting Standards No. 159 "The Fair Value Option for Financial Assets and Financial Liabilities". SFAS No. 159 permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in net income. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The Company is currently evaluating the impact that SFAS No. 159 will have on its financial position and results of operations.

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

### *Interest Rate Risk*

Interest on the Company's borrowings under its financing agreements with North Fork Bank and previously CIT fluctuates with the prime rate and LIBOR. A variation of 1% in the prime rate and LIBOR during the year ended December 30, 2006 would have affected the Company's earnings by approximately \$24,000.

### *Foreign Currency Risk*

The Company is subject to currency exchange rate risk for the assets, liabilities and cash flows of its subsidiary that operates in Canada. The Company does not utilize financial instruments such as forward exchange contracts or other derivatives to limit its exposure to fluctuations in the value of foreign currencies. There are costs associated with our operations in Canada which require payments in the local currency and payments received from customers for goods sold in Canada are typically in the local currency. We partially manage our foreign currency risk related to those payments by maintaining operating accounts in Canada.

A significant portion of the Company's sales and receivables (including those of its Canadian subsidiary) are denominated in U.S. dollars. A strengthening of the U.S. dollar could make the Company's products less competitive in foreign markets. Alternatively, if the U.S. dollar were to weaken, it would make the Company's products more competitive in foreign markets, but could result in higher costs from its Canadian operations.

The functional currency for the Company's Costa Rica operations is the United States dollar.



## ITEM 8. FINANCIAL STATEMENTS

### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders of  
Merrimac Industries, Inc.

We have audited the accompanying consolidated balance sheets of Merrimac Industries, Inc. as of December 30, 2006 and December 31, 2005, and the related consolidated statements of operations and comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 30, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits 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. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also 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, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Merrimac Industries, Inc. as of December 30, 2006 and December 31, 2005, and the results of its operations and its cash flows for each of the three years in the period ended December 30, 2006 in conformity with accounting principles generally accepted in the United States of America.

As discussed in Notes 1 and 16 to the consolidated financial statements, the Company recorded a cumulative effect adjustment as of January 1, 2006, in connection with the adoption of SEC Staff Accounting Bulletin No. 108, "Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements". Also, as discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for share-based compensation effective January 1, 2006 in connection with the adoption of Financial Accounting Standards Board Statement No. 123(R), "Shared-Based Payments".

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. Schedule II is presented for purposes of additional analysis and is not a required part of the basic financial statements. This schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ GRANT THORNTON LLP

Edison, New Jersey  
April 13, 2007

**CONSOLIDATED STATEMENTS OF OPERATIONS AND  
COMPREHENSIVE INCOME (LOSS)**

**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

	<u>2006</u>	<u>2005</u>	<u>2004</u>
<b>OPERATIONS</b>			
Net sales	\$ 27,421,215	\$ 29,719,158	\$ 30,949,487
Costs and expenses:			
Cost of sales	17,286,825	17,504,718	18,039,575
Selling, general and administrative	9,864,576	9,540,101	9,819,800
Research and development	2,021,436	1,932,199	1,722,741
Restructuring charge	286,000	-	-
	<u>29,458,837</u>	<u>28,977,018</u>	<u>29,582,516</u>
Operating income (loss)	(2,037,622)	742,140	1,366,971
Interest and other expense, net	(256,839)	(218,027)	(264,482)
Loss on disposition of assets	-	(42,829)	-
Income (loss) before income taxes	(2,294,461)	481,284	1,102,489
Benefit for income taxes	(69,000)	(280,000)	(96,000)
Net income (loss)	<u>\$ (2,225,461)</u>	<u>\$ 761,284</u>	<u>\$ 1,198,489</u>
Net income (loss) per common share – basic	\$ (.71)	\$ .24	\$ .38
Net income (loss) per common share – diluted	<u>\$ (.71)</u>	<u>\$ .24</u>	<u>\$ .38</u>
Weighted average number of shares outstanding – basic	3,142,154	3,142,425	3,127,070
Weighted average number of shares outstanding – diluted	<u>3,142,154</u>	<u>3,176,521</u>	<u>3,153,854</u>
<b>COMPREHENSIVE INCOME (LOSS)</b>			
Net income (loss)	\$ (2,225,461)	\$ 761,284	\$ 1,198,489
Comprehensive income:			
Foreign currency translation adjustment	21,622	208,534	435,724
Comprehensive income (loss)	<u>\$ (2,203,839)</u>	<u>\$ 969,818</u>	<u>\$ 1,634,213</u>

See accompanying notes.

**CONSOLIDATED BALANCE SHEETS**  
**December 30, 2006 and December 31, 2005**

<b>Assets</b>	<b>2006</b>	<b>2005</b>
<b>Current assets:</b>		
Cash and cash equivalents	\$ 5,961,537	\$ 4,081,330
Accounts receivable, net of allowance of \$50,000 in 2006 and 2005	5,851,617	5,309,786
Income tax refunds receivable	99,000	418,420
Inventories, net (note 16)	3,917,473	3,709,567
Other current assets	881,699	692,832
Deferred tax assets	10,000	140,000
<b>Total current assets</b>	<b>16,721,326</b>	<b>14,351,935</b>
Property, plant and equipment	40,084,105	38,708,486
Less accumulated depreciation and amortization	<u>27,098,740</u>	<u>24,735,905</u>
Property, plant and equipment, net	12,985,365	13,972,581
Restricted cash	-	1,500,000
Other assets	491,596	614,553
Deferred tax assets	552,000	482,000
Goodwill	3,503,219	3,501,193
<b>Total Assets</b>	<b>\$ 34,253,506</b>	<b>\$ 34,422,262</b>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current liabilities:</b>		
Current portion of long-term debt	\$ 648,524	\$ 907,895
Accounts payable	994,221	1,161,199
Accrued liabilities (note 16)	1,420,322	1,545,407
Customer deposits	203,783	863,582
Deferred income taxes	100,000	20,000
<b>Total current liabilities</b>	<b>3,366,850</b>	<b>4,498,083</b>
Long-term debt, net of current portion	4,564,040	2,071,299
Deferred compensation	-	19,692
Deferred liabilities	37,839	2,720
Deferred tax liabilities	-	140,000
<b>Total liabilities</b>	<b>7,968,729</b>	<b>6,731,794</b>
<b>Commitments and contingencies</b>		
<b>Stockholders' equity:</b>		
Preferred stock, par value \$.01 per share:		
Authorized: 1,000,000 shares		
No shares issued		
Common stock, par value \$.01 per share:		
20,000,000 shares authorized; 3,265,638 and 3,228,715 shares issued;		
and 3,141,433 and 3,146,615 shares outstanding, respectively	32,656	32,287
Additional paid-in capital	19,237,130	18,823,353
Retained earnings	6,599,817	8,441,278
Accumulated other comprehensive income	1,389,038	1,367,416
	<u>27,258,641</u>	<u>28,664,334</u>
Treasury stock, at cost - 124,205 shares at December 30, 2006 and 82,100 shares at December 31, 2005	(973,864)	(573,866)
Loan to officer-stockholder	-	(400,000)
<b>Total stockholders' equity</b>	<b>26,284,777</b>	<b>27,690,468</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 34,253,506</b>	<b>\$ 34,422,262</b>

See accompanying notes.

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated			Loan to Officer- Stockholder	Total
	Shares	Amount			Other Comprehensive Income	Treasury Shares	Stock Amount		
Balance, January 3, 2004	3,202,991	\$ 32,030	\$ 6,888,114	\$ 6,481,505	\$ (1,211,988)	82,100	\$ (573,866)	\$ (112,397)	\$ 24,837,741
Net income				1,198,489					1,198,489
Exercise of stock options	9,100	91	53,859						53,950
Stock Purchase Plan sales	2,979	30	15,937						15,967
Forgiveness of loan to officer-stockholder								56,000	56,000
Foreign currency translation					435,724				435,724
Balance, January 1, 2005	3,215,070	32,151	18,756,710	7,679,994	1,158,882	82,100	(573,866)	(456,000)	26,597,871
Net income				761,284					761,284
Exercise of stock options	5,300	53	21,997						22,050
Stock Purchase Plan sales	8,345	83	44,646						44,729
Forgiveness of loan to officer-stockholder								56,000	56,000
Foreign currency translation					208,534				208,534
Balance, December 31, 2005	3,228,715	32,287	18,823,353	8,441,278	1,367,416	82,100	(573,866)	(400,000)	27,690,468
Cumulative effect at January 1, 2006, of change in method of quantifying errors (note 16)				384,000					384,000
Net loss				(2,225,461)					(2,225,461)
Share-based compensation			188,914						188,914
Exercise of stock options	4,200	42	28,758						28,800
Stock Purchase Plan sales	32,723	327	196,105						196,432
Repayment of loan to officer-stockholder						42,105	(399,998)	400,000	2
Foreign currency translation					21,622				21,622
Balance, December 30, 2006	3,265,638	\$ 32,656	\$ 19,237,130	\$ 6,599,817	\$ 1,389,038	124,205	\$ (973,864)	\$ -	\$ 26,284,777

(A) Tax benefits associated with the exercise of employee stock options are recorded to additional paid-in capital when such benefits are realized.

See accompanying notes.

**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

	<u>2006</u>	<u>2005</u>	<u>2004</u>
<b>Cash flows from operating activities:</b>			
Net income (loss)	\$ (2,225,461)	\$ 761,284	\$ 1,198,489
Adjustments to reconcile net income (loss) to net cash (used in) provided by operating activities:			
Depreciation and amortization	2,591,920	3,155,024	3,209,631
Amortization of deferred financing costs	210,632	49,920	49,922
Share-based compensation	188,914	-	-
Loss (gain) on disposition of assets	-	42,829	-
Deferred and other compensation	3,515	64,754	69,305
Deferred income taxes (benefit)	-	5,000	(218,000)
Changes in operating assets and liabilities:			
Accounts receivable	(514,648)	1,202,330	(117,940)
Income tax refunds receivable	324,112	(312,074)	44,209
Inventories	(145,544)	(774,498)	267,991
Other current assets	(188,220)	(110,494)	(96,028)
Deferred tax assets	-	13,000	(28,000)
Other assets	(65,963)	82,241	57,851
Accounts payable	(110,982)	(234,768)	276,182
Accrued liabilities	184,013	(392,360)	202,561
Customer deposits	(659,799)	630,176	(155,805)
Income taxes payable	-	(82,849)	84,819
Deferred compensation	(23,207)	(39,747)	(43,428)
Deferred liabilities	35,119	(31,254)	(14,040)
Net cash (used in) provided by operating activities	<u>(395,599)</u>	<u>4,028,514</u>	<u>4,787,719</u>
<b>Cash flows from investing activities:</b>			
Purchases of capital assets	(1,675,961)	(1,774,233)	(1,714,951)
Proceeds from disposition of capital assets	-	300,000	-
Net cash used in investing activities	<u>(1,675,961)</u>	<u>(1,474,233)</u>	<u>(1,714,951)</u>
<b>Cash flows from financing activities:</b>			
Borrowings under mortgage loan	3,000,000	-	-
Borrowings under term loan	2,000,000	-	-
Borrowings under revolving credit facility	-	161,017	-
Borrowings from revolving lease line	159,988	230,753	-
Restricted cash returned	1,500,000	-	-
Repayment of borrowings	(2,932,835)	(1,117,745)	(1,502,231)
Proceeds from the exercise of stock options	28,800	22,050	53,950
Proceeds from Stock Purchase Plan sales	196,432	44,729	15,967
Net cash provided by (used in) financing activities	<u>3,952,385</u>	<u>(659,196)</u>	<u>(1,432,314)</u>
Effect of exchange rate changes	(618)	19,764	73,394
Net increase (decrease) in cash and cash equivalents	1,880,207	1,914,849	1,713,848
Cash and cash equivalents at beginning of year	4,081,330	2,166,481	452,633
Cash and cash equivalents at end of year	<u>\$ 5,961,537</u>	<u>\$ 4,081,330</u>	<u>\$ 2,166,481</u>
<b>Supplemental disclosures of cash flow information:</b>			
Cash paid during the year for:			
Income taxes	\$ -	\$ 210,000	\$ 37,500
Loan interest	<u>\$ 305,000</u>	<u>\$ 288,000</u>	<u>\$ 279,000</u>
Non-cash activities:			
Unpaid purchases of capital assets	\$ -	\$ 77,000	\$ -
Repurchase of common stock for treasury	\$ (399,998)	\$ -	\$ -
Loan to officer-stockholder repaid	<u>\$ 400,000</u>	<u>\$ -</u>	<u>\$ -</u>

See accompanying notes.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**1. Nature of business and summary of significant accounting policies**

Nature of business: Merrimac Industries, Inc. (the "Company") is involved in the design, manufacture and sale of electronic component devices offering extremely broad frequency coverage and high performance characteristics, and microstrip, bonded stripline and thick metal-backed Teflon® (PTFE) and mixed dielectric multilayer circuits for communications, defense and aerospace applications.

The Company's operations are conducted primarily through two business segments:

- (1) electronic components and subsystems and
- (2) microwave micro-circuitry.

Principles of consolidation: The financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany accounts have been eliminated in consolidation.

Cash and cash equivalents: The Company considers all highly liquid securities with an original maturity of less than three months to be cash equivalents. The Company maintains cash deposits with banks that at times exceed applicable insurance limits. The Company reduces its exposure to credit risk by maintaining such deposits with high quality financial institutions. The Company has not experienced any losses in such accounts.

Use of estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Contract revenues: The Company recognizes revenue in accordance with the provisions of Staff Accounting Bulletin No. 104. Contract revenue and related costs on fixed-price and cost-reimbursement contracts that require customization of products to customer specifications are recorded when title transfers to the customer, which is generally on the date of shipment. Prior to shipment, manufacturing costs incurred on such contracts are recorded as work-in-process inventory. Anticipated losses on contracts are charged to operations when identified. Revenue related to non-recurring engineering charges is generally recognized upon shipment of the related initial units produced or based upon contractually established stages of completion.

The cost rates utilized for cost-reimbursement contracts are subject to review by third parties and can be revised, which can result in additions to or reductions from revenue. Revisions which result in reductions to revenue are recognized in the period that the rates are reviewed and finalized; additions to revenue are recognized in the period that the rates are reviewed, finalized, accepted by the customer, and collectability from the customer is assured. The Company submits financial information regarding the cost rates on cost-reimbursement contracts for each fiscal year in which the Company performed work on cost-reimbursement contracts. The Company does not record any estimates on a regular basis for potential revenue adjustments, as there currently is no reasonable basis on which to estimate such adjustments given the Company's very limited experience with these contracts. During 2004, the Company recognized a revenue reduction of \$12,000 related to a cost-reimbursement contract. The Company recognized revenue of \$715,000 and \$106,000 related to cost-reimbursement contracts in 2006 and 2005, respectively.

Warranties: The Company's products sold under contracts have warranty obligations. Estimated warranty costs for each contract are determined based on the contract terms and technology specific issues. The Company accrues estimated warranty costs at the time of sale and any additional amounts are recorded when such costs are probable and can be reasonably estimated. Warranty expense was approximately \$345,000, \$320,000 and \$167,000 for 2006, 2005 and 2004, respectively. The warranty reserve at December 30, 2006 and December 31, 2005 was \$256,000 and \$168,000, respectively.



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**1. Nature of business and summary of significant accounting policies (continued)**

Accounts receivable: The Company's accounts receivable are primarily from companies in the defense, satellite and telecommunications industries, with 30 day payment terms. Credit is extended based on evaluation of customer's financial condition. Accounts receivable are stated in the financial statements net of an allowance for doubtful accounts. Accounts outstanding longer than the payment terms are considered past due. The Company determines its allowance by considering a number of factors, including the length of time trade accounts receivable are past due, the Company's previous loss history, the customer's current ability to pay its obligations to the Company, and the condition of the general economy and the industry as a whole. The Company writes-off accounts receivable when they become uncollectible.

Fair value of financial instruments: The carrying amounts of financial instruments, including cash and cash equivalents, accounts receivable and accounts payable approximated fair value as of December 30, 2006 and December 31, 2005 because of the relative short maturity of these instruments.

Inventories: Inventories are stated at the lower of cost or market, using the average cost method. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories.

Provision is made for potential losses on slow moving and obsolete inventories when identified.

Foreign currency translation: The functional currency of the Company's Canadian subsidiary, Filtran Microcircuits Inc. ("FMI") is the Canadian dollar. FMI's assets and liabilities are translated into U.S. dollars using exchange rates in effect at the balance sheet date and their operations are translated using average exchange rates prevailing during the year. The resulting translation adjustments are reported as a component of accumulated other comprehensive income. Realized foreign exchange transaction gains and losses, which are not material, are included in the consolidated statements of operations.

Comprehensive income: Comprehensive income is defined as the change in equity of a company during a period from transactions and other events and circumstances from non-owner sources. Accumulated other comprehensive income at December 30, 2006 and December 31, 2005 was attributable solely to the effects of foreign currency translation.

Property, plant and equipment: Property, plant and equipment are recorded at cost. Depreciation and amortization is computed for financial purposes on the straight-line method, while accelerated methods are used, where applicable, for tax purposes. The costs of additions and improvements are capitalized and expenditures for repairs and maintenance are expensed as incurred. The costs and accumulated depreciation applicable to assets retired or otherwise disposed of are removed from the asset accounts and any gain or loss is included in the consolidated statements of operations. The following estimated useful lives are used for financial income statement purposes:

Land improvements	10 years
Building	25 years
Machinery and equipment	3 – 10 years
Office equipment, furniture and fixtures	5 – 10 years

Assets under construction are not depreciated until the assets are placed into service. Fully depreciated assets included in property, plant and equipment at December 30, 2006 and December 31, 2005 amounted to \$16,376,000 and \$15,219,000, respectively.

The Company leases various property, plant and equipment. Leased property is accounted for under Financial Accounting Standard No. 13 "Accounting for Leases" ("SFAS 13"). Accordingly, leased property that

meets certain criteria are capitalized and the present value of the related lease

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**1. Nature of business and summary of significant accounting policies (continued)**

payments are recorded as a liability. All other leases are accounted for as operating leases and the related payments are expensed ratably over the rental period. Amortization of assets under capital leases is computed utilizing the straight-line method over the shorter of the remaining lease term or the estimated useful life. Company leases that include escalating lease payments are straight-lined over the non-cancelable base lease period in accordance with SFAS 13.

**Long-lived assets:** The Company accounts for long-lived assets under SFAS 144, "Accounting for the impairment or disposal of long-lived assets". Management assesses the recoverability of its long-lived assets, which consist primarily of fixed assets and intangible assets with finite useful lives, whenever events or changes in circumstance indicate that the carrying value may not be recoverable. The following factors, if present, may trigger an impairment review: (i) significant underperformance relative to expected historical or projected future operating results; (ii) significant negative industry or economic trends; (iii) significant decline in the Company's stock price for a sustained period; and (iv) a change in the Company's market capitalization relative to net book value. If the recoverability of these assets is unlikely because of the existence of one or more of the above-mentioned factors, an impairment analysis is performed using a projected discounted cash flow method. Management must make assumptions regarding estimated future cash flows and other factors to determine the fair value of these respective assets. If these estimates or related assumptions change in the future, the Company may be required to record an impairment charge. Impairment charges would be included with costs and expenses in the Company's statements of operations, and would result in reduced carrying amounts of the related assets on the Company's balance sheets.

**Goodwill:** Goodwill primarily includes the excess purchase price paid over the fair value of net assets acquired. Effective December 30, 2001, the Company adopted Statement of Financial Accounting Standards ("SFAS"), No. 142, "Goodwill and Other Intangible Assets". Under SFAS 142, the Company ceased amortization of goodwill and tests its goodwill on an annual basis using a two-step fair value based test.

The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying amount of the reporting unit exceeds its fair value, the second step of the goodwill impairment test must be performed to measure the amount of the impairment loss, if any. If impairment is determined, the Company will recognize additional charges to operating expenses in the period in which they are identified, which would result in a reduction of operating income and a reduction in the amount of goodwill.

As shown in footnote 9 of the consolidated financial statements, the sales and operating income of the Company's microwave micro-circuitry segment, conducted through its Filtran Microcircuits, Inc. subsidiary, declined during 2006. The segment's backlog decreased approximately \$1,500,000 since the end of fiscal year 2004 and \$200,000 since the end of fiscal year 2005. The principal reason for the reduction in sales was due to declines in the segment's defense orders that had been expected to renew in 2006. Operating income declined due to the decreased sales, a higher cost structure and reductions in production yields during 2006.

In response to the decline in FMI's results, the Company instituted management changes at Filtran during the fourth quarter of 2006. The Company has begun manufacturing certain Filtran products and is currently evaluating plans to move the manufacturing of other Filtran products to its Costa Rica facility to utilize the benefits of the more efficient production equipment and the lower direct labor costs at that facility. If the performance of FMI does not improve after making the changes listed above, the Company may be required to take to record an impairment charge to its goodwill.

**Advertising:** The Company expenses the cost of advertising and promotion as incurred. Advertising costs charged to operations were \$75,000 in 2006, \$110,000 in 2005 and \$123,000 in 2004.



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**1. Nature of business and summary of significant accounting policies (continued)**

**Income taxes:** The Company uses the liability method to account for income taxes. Under this method, deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax bases of assets and liabilities, and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Tax benefits associated with the exercise of stock options are recorded to additional paid-in capital in the year the tax benefits are realized.

**Savings and Investment Plan:** The Company's Savings and Investment Plan is a 401(k) plan (the "Plan") that provides eligible employees with the option to defer and invest up to 25% of their compensation, with 50% of the first 6% of such savings matched by the Company. In May 2003, the Company suspended its matching contributions to the Plan, and, accordingly, the Company made no contributions to the Plan in 2006, 2005 and 2004. The Board of Directors may also authorize a discretionary amount to be contributed to the Plan and allocated to eligible employees annually. A discretionary contribution amount of \$75,000 was authorized for 2004. No discretionary contribution amounts were authorized for 2006 and 2005.

**Share-based compensation:** On January 1, 2006, the start of the first quarter of fiscal 2006, the Company adopted the provisions of Statement of Financial Accounting Standards No. 123 (revised 2004), "Share-Based Payment" ("SFAS No. 123R") which requires that the costs resulting from all share-based payment transactions be recognized in the financial statements at their fair values. The Company adopted SFAS 123R using the modified prospective application method under which the provisions of SFAS 123R apply to new awards and to awards modified, repurchased, or cancelled after the adoption date. Additionally, compensation cost for the portion of the awards for which the requisite service has not been rendered that are outstanding as of the adoption date is recognized in the Consolidated Statement of Operations over the remaining service period after the adoption date based on the award's original estimate of fair value. Results for prior periods have not been restated.

As a result of the adoption of SFAS No. 123R, the Company's financial results were lower than under our previous accounting method for share-based compensation expense by the following amounts:

	<u>2006</u>
Operating income (loss)	\$ 189,000
Income (loss) before income taxes	\$ 189,000
Net income (loss)	\$ 189,000
Basic and diluted net income (loss) per share	\$ .06

Because of the Company's net operating loss carryforwards, no tax benefits resulting from the exercise of stock options have been recorded, thus there was no effect on cash flows from operating or financing activities.

For the fiscal year ended December 30, 2006, share-based compensation expense related to the 2001 Employee Stock Purchase Plan and the various stock option plans was allocated as follows:

	<u>2006</u>
Cost of sales	\$ 31,000
Selling, general and administrative	\$ 158,000
Total share-based compensation	<u>\$ 189,000</u>



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**1. Nature of business and summary of significant accounting policies (continued)**

Prior to adopting SFAS No. 123R on January 1, 2006, the Company's share-based compensation expense was accounted for under the recognition and measurement principles of APB Opinion No. 25 "Accounting for Stock-Based Compensation" and related interpretations. For 2005 and 2004 no share-based compensation expense is reflected in net income, as all options granted under the Company's stock option plans had an exercise price equal to the underlying common stock price on the date of the grant. The following table illustrates the effect on net income (loss) and net income (loss) per common share as if the Company had applied the fair value recognition provisions for share-based employee compensation of SFAS 123R:

	<u>2005</u>	<u>2004</u>
Net income (loss) – as reported	\$ 761,284	\$ 1,198,489
Plus: Stock-based compensation expense included in reported net income (loss), net of tax	–	–
Less: Stock-based compensation expense determined using the fair value method, net of tax	<u>(147,000)</u>	<u>(167,000)</u>
Net income (loss) – pro forma	<u>\$ 614,284</u>	<u>\$ 1,031,489</u>
Basic earnings (loss) per share:		
As reported	\$ .24	\$ .38
Pro forma	\$ .20	\$ .33
Diluted earnings (loss) per share:		
As reported	\$ .24	\$ .38
Pro forma	\$ .19	\$ .33

The fair value of each of the options and purchase plan subscription rights granted in 2006, 2005, and 2004 was estimated on the date of grant using the Black-Scholes option valuation model.

The following weighted average assumptions were utilized:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
Expected option life (years)	2.9	2.4	2.5
Expected volatility	29.25%	38.00%	45.00%
Risk-free interest rate	5.12%	4.00%	2.00%
Expected dividend yield	0.00%	0.00%	0.00%

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the Company's employee stock options and subscription rights have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options and subscription rights.

**Research and development:** Research and development expenses include materials, salaries and related expenses of certain engineering personnel, and outside services associated with product development. Research and development expenditures of approximately \$2,021,000 in 2006, \$1,932,000 in 2005 and \$1,723,000 in 2004 were expensed as incurred.

**Deferred financing costs:** During 2006, the Company capitalized \$230,000 of deferred financing costs related to its new financing agreement with North Fork Bank and is amortizing such amount



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**1. Nature of business and summary of significant accounting policies (continued)**

over the life of the related debt (eight years). In 2006 the Company charged off approximately \$167,000 of unamortized deferred debt costs to interest expense related to its prior financing agreement.

Net income (loss) per share: Basic net income (loss) per share is computed by dividing income (loss) available to common shareholders by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing income (loss) available to common shareholders by the weighted-average number of common shares outstanding during the period increased to include the number of additional common shares that would have been outstanding if the dilutive potential common shares had been issued. The dilutive effect of the outstanding options would be reflected in diluted net income (loss) per share by application of the treasury stock method.

Accounting period: The Company's fiscal year is the 52-53 week period ending on the Saturday closest to December 31. The Company has quarterly dates that correspond with the Saturday closest to the last day of each calendar quarter and each quarter consists of 13 weeks in a 52-week year. Periodically, the additional week to make a 53-week year (fiscal year 2003 was the latest and fiscal year 2008 will be the next) is added to the fourth quarter, making such quarter consist of 14 weeks.

Recent Accounting Pronouncements: In November 2004, SFAS No. 151, "Inventory Costs (An amendment of ARB No. 43, Chapter 4)," was issued. SFAS No. 151 amends Accounting Research Bulletin ("ARB") No. 43, Chapter 4, to clarify that abnormal amounts of idle facility expense, freight, handling costs and wasted materials (spoilage) should be recognized as current-period charges. In addition, SFAS No. 151 requires that allocation of fixed production overhead to inventory be based on normal capacity of the production facilities. The Company adopted SFAS No. 151 on January 1, 2006. The adoption of SFAS No. 151 did not have a material impact on its financial position and results of operations.

On November 10, 2005, the FASB issued FASB Staff Position 123(R)-3 ("FSP 123R-3"), "Transition Election Related to Accounting for the Tax Effects of Share-based Payment Awards," that provides an elective alternative transition method of calculating the pool of excess tax benefits available to absorb tax deficiencies recognized subsequent to the adoption of SFAS 123R (the "APIC Pool") to the method otherwise required by paragraph 81 of SFAS 123R. The Company may take up to one year from the effective date of this FSP to evaluate its available alternatives and make its one-time election. The Company will use the regular method to calculate the APIC Pool. The regular method will not have an impact on the Company's results of operations or financial condition for the year ended December 30, 2006, due to the fact that the Company is currently using prior period net operating losses and has not realized any tax benefits under SFAS 123R.

In June 2006, the FASB issued FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes", ("FIN 48"). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109 "Accounting for Income Taxes". FIN 48 prescribes a recognition threshold and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006. The Company is currently evaluating the effect that the adoption of FIN 48 will have on its consolidated results of operations and financial position and has not yet reached final conclusions.

In September 2006, the Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin No. 108 ("SAB 108") to provide guidance on Quantifying Financial Statement Misstatements. SAB 108 addresses how the effects of prior-year uncorrected misstatements should be considered when quantifying misstatements in current-year financial statements. SAB 108 requires registrants to

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**1. Nature of business and summary of significant accounting policies (continued)**

quantify misstatements using both the balance sheet and income statement approaches and to evaluate whether either approach results in quantifying an error that is material in light of relevant quantitative and qualitative factors. SAB 108 does not change the SEC staff's guidance in SAB 99 on evaluating the materiality of misstatements.

When the effect of initial adoption of SAB 108 is determined to be material, SAB 108 allows registrants to record that effect as a cumulative effect adjustment to beginning-of-year retained earnings. SAB 108 is effective for the first fiscal year ending after November 15, 2006. During 2006 the Company adopted the provisions of SAB 108 and recorded a cumulative credit adjustment of \$384,000 to beginning retained earnings related to inventory reserves and year-end audit, tax and annual report costs (see note 16).

In September 2006, the FASB issued Statement of Financial Accounting Standards No. 157 "Fair Value Measurements". SFAS No. 157 establishes a single authoritative definition of fair value, sets out a framework for measuring fair value and requires additional disclosures about fair-value measurements. SFAS No. 157 applies only to fair-value measurements that are already required or permitted by other accounting standards and is expected to increase the consistency of those measurements. It will also affect current practices by nullifying Emerging Issues Task Force guidance that prohibited recognition of gains or losses at the inception of derivative transactions whose fair value is estimated by applying a model and by eliminating the use of "blockage" factors by brokers, dealers and investment companies that have been applying AICPA Guides. SFAS No. 157 is effective for fiscal years beginning after November 15, 2007. The Company is currently evaluating the impact that SFAS No. 157 will have on its financial position and results of operations.

In February 2007, the FASB issued Statement of Financial Accounting Standards No. 159 "The Fair Value Option for Financial Assets and Financial Liabilities". SFAS No. 159 permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in net income. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The Company is currently evaluating the impact that SFAS No. 159 will have on its financial position and results of operations.

**2. Inventories**

Inventories consist of the following:

	<u>December 30,</u> <u>2006</u>	<u>December 31,</u> <u>2005</u>
Finished goods	\$ 345,519	\$ 365,346
Work in process	1,634,475	1,675,747
Raw materials and purchased parts	<u>1,937,479</u>	<u>1,668,474</u>
	<u>\$ 3,917,473</u>	<u>\$ 3,709,567</u>

Total inventories are net of valuation allowances for obsolescence and cost overruns of \$1,174,000 at December 30, 2006 and \$1,084,000 at December 31, 2005, of which \$85,000 and \$50,000, respectively, represented cost overruns. The Company disposed of \$38,000 and \$37,000 of obsolete inventories in 2006 and 2005, respectively.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

### 3. Property, plant and equipment

Property, plant and equipment, which is carried at cost, consists of the following:

	December 30, 2006	December 31, 2005
Land and land improvements	\$ 671,486	\$ 671,474
Building and leasehold improvements	6,720,643	6,622,162
Machinery and equipment	24,663,510	23,614,299
Office equipment, furniture and fixtures	8,028,466	7,800,551
	<u>\$ 40,084,105</u>	<u>\$ 38,708,486</u>

Depreciation and amortization expense was approximately \$2,592,000, \$3,155,000 and \$3,210,000 for 2006, 2005 and 2004, respectively.

### 4. Goodwill

The changes in the carrying amount of goodwill for the fiscal years ended December 30, 2006 and December 31, 2005 are as follows:

	2006	2005
Original balance	\$ 3,179,341	\$ 3,179,341
Accumulated amortization through 2001	(434,603)	(434,603)
Accumulated foreign currency adjustment through prior year	756,455	633,175
Foreign currency adjustment, current year	2,026	123,280
Balance, end of year	<u>\$ 3,503,219</u>	<u>\$ 3,501,193</u>

### 5. Current and long-term debt

The Company was obligated under the following debt instruments at December 30, 2006 and December 31, 2005:

	2006	2005
<b>North Fork Bank(A):</b>		
Revolving line of credit, 2.00% above LIBOR or 0.50% below prime	\$ —	\$ —
Term loan, due October 1, 2011, 2.25% above LIBOR or 0.50% below prime	1,900,000	—
Mortgage loan, due October 1, 2016, 2.25% above LIBOR or 0.50% below prime	2,962,500	—
<b>The CIT Group/Business Credit, Inc.(B):</b>		
Revolving line of credit, interest 0.50% above prime	\$ —	\$ —
Term loan A, due October 8, 2008, variable interest above LIBOR or prime	—	725,000
Term loan B, due October 8, 2010, variable interest above LIBOR or prime	—	1,866,074



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**5. Current and long-term debt (continued)**

	<u>2006</u>	<u>2005</u>
The Bank of Nova Scotia(C):		
Capital leases, interest 7.30%, due April 2006	–	74,025
Capital leases, interest 5.85%, due May 2006	–	36,725
Capital leases, interest 7.90%, due June 2006	–	67,469
Capital leases, interest 7.35%, due March 2007	15,389	–
Capital leases, interest 7.50%, due May 2007	20,590	–
Capital leases, interest 5.80%, due January 2010	173,170	209,901
Capital leases, interest 6.60%, due March 2011	<u>140,915</u>	<u>–</u>
	5,212,564	2,979,194
Less current portion	<u>648,524</u>	<u>907,895</u>
Long-term portion	<u>\$ 4,564,040</u>	<u>\$ 2,071,299</u>

(A) On October 18, 2006, the Company entered into a new financing agreement with North Fork Bank which consists of a two-year \$5,000,000 revolving line of credit, a five-year \$2,000,000 machinery and equipment term loan due October 1, 2011 ("Term Loan") and a ten-year \$3,000,000 real estate term loan due October 1, 2016 ("Mortgage Loan"). This financing agreement replaced the prior financing agreement with CIT. Completion of the new financing agreement resulted in additional cash loan proceeds of approximately \$2,900,000 plus the release of previously restricted cash of \$1,500,000. The revolving line of credit is subject to an availability limit under a borrowing base calculation (85% of eligible accounts receivable plus up to 50% of eligible raw materials inventory plus up to 25% of eligible electronic components, with an inventory advance sublimit not to exceed \$1,500,000, as defined in the financing agreement). The revolving line of credit expires October 18, 2008. At December 30, 2006, the Company had available borrowing capacity under its revolving line of credit of \$3,300,000. The revolving line of credit bears interest at the prime rate less 0.50% (currently 7.75%) or LIBOR plus 2.00%. The principal amount of the Term Loan is payable in 59 equal monthly installments of \$33,333 and one final payment of the remaining principal balance. The Term Loan bears interest at the prime rate less 0.50% (currently 7.75%) or LIBOR plus 2.25%. The principal amount of the Mortgage Loan is payable in 119 equal monthly installments of \$12,500 and one final payment of the remaining principal balance. The Mortgage Loan bears interest at the prime rate less 0.50% (currently 7.75%) or LIBOR plus 2.25%. At December 30, 2006, the Company, under the terms of its agreement with North Fork Bank, elected to convert \$1,875,000 of the Term Loan and \$2,950,000 of the Mortgage Loan from their prime rate base to LIBOR-based interest rate loans for one month at an interest rate of 7.60%, which expire January 16, 2007. The revolving line of credit, the Term Loan and the Mortgage Loan are secured by substantially all assets located within the United States and the pledge of 65% of the stock of the Company's subsidiaries located in Costa Rica and Canada. The provisions of the financing agreement require the Company to maintain certain financial covenants. The Company was in compliance with these covenants at December 30, 2006. In connection with the new financing agreement with North Fork Bank, the Company took a charge to interest expense of approximately \$167,000 in the fourth quarter of 2006 related to the write-off of the unamortized loan costs related to the prior financing agreement.

(B)

The financing agreement with CIT consisted of a \$5,000,000 revolving line of credit, that was temporarily reduced by \$250,000 until certain conditions were met; a \$1,500,000 machinery and equipment term loan ("Term Loan A") and a \$2,750,000 real estate term loan ("Term Loan B"). In connection with this financing agreement, the Company was required to place, over the life of

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**5. Current and long-term debt (continued)**

the loan, \$1,500,000 restricted cash collateral with CIT. As further discussed above, the financing agreement was terminated on October 18, 2006, the loans were repaid and the restricted cash was returned by CIT to the Company. The revolving line of credit, which expired October 18, 2006, was subject to an availability limit under a borrowing base calculation (85% of eligible accounts receivable as defined in the financing agreement plus 100% of the \$1,500,000 restricted cash). The revolving line of credit bore interest at the prime rate plus 0.50% (currently 8.75%). The principal amount of Term Loan A was payable in 60 equal monthly installments of \$25,000 and bore interest at the prime rate plus 1% (currently 9.25%). The principal amount of Term Loan B was payable in 84 equal monthly installments of \$32,738 and bore interest at the prime rate plus 1% (currently 9.25%). The revolving line of credit and the term loans were secured by substantially all of the Company's assets located within the United States and the pledge of 65% of the stock of the Company's subsidiaries located in Costa Rica and Canada.

(C) FMI has a revolving credit agreement in place with The Bank of Nova Scotia for up to \$500,000 (Canadian) at the prime rate plus 3/4%. No borrowings were outstanding under this agreement at December 30, 2006.

FMI has a \$1,800,000 (Canadian) (approximately \$1,600,000 US) revolving lease line with the Bank of Nova Scotia, whereby the Company can obtain funding for previous production equipment purchases via a sale/leaseback transaction. As of December 30, 2006, \$350,000 had been utilized under this facility. Such leases are payable in monthly installments for up to five years and are secured by the related production equipment. Interest rates (typically prime rate plus one percent) are set at the closing of each respective sale/leaseback transaction. During the first quarter of 2006, FMI obtained \$160,000 in connection with the sale/leaseback of certain production equipment. The related equipment was originally purchased by the Company in 2005. During the first quarter of 2005, FMI obtained \$231,000 in connection with the sale/leaseback of certain production equipment. The related equipment was originally purchased by the Company in 2004.

Assets securing capital leases included in property, plant and equipment, net, have a depreciated cost of approximately \$703,000 at December 30, 2006 and \$678,000 at December 31, 2005.

At December 30, 2006 and December 31, 2005, the fair value of the Company's debt approximates carrying value. The fair value of the Company's long-term debt is estimated based on current interest rates.

The payments now required under the long-term obligations listed above during the years following December 30, 2006 are set forth below:

2007	\$	648,524
2008		616,469
2009		620,641
2010		627,599
2011		486,831
Thereafter		2,212,500
	<u>\$</u>	<u>5,212,564</u>



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**6. Accrued liabilities**

Accrued liabilities consist of the following:

	<u>2006</u>	<u>2005</u>
Commissions	\$ 239,633	\$ 236,580
Vacation	307,059	327,158
Employee compensation	246,691	220,051
Warranty reserve	255,780	168,012
Deferred compensation	15,782	34,818
Professional fees	149,211	457,221
Restructuring	140,391	-
Other	65,775	101,567
	<u>\$ 1,420,322</u>	<u>\$ 1,545,407</u>

**7. Stock option and stock purchase plans**

New Share-Based Compensation Plans:

On June 22, 2006, the Company's stockholders approved three new share-based compensation programs as follows: (i) 2006 Stock Option Plan; (ii) 2006 Key Employee Incentive Plan; and (iii) 2006 Non-Employee Directors' Stock Plan.

The 2006 Stock Option Plan authorizes the grant of an aggregate of 500,000 shares of Common Stock to employees, directors and consultants of the Company. Under the 2006 Stock Option Plan, the Company may grant to eligible individuals incentive stock options, as defined in Section 422 of the Internal Revenue Code of 1986 ("Code"), and/or non-qualified stock options. The purposes of the 2006 Stock Option Plan are to attract, retain and motivate employees, compensate consultants, and to enable employees, consultants and directors, including non-employee directors, to participate in the long-term growth of the Company by providing for or increasing the proprietary interests of such persons in the Company, thereby assisting the Company to achieve its long-range goals. The 2006 Stock Option Plan replaced the 2001 Stock Option Plan, and the remaining unissued options of 19,700 under the 2001 Stock Option Plan are no longer available for grant.

The 2006 Stock Option Plan may be terminated, amended, altered, or discontinued at any time by the Board, but no amendment may impair the rights of a participant without the participant's consent, subject to the terms of the 2006 Stock Option Plan. In addition, the 2006 Stock Option Plan may not be amended without the approval of the Company's stockholders to the extent such approval is required by law or the listing requirements of any exchange on which the Company's equity securities are publicly traded. Options may not be granted under the 2006 Stock Option Plan after March 28, 2016, or earlier as the Compensation Committee may determine.

At December 30, 2006 there were 85,500 options outstanding under the 2006 Stock Option Plan of which none were exercisable. These options were granted on June 22, 2006 and October 2, 2006 at an average exercise price of \$9.54. Options are granted at the closing price of the Company's shares on the American Stock Exchange on the date immediately prior to grant, pursuant to the 2006 Stock Option Plan. Options available for grant under the 2006 Stock Option Plan were 414,500 at December 30, 2006.

The 2006 Key Employee Incentive Plan replaces the 2001 Key Employee Incentive Plan, which terminated on April 20, 2006. The purpose of the 2006 Key Employee Incentive Plan is to give the Company a competitive advantage in retaining and motivating key officers and employees and to provide the Company and its subsidiaries with a stock plan providing incentives linked to increases in stockholder value.



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**7. Stock option and stock purchase plans (continued)**

The 2006 Key Employee Incentive Plan is substantially similar to the 2001 Key Employee Incentive Plan. The changes primarily relate to updating for changes in applicable tax law and to raise the target market capitalization levels to be achieved by the Company in order for the 2006 Key Employee Incentive Plan participants to receive the benefits of the 2006 Key Employee Incentive Plan.

The number of Restricted Shares issued under the 2006 Key Employee Incentive Plan will depend on whether the Company achieves certain target market capitalizations during the five-year period beginning on March 29, 2006 (the "Effective Date"). If the Company attains or achieves an average market capitalization equal to or greater than \$58,000,000 during any six-month period during the five-year period beginning on the Effective Date (the "\$58,000,000 Market Capitalization"), then each participant who shall still be in the employ of the Company on the last day of such six-month period will be issued the number of Restricted Shares determined by multiplying (a) his or her Award Percentage, (b) 5% and (c) the average market capitalization during such six-month period and dividing the product by the average fair market value of the common Stock during such six-month period.

If the Company attains or achieves an average market capitalization equal to or greater than \$93,000,000 over the course of any six-month period during the five-year period beginning on the Effective Date (the "\$93,000,000 Market Capitalization"), then each participant who shall still be in the employ of the Company on the last day of such six-month period will be awarded the number of Restricted Shares determined by multiplying (a) his or her Award Percentage, (b) 5% and (c) the average market capitalization during such six-month period and dividing the product by the average fair market value of the Common Stock during such six-month period. Such six-month periods may be, in whole or in part, coterminous with, the six-month period in which the \$58,000,000 Market Capitalization is achieved. In no event can Restricted Shares be issued upon attainment of either the \$58,000,000 Market Capitalization or the \$93,000,000 Market Capitalization more than once during the five-year term of the 2006 Key Employee Incentive Plan.

For purposes of the 2006 Key Employee Incentive Plan, market capitalization is defined as the number of outstanding shares of Common Stock (excluding any shares of Common Stock issued subsequent to the Effective Date, other than shares of Common Stock issued upon the exercise of stock options granted to employees, directors or consultants or through the purchase of shares of Common Stock under any stock purchase plan) on a fully diluted basis, multiplied by the fair market value per share of the Common Stock.

In the event of a Change in Control prior to the achievement of the \$58,000,000 Market Capitalization, the \$58,000,000 Market Capitalization will be deemed to be achieved if the number of outstanding shares of Common Stock (calculated on a fully diluted basis) on the date of the Change in Control multiplied by the fair market value determined as of the date of the Change of Control is equal to or greater than \$58,000,000, and in the event it is achieved, each participant will be granted the number of Restricted Shares determined by multiplying (i) such participant's Award Percentage, (ii) 5% and (iii) the Change in Control Market Capitalization and dividing the product by the Change in Control Price. Similarly, the \$93,000,000 Market Capitalization will be deemed to be achieved if such number of shares on the date of the Change of Control multiplied by the fair market value as of the date of the Change of Control is equal to or greater than \$93,000,000, and in the event it is achieved, each participant will be granted the number of Restricted Shares determined by multiplying (i) such participant's Award Percentage, (ii) (A) if the \$58,000,000 Market Capitalization shall have previously been achieved, 5% or (B) if the \$58,000,000 Market Capitalization shall not have previously been achieved, 10% and (iii) the Change in Control Market Capitalization and dividing the product by the Change in Control Price.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**7. Stock option and stock purchase plans (continued)**

The maximum value of an award of Restricted Shares which may be issued to any participant upon achievement (or deemed achievement) of the \$58,000,000 Market Capitalization is \$1,500,000 (based on the fair market value on the date of issuance of such shares). The maximum value of an award of Restricted Shares which may be issued to any participant upon achievement (or deemed achievement) of the \$93,000,000 Market Capitalization is \$3,500,000 (based on the fair market value of the Common Stock on the date of issuance of the Restricted Shares). In the event a Change in Control shall occur which results in a change of control market capitalization equal to or greater than \$93,000,000 prior to achievement of the \$58,000,000 Market Capitalization, the maximum award would be \$5,000,000. The 2006 Key Employee Incentive Plan will terminate at the end of ten years after its Effective Date; provided that the Restricted Shares outstanding as of such date will not be affected or impaired by the termination of the 2006 Key Employee Incentive Plan.

The 2006 Non-Employee Directors' Stock Plan is a new plan that authorizes the grant of an aggregate of 100,000 shares of Common Stock to the non-employee directors of the Company. The plan authorizes each non-employee director to receive 1,500 shares of restricted stock in 2006, or 1,500 shares or such other amount as the Board of Directors may, from time to time, decide for each year in the future following the Company's Annual Meeting of Stockholders.

The purpose of the 2006 Non-Employee Directors' Stock Plan is to attract, retain and motivate the most capable non-employee directors, to align the interests of the Company's non-employee directors and stockholders, to compensate the non-employee directors in line with the Company's competitors, and to generally increase the effectiveness of the Company's non-employee director compensation structure, thereby assisting the Company to achieve its long-range goals. The 2006 Non-Employee Directors' Stock Plan may be terminated, amended, altered, or discontinued at any time by the Board, but no amendment may impair the rights of a participant without the participant's consent, subject to the terms of the 2006 Non-Employee Directors' Stock Plan. In addition, the 2006 Non-Employee Directors' Stock Plan may not be amended without the approval of the Company's stockholders to the extent such approval is required by law or the listing requirements of any exchange on which the Company's equity securities are publicly traded. Awards may not be granted under the 2006 Non-Employee Directors' Stock Plan after December 31, 2015, or earlier as the Board may determine.

On June 22, 2006, the Company issued its initial grant of 9,000 shares of restricted stock to its non-employee directors. The per share price of the grant was \$9.52 (the closing price of the Company's shares on the American Stock Exchange on the date immediately prior to the grant, pursuant to the terms of the Plan). One third of such restricted stock vests on the anniversary of the grant date over a three-year period. Share-based compensation expense for the year ended December 30, 2006 related to the grant of restricted stock was approximately \$17,000. Restricted shares of common stock available for grant under the 2006 Non-Employee Directors' Stock Plan were 91,000 at December 30, 2006.

**Existing Stock Option and Employee Stock Purchase Plans:**

At September 30, 2006, the Company maintains share-based compensation arrangements under the following plans: (i) 1993 Stock Option Plan; (ii) 1997 Long Term Incentive Plan; and (iii) 2001 Stock Option Plan. In addition, non-qualified options for the purchase of a total of 33,000 shares exercisable at \$10.00 per share as a result of grants by the Board of Directors in 1996 to non-employee directors at fair market value on the date of grant expired September 1, 2006.

At December 30, 2006 there were 321,592 options outstanding under the 1993 Stock Option Plan, the 1997 Long Term Incentive Plan and the 2001 Stock Option Plan of which all were exercisable. No options are available for future grant under the 1993 Stock Option Plan, the 1997 Long Term Incentive Plan or the 2001 Stock Option Plan.



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**7. Stock option and stock purchase plans (continued)**

A summary of all stock option activity and information related to all options outstanding follows:

	2006		2005		2004	
	Weighted average exercise price	Shares or price per share	Weighted average exercise price	Shares or price per share	Weighted average exercise price	Shares or price per share
Outstanding at beginning of year	\$ 9.83	430,869	\$ 9.81	431,766	\$ 9.76	426,116
Granted	9.54	85,500	9.00	42,600	8.40	32,500
Exercised	6.87	(4,200)	4.16	(5,300)	5.93	(9,100)
Cancelled	10.79	(105,877)	9.49	(38,197)	8.09	(17,750)
Outstanding at end of year	9.55	407,092	9.83	430,869	9.81	431,766
Exercisable at end of year	\$ 9.14	321,592	\$ 9.85	403,019	\$ 9.83	413,766
Option price range at end of year	\$3.10 – \$17.00		\$3.10 – \$17.00		\$3.10 – \$17.00	
Weighted average estimated fair value of options granted during the year	\$2.57		\$1.95		\$2.49	

The following table sets forth information as of December 30, 2006 regarding weighted average exercise prices, weighted average remaining contractual lives and remaining outstanding options under the various stock option plans sorted by range of exercise price:

Options Price Range	Options Outstanding			Options Exercisable	
	Weighted Number Outstanding	Weighted Average Exercise Price	Weighted Remaining Contractual Life	Number Exercisable	Average Exercise Price
\$3.10 – \$7.00	87,900	\$ 5.99	3.7 years	87,900	\$ 5.99
\$7.01 – \$10.00	203,212	\$ 9.24	7.3 years	120,712	\$ 9.05
\$10.01 – \$13.00	38,980	\$ 11.30	2.6 years	35,980	\$ 11.40
\$13.01 – \$17.00	77,000	\$ 13.95	3.1 years	77,000	\$ 13.95

The aggregate intrinsic value represents the total pre-tax intrinsic value (the difference between the Company's closing stock price on the last trading day of the year and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on December 30, 2006. At December 30, 2006, the aggregate intrinsic value was \$507,000. This amount changes based on the fair market value of the Company's common stock. The total intrinsic value of options exercised for the year ended December 30, 2006 was \$11,000. The total fair value of options vested for the year ended December 30, 2006 was approximately \$27,000.

In 2001, the Company's stockholders approved a stock purchase plan pursuant to which 250,000 shares of the Company's common stock were initially reserved for sale to eligible employees. Under this plan, the Company may grant employees the right to subscribe to purchase shares of common stock from the Company at 85% of the market value on specified dates and pay for the shares through payroll deductions over a period of up to 27 months.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**7. Stock option and stock purchase plans (continued)**

A summary of stock purchase plan subscription activity follows:

	2006		2005		2004	
	Weighted average exercise price	Shares or price per share	Weighted average exercise price	Shares or price per share	Weighted average exercise price	Shares or price per share
Subscribed at beginning of year	\$ 6.34	44,047	\$ 5.36	33,176	\$ –	–
Subscribed	8.10	18,771	7.48	22,694	5.36	36,155
Purchased	6.00	(32,723)	5.36	(8,345)	5.36	(2,979)
Cancelled	6.93	(2,310)	6.80	(3,478)	–	–
Subscribed at end of year	<u>\$ 7.87</u>	<u>27,785</u>	<u>\$ 6.34</u>	<u>44,047</u>	<u>\$ 5.36</u>	<u>33,176</u>
Subscription price range end of year	<u>\$7.48 – \$8.10</u>		<u>\$5.36 – \$7.48</u>		<u>\$5.36</u>	
Weighted average estimated fair value of rights granted during the year	<u>\$2.76</u>		<u>\$3.18</u>		<u>\$2.30</u>	

As of December 30, 2006, there were 164,660 shares available for future stock purchase plan subscriptions.

**8. Income taxes**

The benefit for income taxes consists of the following components:

	2006	2005	2004
Current tax (benefit) provision:			
Federal	\$ –	\$ (20,000)	\$ 38,000
Foreign	(69,000)	(255,000)	–
State	–	(10,000)	84,000
	<u>(69,000)</u>	<u>(285,000)</u>	<u>122,000</u>
Deferred tax provision (benefit):			
Federal	–	–	–
Foreign	–	5,000	(218,000)
State	–	–	–
	<u>–</u>	<u>5,000</u>	<u>(218,000)</u>
Benefit for income taxes	<u>\$ (69,000)</u>	<u>\$ (280,000)</u>	<u>\$ (96,000)</u>

Temporary differences which gave rise to a significant portion of deferred tax assets and liabilities at December 30, 2006 and December 31, 2005 are as follows:

	2006	2005
Current deferred tax assets:		
Inventory valuation allowance	\$ 468,000	\$ 535,000
Capitalized inventory costs	33,000	33,000
Warranty cost	80,000	60,000
Deferred compensation	6,000	14,000
Lease obligations	33,000	70,000

Other

151,000

163,000

771,000

875,000

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**8. Income taxes (continued)**

	<u>2006</u>	<u>2005</u>
Less valuation allowance	(661,000)	(500,000)
Current deferred tax assets	110,000	375,000
Current deferred tax liabilities—		
Research and development credits and costs	(5,000)	(70,000)
Prepaid expenses	(195,000)	(185,000)
Net current deferred tax assets	(90,000)	120,000
Non-current deferred tax assets:		
Deferred compensation	—	8,000
Net operating loss carryforwards	1,315,000	1,151,000
Capitalized leases	92,000	62,000
Research and development credits and costs	1,256,000	950,000
Other	120,000	144,000
	<u>2,783,000</u>	<u>2,315,000</u>
Less valuation allowance	(1,917,000)	(1,060,000)
Non-current deferred tax assets	<u>866,000</u>	<u>1,255,000</u>
Non-current deferred tax liabilities:		
Depreciation and amortization	(290,000)	(913,000)
Other	(24,000)	—
Non-current deferred tax liabilities	<u>(314,000)</u>	<u>(913,000)</u>
Net non-current deferred tax assets	<u>552,000</u>	<u>342,000</u>
Net deferred tax assets, long term	<u>\$ 462,000</u>	<u>\$ 462,000</u>

The statutory Federal income tax rate is reconciled to the effective tax rate computed by dividing the benefit for income taxes by income (loss) before income taxes as follows:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
Statutory Federal income tax rate	(34.0)%	34.0%	34.0%
Effect of:			
State income tax, net of Federal income tax effects	—	(1.4)	7.6
Change in valuation allowance	19.3	(17.5)	(35.5)
Tax effect of foreign operations	8.1	(69.5)	(19.8)
Other	3.6	(3.8)	5.0
Effective tax benefit	<u>(3.0)%</u>	<u>(58.2)%</u>	<u>(8.7)%</u>

The Company files a U.S. income tax return which includes its Costa Rican subsidiary. This subsidiary is not subject to income tax in Costa Rica as it takes advantage of that country's Free Trade Zone Law.

The current foreign tax benefit for the years ended December 30, 2006 and December 31, 2005 represents refundable Canadian provincial tax credits for which FMI, as a technology company, has qualified.

As of December 30, 2006, the Company had net operating loss carryforwards of approximately \$3,300,000 for Federal income tax purposes and \$1,900,000 for state income tax purposes which are available to offset future taxable income through 2026 and 2014, respectively. Included in the net operating losses as of December 30, 2006 are approximately \$770,000 of future Federal tax deductions



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**8. Income taxes (continued)**

related to the exercise of employee stock options. In addition, the Company has U.S Federal income tax credit carryforwards of approximately \$209,000 of which \$98,000 expire through 2015, \$74,000 that expire through 2022 and \$37,000 which have no expiration. The Canadian research and development benefits of \$1,182,000 include \$804,000 of investment tax credits that expire through 2016, and the remaining benefits can be carried forward indefinitely.

The Company increased its domestic deferred tax asset valuation allowance by \$591,000 to \$1,881,000, in fiscal year 2006 reflecting additional net operating loss carryforwards. In 2006 and 2005 the Company recorded additional valuation allowances for certain Canadian deferred tax assets of \$427,000 and \$270,000, respectively, because it believed that the probability of realization of such assets was uncertain. The Company reduced its domestic deferred tax asset valuation allowance by \$165,000 to \$1,290,000 in fiscal year 2005 reflecting utilization of net operating loss carryforwards and lower gross deferred tax assets. The Company's domestic net deferred tax assets have been fully reserved as of December 30, 2006 and December 31, 2005.

The provision (benefit) for foreign income taxes is based upon foreign income (losses) before income taxes as follows: \$(751,000) for 2006, \$249,000 for 2005 and \$5,000 for 2004. Deferred Federal and state income taxes are not provided on the undistributed cumulative earnings of foreign subsidiaries because such earnings are considered to be invested permanently in those operations. At December 30, 2006, the cumulative earnings of foreign subsidiaries were approximately \$730,000. The amount of unrecognized deferred tax liability on the undistributed cumulative earnings has not been calculated as it is impracticable.

Internal Revenue Service Code Section 382 places a limitation on the utilization of net operating loss carryforwards when an ownership change, as defined in the tax law, occurs. Generally, an ownership change occurs when there is a greater than 50 percent change in ownership. If such change should occur, the actual utilization of net operating loss carryforwards, for tax purposes, would be limited annually to a percentage of the fair market value of the Company at the time of such change. The Company may become subject to these limitations depending on change in ownership.

**9. Business segment and geographic data**

The Company's operations are conducted primarily through two business segments: (1) electronic components and subsystems and (2) microwave micro-circuitry. These segments, and the principal operations of each, are as follows:

Electronic components and subsystems: Design, manufacture and sale of electronic component devices offering extremely broad frequency coverage and high performance characteristics for communications, defense and aerospace applications. Of the identifiable assets, 85% are located in the United States and 15% are located in Costa Rica.

Microwave micro-circuitry: Design, manufacture and sale of microstrip, bonded stripline and thick metal-backed Teflon® (PTFE) and mixed dielectric multilayer circuits for communications, defense and aerospace applications. Identifiable assets are located in Canada.

Information about the Company's operations in different industries and geographic areas follows. Operating income (loss) is net sales less operating expenses. Operating expenses exclude interest expense, other income and income taxes. Assets are identified with the appropriate operating segment and are substantially all located in the North America geographic area. Corporate assets consist principally of cash and corporate expenses are immaterial. Intersegment sales and the resulting intersegment assets are principally due to transactions from the microwave micro-circuitry segment to the electronic components and subsystems segment.



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**9. Business segment and geographic data (continued)**

	<u>2006</u>	<u>2005</u>	<u>2004</u>
	(In thousands of dollars)		
<b>Industry segments:</b>			
Sales to unaffiliated customers:			
Electronic components and subsystems	\$ 22,531	\$ 22,483	\$ 25,141
Microwave micro-circuitry	5,045	7,372	5,956
Intersegment sales	(155)	(136)	(148)
Consolidated	<u>\$ 27,421</u>	<u>\$ 29,719</u>	<u>\$ 30,949</u>
Income (loss) before (benefit) provision for income taxes:			
Operating income (loss):			
Electronic components and subsystems	\$ (1,526)	\$ 280	\$ 1,178
Microwave micro-circuitry	(511)	462	189
Interest and other expense, net	(257)	(261)	(265)
Consolidated	<u>\$ (2,294)</u>	<u>\$ 481</u>	<u>\$ 1,102</u>
Identifiable assets:			
Electronic components and subsystems	\$ 22,105	\$ 23,307	\$ 25,593
Microwave micro-circuitry	6,219	7,087	6,849
Corporate	5,961	4,081	2,166
Intersegment assets	(31)	(53)	(33)
Consolidated	<u>\$ 34,254</u>	<u>\$ 34,422</u>	<u>\$ 34,575</u>
Depreciation and amortization:			
Electronic components and subsystems	\$ 2,333	\$ 2,884	\$ 2,965
Microwave micro-circuitry	259	271	245
Consolidated	<u>\$ 2,592</u>	<u>\$ 3,155</u>	<u>\$ 3,210</u>
Capital expenditures:			
Electronic components and subsystems	\$ 1,597	\$ 1,575	\$ 1,419
Microwave micro-circuitry	79	199	296
Consolidated	<u>\$ 1,676</u>	<u>\$ 1,774</u>	<u>\$ 1,715</u>
<b>Geographic areas:</b>			
Sales to unaffiliated customers:			
North America	\$ 24,706	\$ 23,952	\$ 26,757
Europe	2,073	4,401	2,748
Far East	498	925	1,271
Other	144	441	173
Consolidated	<u>\$ 27,421</u>	<u>\$ 29,719</u>	<u>\$ 30,949</u>

The Company's customers are primarily major industrial corporations that integrate the Company's products into a wide variety of defense and commercial systems. The Company's customers include BAE Systems, The Boeing Company, Celestica, Inc., EADS Astrium, General Dynamics Corporation, ITT, Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon Company and Space Systems Loral.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**9. Business segment and geographic data (continued)**

The following table presents our key customers and the percentage of net sales made to such customers:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
Raytheon Company	11.1%	10.5%	13.9%
Lockheed Martin Corporation	8.7%	10.9%	6.6%
The Boeing Company	8.4%	5.9%	7.8%
L-3 Communications Corporation	7.5%	4.3%	2.7%
Space Systems Loral	6.5%	2.4%	1.3%
Northrop Grumman Corporation	5.9%	8.8%	11.9%
Israel Aircraft Industries Ltd.	3.3%	11.2%	6.2%

Accounts receivable are financial instruments that expose the Company to a concentration of credit risk. A substantial portion of the Company's accounts receivable are from customers in the defense industry, and approximately 72% and 44% of its receivables at December 30, 2006 and December 31, 2005, respectively, were from six and five customers, respectively. Exposure to credit risk is limited by the large number of customers comprising the remainder of the Company's customer base, their geographical dispersion and by ongoing customer credit evaluations performed by the Company.

**10. Net income per common share**

The following table summarizes the calculation of basic and diluted net income (loss) per common share for 2006, 2005 and 2004:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
<b>Numerator:</b>			
Net income (loss) available to common stockholders	\$ (2,225,461)	\$ 761,284	\$ 1,198,489
<b>Denominator:</b>			
Weighted average shares outstanding for basic net income (loss) per share	3,142,154	3,142,425	3,127,070
Effect of dilutive securities – stock options(1)	–	34,096	26,784
Weighted average shares outstanding for diluted net income (loss) per share	3,142,154	3,176,521	3,153,854
Net income (loss) per share – basic	\$ (.71)	\$ .24	\$ .38
Net income (loss) per share – diluted	\$ (.71)	\$ .24	\$ .38

(1) Represents additional shares resulting from assumed conversion of stock options less shares purchased with the proceeds therefrom.

Diluted earnings per share excludes 285,000 and 322,000 shares underlying stock options for the years ended December 31, 2005 and January 1, 2005, respectively as the exercise price of these options was greater than the average market value of the common shares, resulting in an anti-dilutive effect on net income per share. Because of the net loss for the year ended December 30, 2006 approximately 407,000 shares underlying stock options were excluded from the calculation of diluted earnings per share as the effect would be anti-dilutive.

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## 11. Commitments and contingencies

Lease commitments:

The Company leases real estate and equipment under operating leases expiring at various dates through January 2011, which includes a 36,200 square-foot manufacturing facility in Costa Rica. The leases include provisions for rent escalation, renewals and purchase options, and the Company is generally responsible for taxes, insurance, repairs and maintenance.

Total rent expense charged to operations amounted to \$553,000 in 2006, \$462,000 in 2005 and \$438,000 in 2004. Future minimum lease payments under noncancellable operating leases with an initial term exceeding one year are as follows:

2007	\$	572,000
2008		551,000
2009		411,000
2010		380,000
2011		30,000
Thereafter		—

Capital leases included in property, plant and equipment at December 30, 2006 are approximately as follows:

Machinery and equipment	\$	1,624,000
Less accumulated depreciation and amortization		921,000
Total	\$	<u>703,000</u>

Future minimum lease payments under capital leases and the present value of such payments as of December 30, 2006 are approximately as follows (see Note 4):

2006	\$	117,000
2007		80,000
2008		80,000
2009		81,000
2010		37,000
Total minimum lease payments		395,000
Less amount representing interest		45,000
Present value of total minimum lease payments	\$	<u>350,000</u>

Purchase obligations:

The Company intends to issue commitments to purchase \$2,400,000 of capital equipment from various vendors. Such equipment will be purchased and become operational during 2007.

Consulting and employment agreements; deferred compensation:

On April 11, 2006, Merrimac Industries, Inc. and its Chairman, President and Chief Executive Officer entered into an employment agreement (the Employment Agreement), setting forth the terms of Mr. Carter's employment. Mr. Carter's employment under the terms of the Employment Agreement will commence on April 11, 2006 and continue until December 31, 2010, and will be renewable for successive twelve-month periods unless terminated earlier by either party. The Employment Agreement supersedes and replaces his previous employment agreement with the Company, dated as of December 19, 1996, as amended on January 1, 1998. Pursuant to the Employment Agreement,

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**11. Commitments and contingencies (continued)**

Mr. Carter's annual base salary is \$332,000. In addition, Mr. Carter will be eligible to participate in the Company's medical benefits, life insurance, 401(k) and similar programs generally available to employees. Mr. Carter will also be eligible to participate in the Company's stock purchase, stock option, and long term incentive plans, and to receive bonuses, in the sole discretion of the compensation committee of Company's board of directors.

On August 31, 2000, in connection with an amendment of Mr. Carter's previous employment agreement, the Company loaned Mr. Carter \$280,000. Interest on the loan was calculated at a variable interest rate based on the prime rate and was payable in accordance with Mr. Carter's previous employment agreement. Each year the Company forgave 20% of the amount due under this loan and the accrued interest thereon. During 2005, the Company forgave \$56,000 of principal and \$3,000 of accrued interest and paid a tax gross-up benefit of \$4,300. During 2004, the Company forgave \$56,000 of principal and \$4,500 of accrued interest and paid \$6,100 for a tax gross-up benefit. This loan was fully satisfied in 2005.

A subsidiary of the Company entered into an employment agreement with the Founder and President Emeritus of FMI that provided for a minimum annual salary of \$150,000 (Canadian). The term of the agreement ended on August 26, 2004 and was extended through January 27, 2006. It was subsequently extended until August 2006 at a minimum annual salary of \$120,000 (Canadian). It was further extended until August 2007 at a minimum annual salary of \$100,000 (Canadian).

The Company entered into a consulting agreement on January 1, 1998 with a director of the Company. The term of the consulting agreement, which initially ended on January 1, 1999, automatically renews for successive twelve-month periods until terminated pursuant to the terms of the agreement. The consulting agreement provides this director with an annual fee of \$36,000 for his services.

The Company is party to a retirement agreement effective January 1997, with its former Vice President, Secretary and Controller, that provides him with annual payments of \$30,000 for ten years. This agreement terminated in December 2006.

**Litigation:**

The Company is a party to lawsuits, arising from the normal course of business. It is the opinion of management, that the disposition of these various lawsuits will not have a material adverse effect to the consolidated financial position or results of operations of the Company.

**12. Restructuring charge**

During 2006 the Company reduced its headcount by 15 persons, principally involved in production, manufacturing support, sales and administration. The Company recorded a personnel restructuring charge of \$286,000, consisting of severance and certain other personnel costs, during the fourth quarter of 2006. Such charges increased the net loss by \$.09 per share. The Company paid \$146,000 of these restructuring charges in 2006. Substantially all of the remaining 2006 restructuring charge will be paid in 2007.

**13. Private placements of Common Stock**

On February 28, 2002, the Company sold to DuPont Electronic Technologies 528,413 shares of Common Stock, representing approximately 16.6% of the Company's outstanding Common Stock after giving effect to the sale, for an aggregate purchase price of \$5,284,000. The Company and DuPont Electronic Technologies have also agreed to work together to better understand the dynamics of the markets for high-frequency electronic components and modules. David B. Miller, Vice President and General Manager of DuPont Electronic

Technologies, was appointed to the Company's Board of Directors.

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On December 13, 2004 Infineon Technologies AG ("Infineon"), at such time a 15.2% holder of the Company's common stock, sold 475,000 shares of the Company's common stock to four purchasers in a privately-negotiated transaction. Two purchasers in such transaction, K Holdings LLC and Hampshire Investments, Limited, each of which is affiliated with Ludwig G. Kuttner, purchased shares representing an aggregate of approximately 9.6% of the Company's common stock. Infineon also assigned to each purchaser certain registration rights to such shares under the existing registration rights agreements Infineon had with the Company.

In connection with the transaction, the Company and Infineon terminated the Stock Purchase and Exclusivity Letter Agreement dated April 7, 2000, as amended, which provided that the Company would design, develop and produce exclusively for Infineon certain Multi-Mix® products that incorporate active RF power transistors for use in certain wireless base station applications, television transmitters and certain other applications that are intended for Bluetooth transceivers.

DuPont and the four purchasers above hold registration rights which currently give them the right to register an aggregate of 1,003,413 shares of Common Stock of the Company.

**14. Related party transactions**

In May 1998, the Company sold 22,000 shares of Common Stock to Mason N. Carter, Chairman, President and Chief Executive Officer of the Company, at a price of \$11.60 per share, which approximated the average closing price of the Company's Common Stock during the first quarter of 1998. The Company lent Mr. Carter \$255,000 in connection with the purchase of these shares and combined that loan with a prior loan to Mr. Carter in the amount of \$105,000. The resulting total principal amount of \$360,000 was payable May 4, 2003 and bore interest at a variable interest rate based on the prime rate. This loan was further amended on July 29, 2002. Accrued interest of \$40,000 was added to the principal, bringing the new principal amount of the loan to \$400,000, the due date was extended to May 4, 2006, and interest (at the same rate as was previously applicable) was payable monthly. Mr. Carter pledged 33,000 shares of Common Stock as security for this loan, which was a full-recourse loan.

On August 31, 2000, in connection with an amendment of Mr. Carter's employment agreement, the Company loaned Mr. Carter an additional \$280,000. Interest on the loan varies and was based on the prime rate, payable in accordance with Mr. Carter's employment agreement. Each year the Company was required to forgive 20% of the amount due under this loan and the accrued interest thereon. During 2005, the Company forgave \$56,000 of principal and \$3,000 of accrued interest and paid a tax gross-up benefit of \$4,300. This loan was fully satisfied in 2005.

On March 29, 2006, the Company entered into an agreement with Mr. Carter to purchase 42,105 shares of the Company's common stock owned by Mr. Carter at a purchase price of \$9.50 per share (the closing price of the common stock on March 29, 2006) resulting in a total purchase price for the shares of \$399,998. As a condition to the Company's obligation to purchase the shares, concurrent with the Company's payment of the purchase price Mr. Carter paid to the Company \$400,000 (plus any accrued and unpaid interest) in full satisfaction of Mr. Carter's promissory note in favor of the Company dated July 29, 2002. This transaction was closed on April 24, 2006.

During fiscal years 2006, 2005 and 2004, respectively, the Company's General Counsel, Katten Muchin Rosenman LLP, was paid \$402,000, \$243,000 and \$288,000 for providing legal services to the Company. A director of the Company is Counsel to the firm of Katten Muchin Rosenman LLP but does not share in any fees paid by the Company to the law firm.

During fiscal years 2006, 2005 and 2004, the Company retained Career Consultants, Inc. and SK Associates to perform executive searches and to provide other services to the Company. The Company paid an aggregate of \$10,000, \$5,000 and \$8,000 to these companies during 2006, 2005 and 2004, respectively. A director of the Company is the Chairman and Chief Executive Officer of each of these companies.



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**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**14. Related party transactions (continued)**

During each of fiscal years 2006, 2005 and 2004, a director of the Company was paid \$36,000 for providing technology-related consulting services to the Company.

During fiscal years 2006, 2005 and 2004, respectively, DuPont Electronic Technologies ("DuPont"), a stockholder, was paid \$32,000, \$54,000 and \$84,000 for providing technological and marketing-related personnel and services on a cost-sharing basis to the Company under the Technology Agreement dated February 28, 2002. A director of the Company is an officer of DuPont, but does not share in any of these payments.

Each director who is not an employee of the Company receives a monthly director's fee of \$1,500, plus an additional \$500 for each meeting of the Board and of any Committees of the Board attended. In addition, the Chair of the Audit Committee receives an annual fee of \$2,500 for his services in such capacity. The directors are also reimbursed for reasonable travel expenses incurred in attending Board and Committee meetings. In addition, pursuant to the 2006 Stock Option Plan, each non-employee director is granted an option to purchase 2,500 shares of the Common Stock of the Company on the date of each Annual Meeting of Stockholders. Such options have a three-year vesting period. Each such grant has an exercise price equal to the fair market value on the date of such grant and will expire on the tenth anniversary of the date of the grant. On June 22, 2006, non-qualified stock options to purchase an aggregate of 17,500 shares were issued to seven directors at an exercise price of \$9.52 per share. Also on June 22, 2006, pursuant to the 2006 Non-Employee Directors' Stock Plan, 9,000 shares of restricted stock were granted to six directors at a fair market value of \$9.52 per share. One third of such restricted stock vests on the anniversary of the grant date over a three-year period.

On December 13, 2004 Infineon Technologies AG ("Infineon"), at such time the beneficial owner of approximately 15% of the Company's common stock, sold 475,000 shares of the Company's common stock to four purchasers in a privately-negotiated transaction. Two purchasers in such transaction, K Holdings, LLC and Hampshire Investments, Limited, each of which is affiliated with Ludwig G. Kuttner, who was President and Chief Executive Officer of Hampshire Group, Limited ("Hampshire"), purchased 300,000 shares representing an aggregate of approximately 9.6% of the Company's common stock. Mr. Kuttner was elected to the Company's Board of Directors at its 2006 Annual Meeting of Stockholders. As a result of an ongoing investigation by Hampshire's audit committee of allegations of certain improprieties and possibly unlawful conduct involving Mr. Kuttner and other Hampshire executives, Mr. Kuttner's employment with Hampshire has been terminated. Mr. Kuttner has taken a leave of absence from his position as a director of Merrimac since the date of his election until the resolution of the investigation. During his leave of absence, Mr. Kuttner is not entitled to any compensation from the Company. Infineon also assigned to each purchaser certain registration rights to such shares under the existing registration rights agreements Infineon had with the Company. In connection with the transaction, the Company and Infineon terminated the Stock Purchase and Exclusivity Letter Agreement dated April 7, 2000, as amended, which provided that the Company would design, develop and produce exclusively for Infineon certain Multi-Mix® products that incorporate active RF power transistors for use in certain wireless base station applications, television transmitters and certain other applications that are intended for Bluetooth transceivers.

**15. Stockholder Rights Plan**

On March 5, 1999, the Board of Directors of the Company approved a stockholder rights plan and declared a dividend of one common share purchase right (a "Right") for each outstanding share of Common Stock of the Company. The dividend was payable on March 19, 1999 (the "Record Date") to stockholders of record as of the close of business on that date. Each Right will entitle the holder to purchase from the Company, upon the occurrence of certain events, one share of Common Stock for \$25.00.

Generally, if any person or group acquires beneficial ownership of 10% or more of the Company's outstanding Common Stock, each Right (other than Rights held by such acquiring person or group)



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

### 15. Stockholder Rights Plan (continued)

will be exercisable, at the \$25.00 purchase price, for a number of shares of Common Stock having a market value of \$50.00. Upon an acquisition of the Company, each Right (other than Rights held by the acquiror) will generally be exercisable, at the \$25.00 purchase price, for a number of shares of common stock of the acquiror having a market value of \$50.00. In certain circumstances, each Right may be exchanged by the Company for one share of Common Stock. The Rights will expire on March 19, 2009, unless earlier exchanged or redeemed at \$0.01 per Right. On March 14, 2007, the Company also announced that it amended its 1999 Stockholder Rights Plan by increasing the defined "Acquiring Person" threshold to 12.5 percent from 10 percent (see Note 17).

### 16. SAB 108 Cumulative Effect Adjustment

In September 2006, the SEC issued SAB 108 in order to eliminate the diversity in practice surrounding how public companies quantify financial statement misstatements. Traditionally there have been two widely recognized methods for quantifying the effects of financial statement misstatements: the "roll-over" method and the "iron curtain" method. The roll-over method focuses primarily on the impact of a misstatement on the income statement, including the reversing effect of prior-year misstatements, but its use can lead to the accumulation of misstatements in the balance sheet. The iron-curtain method focuses primarily on the effect of correcting the period-end balance sheet with less emphasis on the reversing effects of prior year errors on the income statement. Prior to the adoption of SAB 108, the Company used the roll-over method for quantifying financial statement misstatements. SAB No. 108 requires analysis of misstatements using both an income statement (roll-over) approach and a balance sheet (iron curtain) approach in assessing materiality and provides for a one-time cumulative effect transition adjustment. SAB No. 108 is effective for the Company's fiscal year 2006 annual financial statements.

SAB 108 permits existing public companies to initially apply its provisions either by (i) restating prior financial statements as if the dual approach had always been applied or (ii) recording the cumulative effect of initially applying the "dual approach" as adjustments to carrying values of assets and liabilities as of January 1, 2006 with an offsetting adjustment recorded to the opening balance of retained earnings.

The Company identified the following errors through the application of its internal controls over financial reporting and had concluded that the individual errors were immaterial under the rollover method for the periods indicated. However, when applying the dual approach, and after considering all relevant quantitative and qualitative information, the Company concluded that these misstatements are material to the 2006 financial statements when considering the aggregate impact. The Company corrected the errors through the recording of cumulative effect adjustments to retained earnings as of January 1, 2006:

Inventory reserve(1)	\$	63,000
Accrued liabilities(2)		321,000
Impact retained earnings(3)	\$	<u>384,000</u>

- (1) The Company recorded a non-specific inventory reserve for book-to-physical adjustments of \$63,000. Upon adoption of SAB 108, the Company recorded a \$63,000 increase in inventory with a corresponding increase in retained earnings to correct this misstatement.
- (2) The Company had accrued its unbilled year-end audit, income tax preparation and annual report costs at the end of 2005. Under FASB Concepts Statement No. 6, "Elements of Financial Statements" and AICPA Technical Practice Aid 5290, these costs are to be expensed when



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years Ended December 30, 2006, December 31, 2005 and January 1, 2005**

**16. SAB 108 Cumulative Effect Adjustment (continued)**

incurred and not accrued. The Company recorded a \$321,000 reduction of accrued liabilities with a corresponding increase in retained earnings to correct these misstatements.

- (3) Represents the net understatement of retained earnings for 2005 recorded as of January 1, 2006 for the initial application of SAB 108. Due to the Company's net operating loss carryforwards, no provision for income taxes has been recorded.

**17. Subsequent Event**

On March 14, 2007, the Company repurchased in a private transaction 238,700 shares of its Common Stock for the treasury at \$9.00 per share for an aggregate total of \$2,148,300 from a group of investors. The Company also announced that it amended its 1999 Stockholder Rights Plan by increasing the defined "Acquiring Person" threshold to 12.5 percent from 10 percent.

**END OF NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.**

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

None.

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

As of December 30, 2006 (the end of the period covered by this report), the Company's management carried out an evaluation, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of December 30, 2006, the Company's disclosure controls and procedures are effective.

No change occurred in the Company's internal controls concerning financial reporting during the Company's fourth quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal controls over financial reporting.

**ITEM 9B. OTHER INFORMATION.**

None.

### PART III

Pursuant to General Instruction E3 to Form 10-K, portions of information required by Items 10 through 12 and 14 and indicated below are hereby incorporated by reference to Merrimac's definitive Proxy Statement for the 2007 Annual Meeting of Stockholders (the "Proxy Statement") which Merrimac will file with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year covered by this report.

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

Information under the caption "Election of Directors" contained in the Proxy Statement with respect to the Board of Directors is incorporated herein by reference. The following is a list of Merrimac's current executive officers, their ages and their positions. Generally, each executive officer is elected for a term of one year at the organizational meeting of the Board of Directors following the Annual Meeting of Stockholders.

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
Mason N. Carter	61	Chairman, President and Chief Executive Officer
Robert V. Condon	60	Vice President, Finance, Treasurer, Secretary and Chief Financial Officer
Richard E. Dec	64	Vice President, Corporate Relations
Rocco A. DeLillo	39	Vice President, Research and Development
Michael M. Ghadaksaz	52	Vice President, Market Development
Reynold K. Green	48	Vice President and Chief Operating Officer
Jayson E. Hahn	39	Vice President, Information Technology and Chief Information Officer
James J. Logothetis	47	Vice President and Chief Technology Officer
Adriana Mazza	55	Vice President, Human Resources
Michael Pelenskij	46	Vice President, Manufacturing

#### FAMILY RELATIONSHIPS

There are no family relationships among the officers listed.

#### BUSINESS EXPERIENCE OF EXECUTIVE OFFICERS DURING PAST FIVE YEARS

Mr. Carter has served as Chairman of the Board since July 24, 1997, and President and Chief Executive Officer since December 16, 1996.

Mr. Condon has been Vice President, Finance and Chief Financial Officer since joining Merrimac in March 1996 and was appointed Secretary and Treasurer in January 1997.

Mr. Dec has been Vice President, Corporate Relations since November 2002 and was Vice President, Business Development from July 2000. He served as Vice President, Marketing since joining Merrimac in March 1997.

Mr. DeLillo was appointed Vice President, Research and Development in September 2003, after serving as Vice President, Engineering since November 2002. He served as Vice President of Research and Development from September 2002 to November 2002. Prior to September 2002 he was Director of Research and Development since 1999. He joined the Company in March 1998 as a Senior Research and Development Engineer.

Mr. Ghadaksaz was appointed Vice President of Marketing Development in September 2003, after serving as Director of Market Development since February 2003. Prior to joining Merrimac, he served as a consultant for wireless telecommunications equipment and device manufacturers, U.S. and Canadian venture capital firms and their portfolio companies. Mr. Ghadaksaz also served on the Advisory Board of Radical Horizon, an innovative software defined radio solution provider. From



1999 to 2002, he served as Director of Technology Strategy for the Strategy Sector at Motorola. From 1995 to 1999, Mr. Ghadaksaz held the positions of Senior Scientist, Applications and Business Development Manager for Hughes Communications Products Division of Hughes Aircraft Company.

Mr. Green was appointed Vice President and Chief Operating Officer on January 1, 2005. He was Vice President and General Manager since November 2002. He was Vice President and General Manager of the RF Microwave Products Group since January 2000. He was Vice President, Sales from March 1997 to January 2000 and Vice President of Manufacturing from April 1996 to March 1997. He was a member of the Board of Directors from April 1996 to May 1997 and did not seek re-election to the Board.

Mr. Hahn was appointed Vice President, Information Technology and Chief Information Officer in October 2000, after serving as Director, Network Services since June 1998. He served as Manager, Network Services from June 1997 to June 1998 and was Information Technology Support Specialist from December 1996 to June 1997.

Mr. Logothetis was appointed Vice President and Chief Technology Officer in March 2002. Mr. Logothetis was appointed Vice President, Multi-Mix® Engineering in May 1998, after rejoining Merrimac in January 1997 to serve as Director, Advanced Technology. Prior to rejoining Merrimac, he served as a director for Electromagnetic Technologies, Inc. in 1995 and became Vice President of Microwave Engineering at such corporation in 1996. From 1984 through 1994, Mr. Logothetis had various engineering positions with Merrimac including Group Manager, Engineering.

Mrs. Mazza was appointed Vice President, Human Resources in December 2005, after serving as Manager of Human Resources of the Company from September 2002 to December 2005. She joined the Company in May 2000, serving in various human resource capacities until September 2002. Prior to joining Merrimac, she worked for Monroe Systems for Business, a division of Litton Industries; Exxon Office System, a division of Exxon Corporation and did private consulting work in both profit and nonprofit capacities.

Mr. Pelenskij was appointed Vice President Manufacturing in January 2000 after serving as Director of Manufacturing of the Company from January 1999 to January 2000. Prior to January 1999, Mr. Pelenskij held the positions of Manager of Screened Components, RF Design Engineer, and District Sales Manager at the Company since joining the Company in 1993.

Information under the caption "Section 16 (a) Beneficial Ownership Reporting Compliance" contained in the Proxy Statement relating to compliance with Section 16 of the Exchange Act is incorporated herein by reference.

The Company has adopted a code of ethics that applies to its chief executive officer and chief financial officer, its principal executive officer and principal financial officer, respectively, and all of the Company's other officers, directors and employees. The Company makes its code of ethics available free of charge through its internet website, [www.merrimacind.com](http://www.merrimacind.com). The Company will disclose on its web site at [www.merrimacind.com](http://www.merrimacind.com) amendments to or waivers from its code of ethics within four business days following the date of any such amendment or waiver.

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

Information called for by Item 11 is set forth under the heading "Executive Compensation" in the Proxy Statement, which information is incorporated herein by reference.

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

Information called for by Item 12 is set forth under the heading "Share Ownership of Directors, Executive Officers and Certain Stockholders" contained in the Proxy Statement, which information is incorporated herein by reference.

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

Information called for by Item 13 is set forth under the subheading "Certain relationships and related transactions" under the caption "Executive Compensation" contained in the Proxy Statement, which information is incorporated herein by reference.

**ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.**

Information called for by Item 14 is set forth under the caption "Principal Accountant Fees and Services" contained in the Proxy Statement, which information is incorporated herein by reference.

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

<b>EXHIBIT NUMBER</b>	<b>DESCRIPTION OF EXHIBIT</b>
3(a)	Certificate of Incorporation of Merrimac is hereby incorporated by reference to Exhibit 3(i)(b) to Post-Effective Amendment No. 2 to the Registration Statement on Form S-8 (No. 33-68862) of Merrimac dated February 23, 2001.
3(b)	By-laws of Merrimac are hereby incorporated by reference to Exhibit 3(ii)(b) to Post-Effective Amendment No. 2 to the Registration Statement on Form S-8 (No. 33-68862) of Merrimac dated February 23, 2001.
4(a)	Stockholder Rights Agreement dated as of March 9, 1999, between Merrimac and ChaseMellon Stockholder Services, L.L.C., as Rights Agent, is hereby incorporated by reference to Exhibit 1 to Merrimac's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 9, 1999.
4(b)	Amendment No. 1 dated as of June 9, 1999, to the Stockholder Rights Agreement dated as of March 9, 1999, between Merrimac and ChaseMellon Stockholder Services, L.L.C., as Rights Agent, is hereby incorporated by reference to Exhibit 1 to Merrimac's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 9, 1999.
4(c)	Amendment No. 2 dated as of April 7, 2000, to the Stockholder Rights Agreement dated as of March 9, 1999, between Merrimac and ChaseMellon Stockholder Services, L.L.C., as Rights Agent, is hereby incorporated by reference to Exhibit 1(b) to Merrimac's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 10, 2000.
4(d)	Amendment No. 3 dated as of October 26, 2000, to the Stockholder Rights Agreement dated as of March 9, 1999, between Merrimac and ChaseMellon Stockholder Services, L.L.C., as Rights Agent, is hereby incorporated by reference to Exhibit 2 to Merrimac's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 27, 2000.
4(e)	Amendment No. 4 dated as of February 21, 2001, to the Stockholder Rights Agreement dated as of March 9, 1999, between Merrimac and Mellon Investor Services, L.L.C. (formerly known as ChaseMellon Stockholder Services, L.L.C.), as Rights Agent, is hereby incorporated by reference to Exhibit 1(d) to Merrimac's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 21, 2001.
4(f)	Amendment No. 5, dated February 28, 2002, to the Rights Agreement, between Merrimac and Mellon Investor Services LLC (f.k.a. ChaseMellon Shareholder Services, L.L.C.), as Rights Agent is hereby incorporated by reference to Exhibit 99.4 to Merrimac's Form 8-K filed with the Securities and Exchange Commission on March 6, 2002.
4(g)	Amendment No. 6, dated September 18, 2002, to the Rights Agreement, between Merrimac and Mellon Investor Services LLC, as Rights Agent is hereby incorporated by reference to Exhibit 99.3 to Merrimac's Form 8-K filed with the Securities and Exchange Commission on October 10, 2002.
4(h)	Amendment No. 7, dated December 13, 2004, to the Rights Agreement, between Merrimac and Wachovia Bank, National Association, as successor Rights Agent, is hereby incorporated by reference to Exhibit 4.1 to Merrimac's Form 8-K filed with the Securities and Exchange Commission on December 13, 2004.

<b>EXHIBIT NUMBER</b>	<b>DESCRIPTION OF EXHIBIT</b>
4(i)	Amendment No. 8, dated March 14, 2007, to the Rights Agreement, between Merrimac and American Stock Transfer & Trust Company is hereby incorporated by reference to Exhibit 4.1 to Merrimac's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 14, 2007.
10(a)	Registration Rights Agreement dated as of April 7, 2000, between Merrimac and Ericsson Holding International, B.V. is hereby incorporated by reference to Exhibit 10(b) to Merrimac's Quarterly Report on Form 10-QSB for the period ending July 1, 2000.
10(b)	Registration Rights Agreement dated October 26, 2000, between Merrimac and Ericsson Holding International, B.V. is hereby incorporated by reference to Exhibit 10(u) to Merrimac's Annual Report on Form 10-KSB dated for the year ending December 30, 2000.
10(c)	Registration Rights Agreement, dated February 28, 2002 between Merrimac and DuPont Chemical and Energy Operations, Inc., a subsidiary of E.I. DuPont de Nemours and Company is hereby incorporated by reference to Exhibit 99.3 to Merrimac's Form 8-K filed with the Securities and Exchange Commission on March 6, 2002.
10(d)	Profit Sharing Plan of Merrimac is hereby incorporated by reference to Exhibit 10(n) to Merrimac's Registration Statement on Form S-1 (No. 2-79455).*
10(e)	1993 Stock Option Plan of Merrimac effective March 31, 1993, is hereby incorporated by reference to Exhibit 4(c) to Merrimac's Registration Statement on Form S-8 (No. 33-68862) dated September 14, 1993.*
10(f)	1997 Long-Term Incentive Plan of Merrimac is hereby incorporated by reference to Exhibit A to Merrimac's Proxy Statement filed with the Securities and Exchange Commission on April 11, 1997.*
10(g)	Resolutions of the Stock Option Committee of the Board of Directors of Merrimac adopted June 3, 1998, amending the 1983 Key Employees Stock Option Plan of Merrimac, the 1993 Stock Option Plan of Merrimac and the 1997 Long-Term Incentive Plan of Merrimac and adjusting outstanding awards thereunder to give effect to Merrimac's 10% stock dividend paid June 5, 1998, are hereby incorporated by reference to Exhibit 10(f) to Merrimac's Annual Report on Form 10-KSB for the year ending March 30, 1999.*
10(h)	Consulting Agreement dated as of January 1, 1998, between Merrimac and Arthur A. Oliner is hereby incorporated by reference to Exhibit 10 to Merrimac's Quarterly Report on Form 10-QSB for the period ending April 4, 1998.*
10(i)	Separation Agreement dated as of December 31, 1998, between Merrimac and Eugene W. Niemiec is hereby incorporated by reference to Exhibit 10(p) to Merrimac's Annual Report on Form 10-KSB for the year ending January 2, 1999.*
10(j)	Stockholder's Agreement dated as of October 30, 1998, between Merrimac and Charles F. Huber II is hereby incorporated by reference to Exhibit 10 to Merrimac's Quarterly Report on Form 10-QSB for the period ending October 3, 1998.
10(k)	2001 Stock Option Plan is hereby incorporated by reference to Exhibit 4.01 to Merrimac's Form S-8 (No. 333-63436) dated June 20, 2001.*
10(l)	2001 Stock Purchase Plan is hereby incorporated by reference to Exhibit 4.01 to Merrimac's Form S-8 (No. 333-63438) dated June 20, 2001.*
10(m)	2001 Amended and Restated Stock Option Plan is hereby incorporated by reference to Exhibit 4(i) to Merrimac's Quarterly Report on Form 10-QSB for the period ending June 30, 2001.*

<b>EXHIBIT NUMBER</b>	<b>DESCRIPTION OF EXHIBIT</b>
10(n)	Financing Agreement, dated October 8, 2003, between Merrimac and The CIT Group/Business Credit, Inc. is hereby incorporated by reference to Exhibit 10(qq) to Merrimac's Form 10-QSB for the period ending September 27, 2003.
10(o)	Trademark and Patent Security Agreement, dated October 8, 2003, between Merrimac and The CIT Group/Business Credit, Inc. is hereby incorporated by reference to Exhibit 10(rr) to Merrimac's Form 10-QSB for the period ending September 27, 2003.
10(p)	Mortgage and Security Agreement, dated October 8, 2003, by Merrimac in favor of The CIT Group/Business Credit, Inc. is hereby incorporated by reference to Exhibit 10(ss) to Merrimac's Form 10-QSB for the period ending September 27, 2003.
10(q)	Merrimac Severance Plan, as adopted March 29, 2006, is hereby incorporated by reference to Exhibit 10(z) to Merrimac's Annual Report on Form 10-K for the year ending December 31, 2005.
10(r)	Stock Purchase Agreement, dated March 29, 2006, between Merrimac and Mason N. Carter, is hereby incorporated by reference to Exhibit 10(aa) to Merrimac's Annual Report on Form 10-K for the year ending December 31, 2005.
10(s)	Employment Agreement, dated April 11, 2006, between Merrimac and Mason N. Carter, is hereby incorporated by reference to Exhibit 10.1 to Merrimac's Current Report on Form 8-K filed with the Securities Exchange and Commission on April 14, 2006.
10(t)	2006 Stock Option Plan is hereby incorporated by reference to Exhibit A of Merrimac's Definitive Proxy Statement filed with the Securities and Exchange Commission on May 1, 2006.
10(u)	2006 Key Employee Incentive Plan is hereby incorporated by reference to Exhibit B of Merrimac's Definitive Proxy Statement filed with the Securities and Exchange Commission on May 1, 2006.
10(v)	2006 Non-Employee Directors' Stock Plan is hereby incorporated by reference to Exhibit C of Merrimac's Definitive Proxy Statement filed with the Securities and Exchange Commission on May 1, 2006.
10(w)	Revolving Credit, Term Loan and Securities Agreement, dated October 19, 2006, between Merrimac and North Fork Bank, is hereby incorporated by reference to Exhibit 10.1 to Merrimac's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 20, 2006.
21+	Subsidiaries of Merrimac.
23.1+	Consent of Independent Registered Public Accounting Firm Grant Thornton LLP.
31.1+	Chief Executive Officer's Certificate, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2+	Chief Financial Officer's Certificate, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+	Chief Executive Officer's Certificate, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2+	Chief Financial Officer's Certificate, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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\* Indicates that exhibit is a management contract or compensatory plan or arrangement.

+ Indicates that exhibit is filed as an exhibit hereto.

**MERRIMAC INDUSTRIES, INC. AND SUBSIDIARIES**  
**SCHEDULE II VALUATION AND QUALIFYING ACCOUNTS**  
(In thousands)

Description	Balance at Beginning of Year	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Year
Deducted from asset accounts:					
For the 2004 fiscal year ended January 1, 2005					
Allowance for doubtful accounts(a)	\$ 50	\$ 30	\$ –	\$ 21 (d)	\$ 59
Reserve for inventory obsolescence(b)	\$ 1,041	\$ 211	\$ –	\$ 211	\$ 1,041
Reserve for cost overruns(b)	\$ 747	\$ 168	\$ –	\$ 14	\$ 901
Restructuring charges(c)	\$ 103	\$ –	\$ –	\$ 93	\$ 10
Warranty reserve(c)	\$ 150	\$ 28	\$ –	\$ –	\$ 178
Valuation allowance on deferred tax assets	\$ 1,846	\$ –5	\$ –	\$ 391	\$ 1,455
Deducted from asset accounts:					
For the 2005 fiscal year ended December 31, 2005					
Allowance for doubtful accounts(a)	\$ 59	\$ (9)	\$ –	\$ –	\$ 50
Reserve for inventory obsolescence(b)	\$ 1,041	\$ 99	\$ –	\$ 106	\$ 1,034
Reserve for cost overruns(b)	\$ 901	\$ (851)	\$ –	\$ –	\$ 50
Restructuring charges(c)	\$ 10	\$ –	\$ –	\$ 10	\$ –
Warranty reserves(c)	\$ 178	\$ (10)	\$ –	\$ –	\$ 168
Valuation allowance on deferred tax assets	\$ 1,455	\$ 270	\$ –	\$ 165	\$ 1,560
Deducted from asset accounts:					
For the 2006 fiscal year ended December 30, 2006					
Allowance for doubtful accounts(a)	\$ 50	\$ –	\$ –	\$ –	\$ 50
Reserve for inventory obsolescence(b)	\$ 1,034	\$ 235	\$ –	\$ 180	\$ 1,089
Reserve for cost overruns(b)	\$ 50	\$ 35	\$ –	\$ –	\$ 85
Restructuring charges(c)	\$ –	\$ 286	\$ –	\$ 146	\$ 140
Warranty reserve(c)	\$ 168	\$ 88	\$ –	\$ –	\$ 256
Valuation allowance on deferred tax assets	\$ 1,560	\$ 1,018	\$ –	\$ –	\$ 2,578

- (a) Included in accounts receivable.  
(b) Included in inventory.  
(c) Included in accrued liabilities.  
(d) Comprised of uncollected accounts charged against the allowance.

## 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.

### MERRIMAC INDUSTRIES, INC.

(Registrant)

Date: April 16, 2007

By: /s/ Mason N. Carter  
Mason N. Carter  
Chairman, President and  
Chief Executive Officer

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

<u>Signature</u>	<u>Date</u>	<u>Title</u>
<u>/s/ Mason N. Carter</u> (Mason N. Carter)	April 16, 2007	Chairman, President and Chief Executive Officer (Principal executive officer and Director)
<u>/s/ Albert H. Cohen</u> (Albert H. Cohen)	March 26, 2007	Director
<u>/s/ Edward H. Cohen</u> (Edward H. Cohen)	March 28, 2007	Director
<u>/s/ Fernando L. Fernandez</u> (Fernando L. Fernandez)	March 29, 2007	Director
<u>/s/ Joel H. Goldberg</u> (Joel H. Goldberg)	March 27, 2007	Director
<u>/s/ David B. Miller</u> (David B. Miller)	March 26, 2007	Director
<u>/s/ Arthur A. Oliner</u> (Arthur A. Oliner)	March 28, 2007	Director
<u>/s/ Harold J. Raveché</u> (Harold J. Raveché)	March 27, 2007	Director
<u>/s/ Robert V. Condon</u> (Robert V. Condon)	April 16, 2007	Vice President, Finance, Treasurer, Secretary and Chief Financial Officer (principal financial and accounting officer)

**Exhibit 21**

<u>Name</u>	<u>Jurisdiction of Organization</u>	<u>Percentage owned by the Company</u>
1. 508790 N.B. Inc.	Province of New Brunswick, Canada	100%
2. Filtran Microcircuits Inc.	Province of New Brunswick, Canada	100%
3. Multi-Mix <sup>®</sup> Microtechnology, S.R.L.	Costa Rica	100%

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**Consent of Independent Registered Public Accounting Firm**

We have issued our report dated March 27, 2007 accompanying the consolidated financial statements and schedule included in the Annual Report of Merrimac Industries, Inc. on Form 10-K for the year ended December 30, 2006 (which report contains an explanatory paragraph relating to the adoption of SEC Staff Accounting Bulletin No. 108, "Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements" and Financial Accounting Standards Board Statement No. 123(R), "Share-Based Payments"). We hereby consent to the incorporation by reference of said report in the Registration Statements of Merrimac Industries, Inc. on Forms S-8 (Registration No. 333-36795, dated September 30, 1997, as amended February 23, 2001, Registration No. 333-36199, dated September 23, 1997, as amended February 23, 2001, Registration No. 33-68862, dated September 15, 1993, as amended February 23, 2001, Registration No. 333-09663, dated August 6, 1996, as amended February 23, 2001, Registration No. 333-63434, dated June 20, 2001, Registration No. 333-63436, dated June 20, 2001, Registration No. 333-63438, dated June 20, 2001, Registration No. 333-135870 dated July 20, 2006 and Registration Statement No. 333-135874 dated July 20, 2006).

/s/ Grant Thornton LLP

Edison, New Jersey  
April 13, 2007

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CERTIFICATION

I, Mason N. Carter, certify that:

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

April 16, 2007

/s/ Mason N. Carter  
Mason N. Carter  
Chairman, President and  
Chief Executive Officer

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CERTIFICATION

I, Robert V. Condon, certify that:

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

Date: April 16, 2007

/s/ Robert V. Condon  
Robert V. Condon  
Vice President, Finance and  
Chief Financial Officer

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**CERTIFICATE PURSUANT TO  
18 U.S.C. SECTION 1350  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES–OXLEY ACT OF 2002**

The undersigned, Mason N. Carter, Chief Executive Officer of Merrimac Industries, Inc. (the "Company"), hereby certifies, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes–Oxley Act of 2002, that:

- (1) The Company's Annual Report on Form 10–K for the fiscal year ending December 30, 2006, as filed with the Securities and Exchange Commission on the date hereof (the "Annual Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Mason N. Carter  
Mason N. Carter  
Chief Executive Officer  
April 16, 2007

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**CERTIFICATE PURSUANT TO  
18 U.S.C. SECTION 1350  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES–OXLEY ACT OF 2002**

The undersigned, Robert V. Condon, Chief Financial Officer of Merrimac Industries, Inc. (the "Company"), hereby certifies, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes–Oxley Act of 2002, that:

- (1) The Company's Annual Report on Form 10–K for the fiscal year ending December 30, 2006, as filed with the Securities and Exchange Commission on the date hereof (the "Annual Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert V. Condon  
Robert V. Condon  
Chief Financial Officer  
April 16, 2007

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