

NANOMETRICS INC
Form 10-K/A
February 23, 2006
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

(Amendment No. 2)

(Mark One)

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

For the fiscal year ended January 1, 2005

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: 0-13470

NANOMETRICS INCORPORATED

(Exact name of registrant as specified in its charter)

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California
(State or other jurisdiction of incorporation or organization)

94-2276314
(I.R.S. Employer Identification Number)

1550 Buckeye Drive

Milpitas, California
(Address of principal executive offices)

95035
(Zip Code)

Registrant's telephone number, including area code: (408) 435-9600

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

None

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

Common Stock, no par value

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the 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 shell company (as defined in Rule 12b-2 of the Exchange Act.): Yes No

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

As of July 2, 2004, the last business day of our most recently completed second fiscal quarter, the aggregate market value of the Common Stock of the registrant held by non-affiliates was approximately \$73,351,027. Shares of voting stock held by each officer and director and by each person who owns 5% or more of the outstanding voting stock have been excluded because such persons may be deemed to be affiliates as that term is defined under the rules and regulations of the Securities Exchange Act of 1934, as amended. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 24, 2005, 12,576,644 shares of the registrant's Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the registrant's definitive proxy statement, to be filed with the Securities and Exchange Commission in connection with the registrant's upcoming annual meeting of shareholders for the fiscal year ended January 1, 2005, are incorporated by reference in Part III of this Form 10-K.

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NANOMETRICS INCORPORATED

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YEAR ENDED JANUARY 1, 2005

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EXPLANATORY NOTE

On October 26, 2005, the Company's Audit Committee, acting on a recommendation from the Company's management, determined that the Company's audited financial statements for the fiscal year ended January 1, 2005, and its unaudited quarterly financial statements for the periods ended April 2, 2005 and July 2, 2005, respectively, should be restated to revise the accounting for certain post-sale warranty services and other items. The restatement impacts the year ended January 1, 2005 presented herein and is further discussed in Note 2 to the condensed consolidated financial statements included herein.

This amendment to the Company's Annual Report on Form 10-K/A is being filed solely for the purpose of amending and restating Items 1, 6, 7 and 8 of the Form 10-K originally filed solely to the extent necessary (i) to reflect the restatement of the Company's condensed consolidated financial statements as of and for the year ended January 1, 2005 as described in Note 2 to the condensed consolidated financial statements and (ii) to make revisions to Management's Discussion and Analysis of Financial Condition and Results of Operations as warranted by the restatement, (iii) to make revisions to Item 9A of Part II to reflect our evaluation of controls and procedures as of the date of filing this amended Annual Report on Form 10-K/A, (iv) to include the certifications required by the Sarbanes-Oxley Act of 2002 and (v) to update the exhibits. The Company has made no further changes to the originally filed Form 10-K. All other information in this amended Annual Report on Form 10-K/A is as of the date the Annual Report on Form 10-K was originally filed and does not reflect any subsequent information or events other than those described above.

Subsequent to the filing of this Form 10-K/A, the Company will file an Amendment No. 1 to its Quarterly Report on Form 10-Q/A for the periods ended April 2, 2005 and July 2, 2005, respectively, to reflect restatements of the Company's consolidated balance sheet as of each respective quarter end and the Company's consolidated statements of operations and cash flows for the three-month periods ended April 2, 2005 and April 3, 2004 and the six-month periods ended July 2, 2005 and July 3, 2004.

As stated above, the Company is filing this Amendment No. 2 to its Annual Report on Form 10-K/A for the year ended January 1, 2005 and as such, the unaudited quarterly financial statements in the Quarterly Reports on Form 10-Q for the periods ended April 3, 2004, July 3, 2004 and October 2, 2004, should no longer be relied upon. The Company has not amended and does not intend to amend its previously filed Quarterly Reports on Form 10-Q for the periods affected by the restatement prior to January 1, 2005 as the 2004 restatement information will be reflected in the Quarterly Reports on Form 10-Q/A for the three-month periods ended April 2, 2005 and July 2, 2005 and in the Quarterly Report on Form 10-Q for the three-month period ended October 1, 2005 with the statement of operations information also included in this Form 10-K/A.

Forward-Looking Statements

This Annual Report on Form 10-K/A contains forward-looking statements that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements regarding trends in demand in our industry, the increased use of metrology in manufacturing, the drive toward integrated metrology and the broadening of our technology portfolio. Words such as believe, expect, anticipate or similar expressions, are indicative of forward-looking statements.

Our actual results may differ materially from the results discussed in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those outlined in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations Risks Related to Our Business and Management's Discussion and Analysis of Financial Condition and Results of Operations Risks Relating to

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the Merger with August Technology Corporation, below. The forward-looking statements contained herein are made as of the date hereof, and we assume no obligation to update such forward-looking statements or to update reasons actual results could differ materially from those anticipated in such forward-looking statements.

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PART I

ITEM 1. BUSINESS

Overview

We are a leader in the design, manufacture, and marketing of high-performance process control metrology systems used in the manufacture of semiconductors/integrated circuits and flat panel displays. Our metrology systems (i) measure various thin film properties, critical circuit dimensions and layer-to-layer circuit alignment (overlay) and (ii) inspect for surface defects during various steps of the manufacturing process, enabling semiconductor and integrated circuit manufacturers to improve yields, increase productivity and lower their manufacturing costs. The relative alignment of sequentially patterned thin film layers is critical to device production.

We have been a pioneer and innovator in the field of metrology for nearly three decades. We have been selling metrology systems since 1977 and have an extensive installed base with industry leading customers worldwide, including Applied Materials Inc., Samsung, Hynix Semiconductor Inc., IBM, Intel Corporation, Micron Technology, Inc., TSMC Ltd., Renesas, Powerchip, UMC, Ebara, Chi Mei, AU Optronics and Hannstar.

On January 21, 2005, we announced a definitive agreement to merge our business with August Technology Corporation, a leading provider of defect inspection technology headquartered in Bloomington, Minnesota. Upon consummation of the merger, Nanometrics will be renamed August Nanometrics Inc. and reincorporated into Delaware. Additionally, August Technology will become a wholly owned subsidiary of August Nanometrics. Each share of August Technology common stock will be converted into the right to receive 0.6401 of a share of August Nanometrics common stock upon consummation of the merger. The merger is expected to close during the second quarter of 2005, and is subject to customary closing conditions, including receipt of shareholder approval from the shareholders of Nanometrics and August Technology. See Management's Discussion and Analysis of Financial Condition and Results of Operations Risks Relating to the Merger with August Technology Corporation for more information concerning this announcement.

We intend to file a joint proxy statement/prospectus in connection with the proposed merger as well as other documents related to the merger. Investors and security holders are urged to read these filings when they become available because they will contain important information about the proposed merger. Investors and security holders may obtain free copies of these documents (when they are available) and other documents filed with the Securities and Exchange Commission at the Securities and Exchange Commission's web site at www.sec.gov. Investors and security holders may obtain free copies of the documents filed by Nanometrics with the Securities and Exchange Commission by contacting Investor Relations at 1550 Buckeye Drive, Milpitas, California 95035, 408.435.9600. In addition, investors and security holders may read and copy any reports, statements and other information filed by Nanometrics at the SEC public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 800.SEC.0330 for further information on the public reference room. Nanometrics and August Technology and their respective directors and executive officers may be deemed to be participants in the solicitation of proxies from the shareholders of Nanometrics and August Technology in connection with the proposed merger. Certain officers and directors of Nanometrics have interests in the proposed merger, including their ownership of Nanometrics common stock, and their interests will be described in the joint proxy statement/prospectus when it becomes available.

Our Business

We offer a complete line of systems to address the metrology requirements of our customers. Our metrology systems can be categorized as follows:

Standalone, fully automated systems for high-volume manufacturing operations;

Integrated systems for integration into semiconductor processing equipment that provide real-time measurements and feedback to improve process control and increase throughput; and

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Tabletop systems used to provide manual or semi-automatic measurements for engineering and low-volume production environments.

We also provide systems that are used to measure the overlay accuracy of successive layers of semiconductor patterns on wafers in the photolithography process. The accurate alignment, or overlay, of successive film layers, relative to each other, across the wafer is critical for device performance and favorable production yields.

We believe that process control metrology is growing at a greater rate than other segments of the semiconductor equipment market. As films become thinner, film materials more exotic, and circuit dimensions and overlay requirements more demanding, metrology and inspection continue to grow in importance, especially as wafers become larger and more expensive to manufacture. We expect these factors will drive the demand for our high-end, standalone metrology and integrated products.

Additional demands on process tool manufacturers for better film uniformity, tighter dimensional control, tool-to-tool matching and within-tool chamber uniformity is driving the need for integrated process control metrology. These new tool requirements will drive the need to place metrology inside the process tool for real-time, integrated, process control metrology, using both feed forward and feedback of the collected metrology data to control the process equipment.

We have made several strategic changes in our business model to enable us to further address these metrology trends. These changes include:

The separation of our business in Japan into two facilities to better serve the semiconductor and flat panel display (FPD) metrology markets.

The building of our position as a leading supplier of integrated metrology systems;

The introduction of several new 300 millimeter wafer platforms for both advanced standalone and integrated metrology;

The continued outsourcing of certain system components, such as robotics, enabling us to leverage our technical resources;

The maximum utilization of an in-house manufacturing strategy for our products; and

The development of new measurement technologies for advanced lithography and ultra-thin film deposition.

Demand for our products is driven by the increasing use of multiple thin film technology by manufacturers of electronic products and, more recently, by the increased adoption of both integrated metrology and advanced process control (APC) by semiconductor manufacturers. With feature sizes shrinking below 90 nanometers, well below the wavelength of light, the need for very tight process tolerances as well as productivity improvements in semiconductor fabrication, or fabs, are driving the need for integrated metrology and APC. Our innovative Optical Critical Dimension (OCD) measurement system is being increasingly viewed not only as an enabling technology for APC, but also as a solution for critical dimension measurement.

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We combined our deep ultraviolet (DUV) reflectometry technology with the OCD technology in a single, integrated metrology module, the NanoOCD/DUV 9010. The compact size and speed of this OCD/DUV technology enables the measurement system to be fully integrated into the customer s process tool, thus providing a complete, feed forward and feedback APC solution for wafer-to-wafer closed loop control. By measuring the critical dimensions of developed photoresist and then adjusting the final etched dimensions of a silicon gate-etch process by feeding this information back into the process and trimming the resist, the device manufacturer is able to achieve the maximum possible microprocessor speed. In addition, new semiconductor process technologies, such as copper interconnects, require that new measurement technologies be developed in order to keep pace with the latest metrology demands. Our new, combined integrated metrology module represents a unique solution to the problem of measuring the remaining oxide film thickness as well as the loss of material over arrays of copper lines during the chemical mechanical planarization (CMP) process.

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Our OCD technology has also proven to be applicable to the emerging requirements for advanced lithography measurements such as the characterization of critical dimensions and film thicknesses on masks and reticles which are comprised of square glass substrates. We introduced the Nanometrics Atlas-M, the first fully automated, standalone metrology system to use OCD technology for these square glass substrates. This system is crucial to the suppliers of masks and reticles by providing the means for accurately determining line widths and analyzing complex profiles for a variety of structures found in today's mask fabrication process.

We successfully beta tested the Nanometrics Orion Overlay Control System at a leading semiconductor memory device manufacturer. The Orion is an advanced overlay metrology and analysis system for monitoring microlithography stepper performance. Orion provides exceptional throughput and measurement performance required by today's demanding 200mm and 300mm overlay control applications.

We have continued the development the Universal Defect Inspection (UDI) system following the successful beta site testing at a leading integrated device manufacturer (IDM). The NanoUDI technology can be configured as either a standalone, fully automated 300-millimeter system or an integrated module for defect and contamination detection on a wide variety of films and surfaces. The system combines high efficiency illumination and high-resolution optics with sophisticated image processing to detect and classify particles and defects in the sub-micron range.

Many types of thin films are used in the manufacture of products, such as semiconductor integrated circuits and flat panel displays. These products require the precise electronic, optical and surface properties enabled by thin film metrology. The need for tighter process control and improved productivity has created increased demand for our advanced standalone and integrated metrology systems.

Industry Characteristics

Growth

Moore's Law which, simply stated, predicts a doubling of integrated circuit performance with a 50% reduction in manufacturing costs every 18 months, is an important factor in determining factory investment in the semiconductor industry. Two important industry drivers are: (i) the increasing complexity of chip designs as users of semiconductor chips demand increasingly higher performance and require more complicated manufacturing processes and (ii) the market pressure for lower cost chips. The semiconductor equipment industry has experienced cyclical growth with a compounded annual growth rate of approximately 15-17% over the past 20 years. The semiconductor industry recently emerged from an exceptionally long, cyclical downturn, and 2004 saw a growth in semiconductor equipment revenues of approximately 60% over 2003. We believe that the convergence of 300-millimeter wafer size, copper interconnects and fast, sub-100 nanometer architecture will continue to drive the demand for new metrology solutions, such as those that we offer, and that the process control market segment will continue to outpace overall equipment growth.

In the past, demand for Internet access, personal computers, telecommunications, and new consumer electronic products and services has fueled growth of the semiconductor, data storage and flat panel display industries. New display technologies, consumer electronics, automotive electronics and personal computers will likely continue as the primary drivers in the near-term for the semiconductor industry. We believe that consumer desire for high performance electronics drives technology advancement in semiconductor design and manufacturing and, in turn, promotes the purchasing of capital equipment featuring the latest advances in technology.

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The two significant factors affecting demand for our measurement systems are: (i) new construction or refurbishment of manufacturing facilities, which, in turn, depends on the current and anticipated market demand for semiconductors, disk drives, flat panel displays, and products that use such components, and (ii) the increasing complexity of the manufacturing process as a result of the demand for higher performance semiconductors and flat panel displays.

Semiconductor Manufacturing Process

Semiconductors are fabricated by a series of process steps on a wafer substrate made of silicon or other material. Our thin film, critical dimension, overlay metrology and defect inspection systems can be used at many points during the fabrication process to monitor and measure circuit dimensions, layer-to-layer registration and film uniformity as well as material properties in order to maximize the yield of acceptable semiconductors. Each wafer typically goes through a series of 100 to 500 process and metrology steps in generally repetitive cycles.

The four primary wafer film processing steps are:

Deposition;

Chemical Mechanical Planarization;

Photolithography imaging and overlay; and

Etching of circuit elements.

Deposition. Deposition refers to placing layers of insulating or conducting materials on a wafer surface in thin films that make up the circuit elements of semiconductor devices. Common methods of deposition include chemical vapor deposition (CVD), plasma-enhanced chemical vapor deposition (PECVD) and physical vapor deposition (PVD). Diffusion and oxidation are also used to create or define thin films. The control of uniformity and thickness during the formation of these films is critical to the performance of the semiconductor circuit.

Chemical Mechanical Planarization. CMP flattens, or planarizes, the topography of the film surface to permit the multiple patterns of small features on the resulting smoothed surface by the photolithography process. The CMP process is a combination of chemical etching and mechanical polishing and commonly uses an abrasive liquid and polishing pad. Semiconductor manufacturers need metrology systems to control the CMP process by measuring the thin film layer to determine precisely when the appropriate thickness has been achieved.

Photolithography. Photolithography is the process step that projects the patterns of the circuits on the chip. A wafer is pre-coated with photoresist, a light sensitive film, that must have an accurate thickness and uniformity for exposure. Photolithography involves the optical projection of integrated circuit patterns onto the photoresist after which, the photoresist is developed, leaving unexposed areas available for etching. In order to precisely control the photolithography process, it is necessary to verify reflectivity, film thickness, critical dimensions and overlay registration.

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Etch. Etch is a dry or wet process for selectively removing unwanted areas that have been deposited on the surface of a wafer. A film of developed photoresist protects material that needs to be left untouched by the etch to make up the circuits. Thin film metrology systems are required to verify precision of material removal and critical dimension achievement.

Before and after deposition, CMP, photolithography and etch, the wafer surface is measured to determine the quality of the film or pattern and to find defects. Measurements taken to ensure process uniformity include thickness, width, height, roughness and other characteristics. Process control helps avoid costly rework or misprocessing and results in higher yields for semiconductor manufacturers.

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These processing steps are typically repeated multiple times during the fabrication process, with alternating layers of insulating and conducting films. Depending on the specific design of a given integrated circuit, a variety of film types and thicknesses and a number of layers can be used to achieve desired electronic performance characteristics. The semiconductors are then tested, separated into individual circuits, assembled and packaged into an integrated circuit.

Flat Panel Display Manufacturing Processes

Flat panel displays are manufactured in clean rooms using thin film measurement systems that are similar to those used in semiconductor manufacturing. Most flat panel displays are constructed on large glass substrates that currently range in size up to 1,870 x 2,200 millimeters and should increase to up to 2,160 x 2,400 millimeters by the end of 2005.

Increased Use of Metrology in Manufacturing

We believe that continually rising wafer costs are forcing semiconductor manufacturers to re-evaluate their manufacturing strategies at all levels, from individual process steps to fabwide process optimization. Many major semiconductor manufacturers are adopting feed-forward and feedback of film thickness and critical dimensions, or CDs, based on real-time data from metrology systems. Major benefits of these new metrology strategies are higher manufacturing efficiencies from reduced rework, reduced headcount to perform at the same quality level and increased device performance. Additional benefits include process tool matching and more precise control of the overall manufacturing process.

Drive Toward Integrated Metrology

For many years, semiconductor manufacturers have sought to improve fab efficiency by choosing systems that integrate more than one process step into a single tool. Integrated metrology solutions increase productivity with higher throughput, smaller overall product footprints, reduced wafer handling and faster process development. This trend began in the mid-1980s, as leading manufacturers introduced a cluster process tool architecture that combined multiple processes in separate chambers around a central wafer-handling platform.

Today, although there is continued focus on increased productivity driving the adoption of integrated metrology, there is an additional requirement for tighter process tolerances with advanced, sub-90nm technologies. This new requirement is driving integrated process control metrology as necessary for many processes, such as planarization, deposition, lithography and etch. As a result, we continue to see the emergence of integrated metrology using both feed-forward and feedback process tool control in real time. Integrated metrology has already shown its ability to control key process parameters during the manufacturing process. Additional benefits include extended tool availability and improved utilization. Tighter control of the process means lower material and processing costs. Integrated metrology also provides rapid fault detection, improved excursion control and loss prevention, which can be elusive with only open-loop standalone metrology.

Before we introduced integrated metrology, semiconductor manufacturers were required to physically transport wafers from a process tool to a separate metrology system in order to make critical measurements such as film thickness and uniformity. Manufacturers of process equipment are increasingly seeking to offer their customers integrated metrology in their tools to lower costs and improve overall fab efficiency. Integrated metrology provides semiconductor manufacturers with several additional benefits, including a reduction in the number of test wafers, increased overall process throughput, faster detection of process excursions and faults, reduced wafer handling, faster process development and ultimately an improvement in overall equipment effectiveness.

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Nanometrics Offerings

We offer a complete line of systems to address the broad range of metrology requirements of our customers.

Our metrology systems can be categorized as follows:

Standalone, fully automated systems used for the characterization and measurement of thin films in high-volume manufacturing operations. We offer a broad line of fully automated thin film thickness, critical dimension, defect inspection and overlay measurement systems. These systems remove the dependence on human operators by incorporating reliable wafer handling robots and are designed to meet the speed, measurement, performance and reliability requirements that are essential for today's semiconductor and flat panel display manufacturing facilities. Each of these measurement systems uses non-destructive, optical techniques to analyze and measure films. Our fully automated metrology product line also includes systems that are used to measure the critical dimensions and overlay registration accuracy of successive layers of semiconductor patterns on wafers in the photolithography process.

Integrated systems used to measure in-process wafers automatically and quickly without having to leave the enclosed wafer processing system. In 1998, we introduced our high-speed integrated metrology system. Our integrated metrology systems are compact and monitor a multitude of small test points on the wafer using sophisticated pattern recognition. Our integrated systems can be attached to film deposition, planarization, lithography, etch and other process tools to provide rapid monitoring of films on each wafer immediately before or after processing. Integrated systems can offer customers significantly increased operating efficiency and equipment utilization, lower manufacturing costs and higher throughput. We anticipate continuing to ship integrated systems to many original equipment manufacturers for installation on their planarization, deposition, litho and etch tools.

Tabletop systems used to manually or semi-automatically measure thin films in engineering and low-volume production environments. We have been a pioneer and leading supplier of tabletop thin film thickness measurement systems, which are mainly used in low-volume production environments such as failure analysis and engineering labs. Our tabletop models have multiple capabilities and several available configurations, depending on wafer handling, range of films to be measured, uniformity mapping and other customer needs.

Each of our measurement systems provides for the measurement, visualization and control of film uniformity and thickness, critical dimensions and profiles, and layer-to-layer registration/overlay. In addition, we have developed new automated systems and tabletop products for emerging technologies using larger substrates such as 300-millimeter silicon wafers and larger flat panel displays. We were one of the first companies to ship fully automated thin film thickness measurement systems for 300-millimeter wafers. We have also introduced new technology for the precise thin film measurements that are dictated by sub-100nm design rules and have developed products with mini-environments that meet the latest standards for clean, particle-free manufacturing.

Strategy

Our strategy is to offer and support, on a worldwide basis, technologically advanced metrology solutions that meet the changing manufacturing requirements of the semiconductor and flat panel display industries, as well as other industries that use metrology systems. Our proposed merger with August Technology may enable us to expand our strategy into the macro defect inspection space. Key elements of our strategy include:

Maintaining Organically Developed Technology Leadership. We are committed to developing advanced metrology systems that meet the requirements of advanced semiconductor and flat panel display manufacturing technology. We have an extensive array of proprietary technology and expertise in optics, software and systems integration. We have chosen to reduce our dependence on outside suppliers by taking control of the technology and development of the critical components of our metrology systems. These technologies include polarized reflectometry, precision motion control, extreme dark field imaging, low distortion imaging and advanced algorithms.

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Continuing to Offer Advanced Integrated Metrology Systems. We were one of the first suppliers to offer products that integrate process metrology systems into wafer processing equipment. We supply integrated metrology systems for Applied Materials Mirra Mesa and 300mm Reflexion CMP systems and the Producer QA and SECD systems. Our optical critical dimension (OCD) metrology system is incorporated in the Applied Materials Transforma 300mm etch system for controlling critical dimensions. The introduction of the first combined OCD/DUV integrated metrology product has allowed us to penetrate additional OEM suppliers of etch processing and CMP equipment, including Hitachi High Tech (HHT), Dainippon Screen (DNS) and Ebara. The introduction of the NanoOCD/DUV 9010T enhanced integrated metrology product has led to additional design wins at TEL/Timbre. Our integrated metrology sales group continues to focus on sales of integrated metrology products to both original equipment manufacturers (OEMs) and end-users.

Broadening Our Product Portfolio. We intend to continue to add a wide range of new measurement technologies to our expanding base of intellectual property. Our highly successful integrated platform offers a single integrated module that combines OCD and DUV technologies, and enables us to perform critical erosion and film thickness/array measurements for the oxide and copper/metal CMP processes. In addition, our copper/metal profiler for CMP process control combines optical profile measurement or profilometry with our highly successful reflectometry technology to monitor metal removal during the CMP process. These metrologies are key requirements for the copper damascene process, which replaces the current subtractive aluminum process on newer semiconductor devices.

We also participate in the particle and defect inspection market with our Universal Defect Inspection (UDI) technology. This technology has applications not only for inspection of semiconductor wafers but also for flat panel displays for the purpose of detecting defects early in the process before they cause catastrophic yield loss.

Our OCD technology has also been applied to advanced photolithography processes with the introduction of the Nanometrics Atlas-M fully automated metrology system for mask and reticle measurement and characterization. This new product has already successfully correlated the interrelationships between film thickness and critical dimension parameters. The OCD technology has also been successfully extended to perform overlay/registration measurements. Our new diffraction-based overlay (DBO) technology can provide lithographers with wafer overlay control well beyond the requirements of the 65-nanometer node of the International Technology Roadmap for Semiconductors (ITRS) through the year 2010.

Leveraging Existing Customer and Industry Relationships. We expect to continue to strengthen our existing customer relationships and foster working partnerships with semiconductor equipment manufacturers by providing technologically superior systems and high levels of customer support. Our strong industry relationships have allowed close customer collaboration which, in return, facilitates our ability to introduce new products and applications in response to customer needs. We believe that our large customer base will continue to be an important source of new product development ideas. Our large customer base also provides us with the opportunity for increased sales of additional metrology systems to our current customers.

Providing Worldwide Sales and Customer Support. We believe that a direct sales and support capability is beneficial for developing and maintaining close customer relationships and for rapidly responding to changing customer requirements. Because a majority of our revenues come from sources outside of the United States, we have expanded our direct sales force in Japan, South Korea, Taiwan and China, and will continue to expand into additional territories as customer requirements dictate. We use selected sales representatives in non-key territories. We intend to monitor our network by evaluating our existing and new offices, as well as developing additional relationships as needed. We believe that enhancing our sales and customer support network will improve our competitive position.

Addressing Multiple Markets. There are broad applications of our technology beyond the semiconductor industry. We currently offer a comprehensive family of metrology systems that accurately measure thin films, critical dimensions and overlay registration used in manufacturing process. Newer products inspect for particles and defects and monitor critical metal loss during the copper removal process. We

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intend to continue developing and marketing products to address metrology requirements in the manufacture of flat panel displays and any other industries that might apply our technology in the future. We believe that diversification of our technology through applications across multiple industries increases the total available market for our products and reduces, to an extent, our exposure to the cyclicity of any particular market.

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Broadening of our OEM Customer Base. We believe that our OEM customer base will become an increasingly important aspect of our business. In 2004, we began shipping to Ebara, Hitachi, Dainippon Screen and Tokyo Electron Limited (TEL). These OEM design wins, together with our strong OEM position with Applied Materials, is expected to allow us to capitalize on this rapidly growing market segment. Our new, OEM integrated metrology sales group provides additional focus on this market opportunity, which is expected to result in continued increasing acceptance of our products in this sector.

Technology

We believe that our engineering expertise, technology acquisitions, supplier alliances and short-cycle production strategies enable us to develop and offer advanced solutions that address industry trends. By offering common metrology platforms that can be configured with a variety of measurement technologies, our customers can (i) specify high performance systems not easily offered by other suppliers and (ii) narrowly configure a system for a specific application as a cost saving measure.

Spectroscopic Reflectometry. We pioneered the use of micro-spot spectroscopic reflectometry for semiconductor film metrology in the late 1970s. Spectroscopic reflectometry uses multiple wavelengths (colors) of light to obtain an array of data for analysis of film thickness and other film parameters. Today's semiconductor manufacturers still depend on spectroscopic reflectometry for most film metrology applications. Reflectometry is the measurement of reflected light. For film metrology, a wavelength spectrum in the visible region is commonly used. Light reflected from the surfaces of the film and the substrate is analyzed using computers and measurement algorithms. The analysis yields thickness information and other parameters without contacting or destroying the film.

In the mid-1980s, we introduced a DUV reflectometer for material analysis. In 1991, we were awarded a patent for the determination of absolute reflectance in the ultraviolet region. This technology provides enhanced measurement performance for thinner films and for films stacked on top of one another.

Spectroscopic Ellipsometry. Like reflectometry, ellipsometry is a non-contact and non-destructive technique used to analyze and measure films. An ellipsometer analyzes the change in a polarized beam of light after reflection from a film's surface and interface. Our systems are spectroscopic, providing ellipsometric data at many different wavelengths. Spectroscopic ellipsometry provides a wealth of information about a film, yielding very accurate and reliable measurements. In general, ellipsometers are used for thin films and complex film stacks, whereas reflectometers are used for thicker films and stacks.

Optical Critical Dimension Technology. Our OCD technology is a critical dimension measurement technology that is used to precisely determine the dimensions on the semiconductor wafer that directly control the resulting performance of the integrated circuit devices. Our non-destructive, OCD measurement technology is compatible with the current 90nm manufacturing technology and can be extended below 90nm for future requirements in both photo-lithography and etch applications. OCD combines non-contact optical technology with extremely powerful data analysis software to provide highly accurate measurement results for line width, height and sidewall angles. This technology is available in both standalone and integrated platforms.

Overlay Registration. Overlay registration refers to the relative alignment of two layers in the thin film photolithographic process. Our microscope-based, measurement technology utilizes a high magnification, low distortion imaging system combined with proprietary software algorithms to numerically quantify the alignment.

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Diffraction-Based Overlay Registration. We developed diffraction-based overlay as an alternative solution for overlay technology nodes below 90 nanometers. This novel technique extracts overlay alignment error from our broadband OCD technology using specially designed diffraction targets in real-time. The technique is based on spectroscopy rather than imaging, is much more robust than aerial imaging methods, and the total measurement uncertainty is about six times smaller than traditional techniques. This new technology is capable of meeting the advanced design requirements of the 45nm process. A major advantage of the diffraction technique is that the measurement targets can be produced that match the dimensions of the circuits being manufactured, thus providing the immediate benefit of looking at the overlay performance of features that closely resemble the circuit features.

Optical Profilometry. We developed the optical profiler for the measurement of copper metal loss during the chemical mechanical planarization process. This technology uses the combination of an optical interferometer and our reflectometer technology to accurately determine metal loss, even over multiple layers during the final steps of metallization. Our technology is a unique method for precisely and accurately controlling this semiconductor manufacturing process step.

Extreme Dark Field (EDF) Imaging Technology. Our new, dark field inspection technology is used to detect and accurately locate particles and defects on the front and back sides of wafer surfaces, which could potentially lead to device failures and critical yield loss during the semiconductor manufacturing process. The technology combines a high efficiency, broadband light source with a high-resolution detection system and proprietary digital image processing for defect and contamination detection on a wide variety of films and surfaces. We believe that this technology can be readily extended to other manufacturing processes.

Table of Contents**Products**

Our thin film thickness measurement systems use microscope-based, non-contact spectroscopic reflectometry (SR). Some of our systems provide complementary spectroscopic ellipsometry (SE) to measure the thickness and optical characteristics of films on a variety of substrates. In addition, we offer both integrated and standalone optical critical metrology systems to measure critical dimensions of patterns on semiconductor wafers. We also manufacture a line of optical overlay registration systems that are used to determine the alignment accuracy of successive layers of semiconductor patterns on wafers in the photolithography process. Our products can be divided into three groups: automated standalone systems, integrated systems and tabletop systems.

Platform	Market	Substrate Size	Applications	Technology
Automated/				
Standalone Systems				
9100	Semiconductor	75-200mm	CVD, CMP, Etch, Litho, Film Thickness	SR, SE
9200	Semiconductor	150mm 200mm	CVD, CMP, Etch, Litho, Film Thickness	SR
FLX	Semiconductor	200mm 300mm	CVD, CMP, Etch, Litho, Film Thickness, CD	SR, OCD/SR, UDI
Atlas/Atlas-M	Semiconductor	200mm 300mm 6-inch masks/reticles	CVD, CMP, Etch, Litho, Film Thickness, Film Stress, CD	SR, SE, OCD/SE, DBO
6500 Series	Flat Panel Display	Generations 5, 6 and 7	Film Thickness	SR, SE
Orion	Semiconductor	200mm 300mm	Overlay	Imaging
Integrated Systems				
9000	Semiconductor	200mm	CVD, CMP, Film Thickness	SR
9000i	Semiconductor	200mm 300mm	CVD, CMP, Etch, Film Thickness, CD	SR, OCD
9000b	Semiconductor	300mm	CVD, CMP, Etch, Film Thickness	SR
9010/9010b	Semiconductor	300mm	CMP, CVD, Etch, Litho Film Thickness, CD	OCD/SR, CLP, UDI
9010T/9010T/b	Semiconductor	200mm 300mm	CMP, Etch	OCD/SR
Table Top Systems				
3000	Semiconductor	75mm 150mm	Film Thickness	SR
6100	Semiconductor	75mm 150mm 200mm	Film Thickness	SR

Automated/Standalone Systems

Our standalone, fully automated metrology systems are employed in high-volume production environments. These systems incorporate automated material handling interface options for a variety of fab automation environments and implement multiple measurement technologies for a broad range of substrate sizes. Our automated systems range in price from approximately \$200,000 to over \$1,000,000, depending on substrate sizes, measurement technologies, material handling interfaces and other options.

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Nanometrics Atlas and Atlas-M

The Nanometrics Atlas high-performance metrology system combines up to five metrology technologies on a single platform, providing increased measurement capabilities in a small footprint design for reduced cost of ownership. The Atlas-M further extends the versatility of this 300mm platform to provide fully automated mask and reticle measurements. The system is capable of housing up to five metrology technologies including polarized, normal incidence spectroscopic ellipsometry for linewidth profile and critical dimensions, spectroscopic reflectometry for films and film stacks, UV and deep UV spectroscopic ellipsometry for ultra-thin films and film characterization, diffraction-based overlay technology for layer-to-layer registration measurement, and film stress/wafer bow measurements. The Atlas offers high accuracy, high precision metrology for wafer characterization and can be configured for 200mm and 300mm wafer sizes or 6-inch masks and reticles. The system is also compatible with NanoNet, an optional software package that enables users to synchronize standalone and integrated metrology systems for remote process setup and monitoring.

Nanometrics FLX

The Nanometrics FLX flexible metrology system is based on the Atlas automation platform, and is designed to support up to four integrated metrology modules simultaneously the tool can mix-and-match any combination of modules to form a complete metrology solution for lithography, planarization, etch and deposition processes. This capability accelerates process development through parallel development of integrated metrology solutions. The Nanometrics FLX is a flexible, cost-efficient, high-throughput 300-mm standalone metrology system based on Nanometrics proven integrated metrology solutions. The system offers industry-leading throughput of 250-500 wafers per hour fueled by dual multi-axis wafer-handling robots.

NanoSpec 9100

The NanoSpec 9100 standalone, automated thin film measurement system is capable of handling wafers ranging in size from 75 to 200 millimeters in diameter. The 9100 can be configured with a deep ultraviolet (DUV) to near infrared (NIR) spectroscopic ellipsometer for ultra-thin, multiple film stack and DUV lithography measurement applications. Other 9100 options include a standard mechanical interface with mini-environment enclosures for use in ultra-clean manufacturing facilities. The system also features a Windows NT software platform that conforms to the newly establish SEMI user interface standard. The 9100 can also be configured to handle the substrates. We developed the 9100 using technologies from the integrated film thickness systems to allow easy transfer of measurement recipes between the integrated and standalone film metrology systems.

NanoSpec 9200

The NanoSpec 9200 standalone, automated thin film measurement system is capable of handling wafers of 150 and 200 millimeters in diameter. We developed this system, using technologies from the NanoSpec 9000 integrated film thickness system, to be compact and to provide high wafer throughput.

NanoSpec 6500

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The NanoSpec 6500 measures optically transparent films that are used in the manufacture of flat panel displays. The NanoSpec 6500 is an advanced version of our flat panel measurement system with additional proprietary software and hardware enhancements and is capable of handling generation 5, 6 and 7 substrates. Product enhancements include the integration of ultra-violet (UV) spectroscopic reflectometry for the measurement of low temperature, deposited poly-silicon films and UV to near infra-red (NIR) spectroscopic ellipsometry (SE) for the measurement of multilayer film stacks and improved measurement precision.

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Nanometrics Orion

The recently introduced Nanometrics Orion, Advanced Overlay Control System provides enhanced measurement performance and higher wafer throughput and replaces the original Metra line of products. The system is based on the highly successful Atlas platform and offers high throughput in excess of 180 wafers per hour. Orion utilizes a proprietary optical system to provide low total measurement uncertainty (TMU), enabling 1 nanometer, 3-sigma precision in overlay control applications. Orion's aerial image metrology with proprietary digital image folding tolerates wide process variations and reduces the possibility of erroneous data. Both attributes are crucial elements in attaining high yields in 200mm and 300mm volume production.

Integrated Systems

Our integrated metrology systems are installed inside wafer processing equipment to provide near real-time measurements for improving process control and increasing throughput. Our integrated systems are available for wafer sizes up to 300 millimeters and offer DUV spectroscopic reflectometry and/or critical dimension measurement technologies. Our integrated metrology systems range in price from approximately \$80,000 to \$300,000 depending on features and technology.

NanoSpec 9000

The NanoSpec 9000 is an ultra-compact measurement system designed for integration into semiconductor wafer processing equipment. The system can be used in several wafer film process steps, including metal deposition, planarization, chemical vapor photolithography and etch. In its basic configuration, the NanoSpec 9000 is equipped with visible wavelength spectroscopic reflectometry.

NanoSpec 9000i

The NanoSpec 9000i is a 300mm version of the NanoSpec 9000. This metrology platform can be integrated into multiple wafer film process steps including metal deposition, planarization, chemical vapor deposition, photolithography and etch. The NanoSpec 9000i is also equipped with visible wavelength spectroscopic reflectometry and can be extended into deep ultraviolet wavelengths. The NanoSpec 9000i will also support the newly developed optical critical dimension (OCD) technology for the measurement of critical dimensions on semiconductor wafers. The system is designed for integration into semiconductor wafer processing equipment and used in several critical processing steps including photolithography and etch.

NanoOCD 9010M

The NanoOCD 9010M utilizes our production-proven OCD metrology, and enables non-destructive, real-time measurement and profiling of critical features on photomasks and reticles without the limitations and drawbacks associated with CD-SEM metrology. Current CD-SEM technology appears to be reaching its theoretical limits for making critical dimension measurements on these substrates. Photoresist-on-chrome-on-glass features found on reticles and masks suffer severe charging during CD-SEM metrology making critical

dimension measurements impossible. OCD is a non-destructive technology that provides information not available from CD-SEM measurements.

NanoOCD/DUV 9010

The NanoOCD/DUV 9010 is the first integrated metrology tool to combine two measurement technologies on a single platform. The NanoOCD/DUV 9010 incorporates both ultra violet optical critical dimension (OCD) spectroscopic ellipsometry and deep ultra violet (DUV) spectroscopic reflectometry. The NanoOCD/DUV 9010 provides thin film and film stack thickness measurements on pads as well as oxide, nitride and trench profile measurements on arrays in a single tool. The combined technologies provide a complete measurement solution over the entire range of measurement requirements for each process step. This complete metrology capability can be utilized across a number of lithography, deposition, copper planarization, dielectric planarization, poly-Si etch and dielectric etch applications.

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NanoOCD/DUV 9010b

The NanoOCD/DUV 9010b is a SEMI BOLTS compatible, 300 millimeter based system that incorporates all the features of the NanoOCD/DUV 9010. By conforming to the industry standard BOLTS mounting system, the NanoOCD/DUV 9010b is interchangeable with industry conforming load ports for simplified mechanical integration.

Nano 9010T Integrated Metrology Platform

The 9010T is an advanced, integrated metrology platform for optical CD measurement and profiling. The 9010T system is designed to be incorporated into semiconductor equipment requiring leading-edge CD metrology for semiconductor applications. The 9010T offers an extended wavelength range down to 210nm, extending the CD measurement capabilities for line width structures down to 65nm. The system also incorporates the UV film thickness function, and its improved design offers a faster, more cost effective integrated CD measurement solution with increased throughput. The system is also offered as the 9010T/b, in the SEMI BOLTS configuration for easy installation directly onto the OEM process equipment's standard 300mm loadport.

Tabletop Systems

Our tabletop systems are used primarily in low-volume production environments and in engineering labs for which automated handling and high throughput are not required. Our tabletop product line encompasses both manual and semi automated models for film thickness measurements. Our tabletop system prices range from approximately \$50,000 to \$200,000.

NanoSpec 3000 and 6100

The NanoSpec tabletop systems provide a broad range of thin film measurement solutions at a lower entry price point. The NanoSpec 3000 is a basic, manual system while the 6100 models feature semiautomatic wafer handling or staging.

Customers

We sell our metrology systems worldwide to many of the major semiconductor and flat panel display manufacturers and equipment suppliers, as well as to producers of silicon wafers and photomasks. The majority of our systems are sold to customers located in Asia and the United States. Two customers, Applied Materials and Samsung, represented 21.4% and 14.7% of our total net revenues in 2004, respectively.

The following is a list of our top ten customers (categorized by type of customer), based on revenues, during 2004:

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Original Equipment Manufacturers (OEMs)

Applied Materials, Inc.
Ebara Technologies, Incorporated (ETI)
Tokyo Electron Limited (TEL)

Integrated Device Manufacturers (IDMs) and Flat Panel Display (FPD)

Samsung
Hynix Semiconductor Inc.
Tricenti Technology Inc. (TTI)
Semiconductor Manufacturing International Corporation (SMIC)
Taiwan Semiconductor Manufacturing Corporation (TSMC)
United Microelectronics Corporation (UMC)
Innolux Display Corporation

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Sales and Marketing

We believe that the capability for direct sales and support is beneficial for developing and maintaining close customer relationships and for rapidly responding to changing customer requirements. We provide direct sales and support from our corporate office in California. We also have a direct sales presence in South Korea, Taiwan, China and Japan. We use selected sales representatives in the United States and other countries. We intend to continue monitoring our network, our existing and new offices as well as developing additional distribution relationships when needed. We believe that growing our international distribution network can enhance our competitive position. We maintain a direct sales force of highly trained, technically sophisticated sales engineers who are knowledgeable in the use of metrology systems generally and with the features and advantages of our specific products. Our sales engineers are supported by applications scientists. Together, these highly trained individuals work closely with our customers to solve complex measurement and process problems.

Direct exports of our metrology systems to our foreign customers and shipments to our subsidiaries require general export licenses. See Note 13 of the Notes to Consolidated Financial Statements for information regarding total net revenues and long-lived assets of our foreign operations. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations-Risks Related to Our Business, for information regarding risks related to our foreign operations.

Revenue from customers located in the United States and in foreign countries, as a percentage of total net revenues, were as follows:

	<u>2002</u>	<u>2003</u>	<u>2004</u>
United States	31.0%	25.2%	28.2%
Japan	23.9%	24.8%	29.6%
Taiwan	22.7%	21.5%	11.6%
South Korea	10.5%	21.8%	19.3%
All other countries	11.9%	6.7%	11.3%

In order to raise market awareness of our products, we advertise in trade publications, distribute promotional materials, publish technical articles, conduct marketing programs, issue press releases regarding new products, work with a public relations firm and participate in industry trade shows and conferences. We also maintain a website at www.nanometrics.com.

Customer Service and Support

We believe that customer service and technical support are important factors to distinguish us from our competitors and are essential to building and maintaining close, long-term relationships with our customers. We provide support to our customers with factory technical support and globally deployed field service offices. The factory technical support operations provide both OEM and end-user customers with telephonic technical support access, direct training programs and operating manuals and other technical support information. We use our demonstration equipment for training programs, as well as for our sales and marketing efforts. Our technical training department has metrology systems that are used for customer training. We coordinate warranty and post-warranty field service and spare parts support from our corporate headquarters in Milpitas, California. We also have North America field service operations based in Vermont, Arizona, Texas and Idaho. In Asia, service is provided by direct offices in Japan, South Korea, Taiwan and China.

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We provide a standard one-year warranty on parts and labor for products sold domestically and in foreign markets and in certain instances, we will provide warranty periods in excess of one year but only upon customer request. Service revenue, including sales of replacement parts, represented approximately 17.4%, 16.9% and 11.1% of total net revenues in 2002, 2003 and 2004, respectively.

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Backlog

As of January 1, 2005, our backlog was approximately \$16.6 million. As of January 3, 2004, our backlog was approximately \$9.1 million. Backlog includes orders for products that we expect to ship within 12 months. Orders from our customers are subject to cancellation or delay by the customer without penalty. Historically, order cancellations and order rescheduling have not been significant. However, orders presently in backlog could be canceled or rescheduled. As only a portion of our revenues for any fiscal quarter represent systems in backlog, we do not believe that backlog is necessarily an accurate indication of our future revenues or financial performance.

Competition

The market for our metrology systems is intensely competitive. We compete on a global basis with both larger and smaller companies. Our products compete primarily with: standalone metrology products from KLA-Tencor Corporation, Therma-Wave, Inc. and Rudolph Technologies; integrated metrology products from Nova Measuring Instruments Ltd., KLA-Tencor and Therma-Wave; and overlay metrology products from KLA-Tencor and Accent Optical Technologies. Many of our competitors have substantially greater financial, engineering, manufacturing and marketing resources than we do. Significant competitive factors in our industry include: performance of proprietary measurement technology; system performance, including automation and software capability; ease of use; reliability; established customer bases; cost of ownership; price; and global customer service. We believe that we compete favorably with respect to these factors. Nevertheless, we must continue to develop and design new and improved products and evaluate the attractiveness of strategic transactions, including mergers and asset acquisitions, in order to maintain our competitive position, especially in light of the competitive advantage our larger competitors, such as KLA-Tencor Corporation may be able to exert in the marketplace.

Manufacturing

We manufacture our products in the United States, Japan and South Korea. We combine proprietary measurement technology produced in our facilities with components and subassemblies obtained from outside suppliers. We currently do not expect our manufacturing operations to require us to make any additional major investments in capital equipment.

Certain components, subassemblies and services necessary for the manufacture of our systems are obtained from a sole supplier or limited group of suppliers. We do not maintain long-term supply agreements with any of our suppliers.

Research and Development

Our research and development is directed towards enhancing existing products and developing and introducing new products to maintain technological leadership and to meet current and evolving customer needs. Our process, engineering, marketing, operations and management personnel have developed close collaborative relationships with many of our customers and have used these relationships to identify market demands and target our research and development to meet those demands. We are working to develop potential applications of new and emerging technologies, including improved metrology methods. We conduct research and development at our facilities in California, South Korea and Japan.

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In the United States, our research and development efforts are focused on semiconductor metrology. In South Korea, our research and development efforts are focused on the overlay metrology market. In Japan, our research and development efforts are focused on tabletop and flat panel display metrology.

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Our research and development expenditures in 2004 in the United States, Japan and South Korea were as follows:

United States (semiconductor metrology)	\$ 11.1 million
Japan (tabletop and flat panel display metrology)	\$ 1.2 million
South Korea (overlay metrology)	\$ 0.5 million
Total	\$ 12.8 million

We have extensive proprietary technology and expertise in such areas as spectroscopic reflectometry using our patented absolute reflectivity, robust pattern recognition and complex measurement software algorithms. We continue to add to our intellectual property portfolio, most recently in the areas of critical dimension measurement and integrated metrology. We also have extensive experience in systems integration engineering required to design compact, highly automated systems for advanced clean room environments. Expenditures for research and development during fiscal years 2002, 2003 and 2004 were \$13.8 million, \$13.4 million and \$12.8 million, respectively, and represented 39.6%, 32.2% and 18.3% of total net revenues, respectively.

Intellectual Property

Our success depends in large part on the technical innovation of our products. We actively pursue a program of filing patent applications to seek protection of technologically sensitive features of our metrology systems. As of January 1, 2005, we held 30 United States patents with 35 patent applications pending, four of which were filed during 2004. The United States patents, issued during the period 1988 to 2004, will expire between 2005 and 2023. While we attempt to establish our intellectual property rights through patents and trademarks and protect intellectual property rights through non-disclosure agreements, we believe that our success will depend to a greater degree upon innovation, technological expertise and our ability to adapt our products to new technology. We may not be able to protect our technology and competitors may be able to develop similar technology independently. Others may obtain patents and assert them against us. In addition, the laws of certain foreign countries may not protect our intellectual property to the same extent as do the laws of the United States. From time to time we receive communications from third parties asserting that our metrology systems may contain design features that are claimed to infringe their proprietary rights. We typically refer such matters to our legal counsel.

We have registered the following trademarks with the U.S. Patent and Trademark Office: Nanometrics®, NanoSpec®, Integrated Metrology®, NanoOCD®, Metra®, NanoNet®, OCD® and others. Additionally, we use a variety of other trademarks and trade names such as Atlas, NanoCLP and the Nanometrics logo. All other brand names, trade names and trademarks mentioned herein are the property of their respective holders. The effect of registering our trademarks is to further protect Nanometrics brand and corporate identity.

Employees

At January 1, 2005, we employed approximately 311 persons worldwide: 78 in research and development, 59 in manufacturing and manufacturing support, 70 in customer service, 72 in sales and marketing, and 32 in general administration and finance. None of our employees is represented by a union and we have never experienced a work stoppage as a result of union actions. Many of our employees have specialized skills that are of value to us. Our future success will depend in large part upon our ability to attract and retain highly skilled scientific, technical and managerial personnel, who are in great demand in our industry. We consider our employee relations to be good.

Table of Contents**Executive Officers of the Registrant**

The following are our current executive officers and their ages as of January 1, 2005:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Vincent J. Coates	79	Chairman of the Board, Secretary
John D. Heaton	44	President, Chief Executive Officer and Director
Paul B. Nolan	49	Vice President and Chief Financial Officer
Roger Ingalls Jr.	43	Senior Vice President of Standalone Sales

Mr. Vincent J. Coates has been Chairman of the Board since Nanometrics was founded in 1975. He has been our Secretary since February 1989. He has also served as our Chief Executive Officer through April 1998 and President from our founding through May 1996, except for the period of January 1986 through February 1987 when he served exclusively as Chief Executive Officer. Mr. Coates has also served as Chairman of the Board of Nanometrics Japan Ltd., a subsidiary of the Company, since June 1998. Prior to his employment at Nanometrics, Mr. Coates co-founded Coates and Welter Instrument Corporation, a designer of electron microscopes, which company was subsequently acquired by Nanometrics. Mr. Coates also spent over twenty years working in engineering, sales and international operations for the Perkin-Elmer Corporation, a manufacturer of analytical instruments. In 1995, he received an award that recognized his contribution to the industry from Semiconductor and Equipment and Materials International, an industry trade organization.

Mr. John D. Heaton has served as a director of Nanometrics since July 1995. Since May 1996, he has served as our President. Since April 1998, he has also served as our Chief Executive Officer. From May 1996 to April 1998, he served as our Chief Operating Officer. Mr. Heaton has also served as President of Nanometrics Japan Ltd., a subsidiary of the Company, since January 1998. Beginning in 1978, Mr. Heaton served in various technical positions at National Semiconductor, a semiconductor manufacturer, prior to joining the Company in 1990.

Mr. Paul B. Nolan has served as Vice President and Chief Financial Officer of Nanometrics since March 1994. Mr. Nolan joined us as a Financial Analyst in March 1989, and served as Director of Finance from March 1993 to March 1994. Mr. Nolan served as Financial Analyst at Harris Corporation, a communications equipment company, prior to joining the Company.

Mr. Roger Ingalls Jr. has served as our Senior Vice President of Standalone Sales since January 2002. Mr. Ingalls joined Nanometrics in March 1995, serving as Vice President and Director of Sales and Marketing from October 1997 to February 1998, and as Vice President and Director of Marketing from February 1998 to January 2002. Prior to joining Nanometrics, he served as a sales engineer for Nikon Inc., a precision optical company, from March 1993 to March 1995.

ITEM 2. PROPERTIES

At January 1, 2005, our owned or leased facilities included those described below:

Type	Location	Use
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		Square Footage	
Owned	Milpitas, California	133,000	Corporate headquarters and manufacturing
Owned(1)	Pyongtaek-city, South Korea	39,000	Sales, service, engineering and manufacturing
Owned	Chiba Ken, Japan	50,000	Sales, service, engineering and manufacturing
Owned	Milpitas, California	4,602	Corporate housing
Leased	Hsinchu, Taiwan	3,250	Sales and service
Leased	Austin, Texas	1,130	Sales and service
Leased	Shanghai, China	1,400	Sales and service

(1) Certain real estate improvements on this property are owned; the underlying land, however, is leased.

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We believe that our existing facilities, which are currently utilized at or near capacity, are suitable and adequate for our current needs and anticipated growth.

ITEM 3. LEGAL PROCEEDINGS

None.

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

No matters were submitted to a vote of security holders during the quarter ended January 1, 2005.

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Our common stock is quoted on the Nasdaq National Market under the symbol NANO. The following table sets forth, for the periods indicated, the high and low bid prices per share of our common stock as reported on the Nasdaq National Market. These quotations represent prices between dealers and do not include retail markups, markdowns or commissions and may not necessarily represent actual transactions.

	<u>High</u>	<u>Low</u>
2003		
First Quarter	\$ 6.11	\$ 2.85
Second Quarter	\$ 7.49	\$ 3.88
Third Quarter	\$ 15.89	\$ 6.15
Fourth Quarter	\$ 17.41	\$ 10.63
2004		
First Quarter	\$ 23.50	\$ 13.86
Second Quarter	\$ 18.94	\$ 10.60
Third Quarter	\$ 12.20	\$ 7.50
Fourth Quarter	\$ 17.72	\$ 11.14

On February 24, 2005, the last reported sale price of our common stock on the Nasdaq National Market was \$12.31 per share, and there were approximately 141 holders of record of our common stock.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently expect to retain future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future.

Equity Compensation Plan Information

The following table gives information about the common stock that may be issued under all of our existing equity compensation plans as of January 1, 2005.

<u>Plan category</u>	Number of securities to be issued upon exercise of	Weighted-average	Number of securities remaining available for future issuance
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	<u>outstanding options, warrants and rights</u>	<u>exercise price of outstanding options, warrants and rights</u>	<u>under equity compensation plans (excluding securities reflected in column (a))</u>
	(a)	(b)	(c)
Equity compensation plans approved by security holders	1,555,629	\$ 11.94	1,136,990
Equity compensation plans not approved by security holders	1,076,646	\$ 8.13	35,359
Total	2,632,275	\$ 10.38	1,172,349

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The selected consolidated financial data set forth below should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K/A.

	Years Ended				
	December 30,	December 29,	December 28,	January 3,	January 1,
	2000(a)	2001(a)	2002	2004(b)	2005
	(in thousands, except per share data)				
					<i>As restated(d)</i>
Consolidated Statement of Operations Data:					
Net revenues:					
Product	\$ 63,468	\$ 42,653	\$ 28,669	\$ 34,592	\$ 62,147
Service	6,023	4,931	6,054	7,010	7,784
Total net revenues	69,491	47,584	34,723	41,602	69,931
Costs and expenses:					
Cost of product sales	25,082	17,949	13,237	17,691	27,812
Cost of service	6,022	5,406	5,765	6,620	8,404
Research and development	9,238	10,760	13,765	13,399	12,827
Selling	10,313	9,523	10,862	11,496	11,748
General and administrative	4,258	4,177	5,104	4,689	5,137
Goodwill impairment			1,077		
Total costs and expenses	54,913	47,815	49,810	53,895	65,928
Income (loss) from operations	14,578	(231)	(15,087)	(12,293)	4,003
Other income, net	3,903	1,973	589	686	122
Provision (benefit) for income taxes	5,942	782	(6,230)	5,860(c)	426
Income (loss) before cumulative effect of change in accounting principle	12,539	960	(8,268)	(17,467)	3,699
Cumulative effect of change in revenue recognition principle (SAB 101)	(1,364)				
Net income (loss)	\$ 11,175	\$ 960	\$ (8,268)	\$ (17,467)	\$ 3,699
Basic net income (loss) per share:					
Income (loss) before cumulative effect of change in accounting principle	\$ 1.14	\$ 0.08	\$ (0.70)	\$ (1.45)	\$ 0.30
Cumulative effect of change in revenue recognition principle (SAB 101)	(0.12)				
Net income (loss)	\$ 1.02	\$ 0.08	\$ (0.70)	\$ (1.45)	\$ 0.30
Diluted net income (loss) per share:					
	\$ 1.06	\$ 0.08	\$ (0.70)	\$ (1.45)	\$ 0.28

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Income (loss) before cumulative effect of change in accounting principle

Cumulative effect of change in revenue recognition principle (SAB 101)	(0.12)				
Net income (loss)	\$ 0.94	\$ 0.08	\$ (0.70)	\$ (1.45)	\$ 0.28
Shares used in per share computation:					
Basic	10,986	11,691	11,878	12,043	12,320
Diluted	11,845	12,161	11,878	12,043	13,364

- (a) We adopted Statement of Financial Accounting Standards No. 142 Goodwill and Other Intangible Assets (SFAS 142), effective January 1, 2002. The effect of not amortizing goodwill and other intangible assets in periods prior to the adoption of SFAS 142 would have resulted in net income of \$1,028 and \$11,956 for the years ended December 29, 2001 and December 30, 2000, respectively; basic earnings per common share of \$0.09 and \$1.09 for the years ended December 29, 2001 and December 30, 2000, respectively; and diluted earnings per common share of \$0.09 and \$1.01 for the years ended December 29, 2001 and December 30, 2000, respectively.
- (b) The fiscal year ended January 3, 2004 included 53 weeks, whereas the other periods presented included 52 weeks.
- (c) The income tax provision for the fiscal year ended January 3, 2004 primarily represents a charge of \$6,020 to record a valuation allowance against deferred income tax assets.
- (d) The restatement impacts the year ended January 1, 2005 presented herein and is further discussed in Note 2 to the condensed consolidated financial statements included herein.

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	At				
	December 30, 2000	December 29, 2001	December 28, 2002	January 3, 2004	January 1, 2005
	(in thousands)				
	<i>As restated</i>				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and short-term investments	\$ 69,788	\$ 47,227	\$ 36,866	\$ 29,892	\$ 33,868
Working capital	92,420	80,171	74,776	59,587	68,588
Total assets	144,796	142,355	134,688	121,740	133,769
Debt obligations, less current portion	4,236	3,314	3,123	2,648	2,070
Total shareholders' equity	127,009	129,845	124,106	108,441	116,829

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our consolidated financial statements and the notes thereto included elsewhere in this Annual Report on Form 10-K/A. Our discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties, such as our plans, objectives and intentions. In some cases, forward-looking statements can be identified by words such as believe, expect, anticipate, plan, potential, continue or similar expressions. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain risk factors, including those set forth in Factors That May Affect Future Operating Results and elsewhere in this Annual Report on Form 10-K/A. We believe it is important to communicate our expectations to our investors. However, there may be events in the future that we are not able to predict accurately or over which we have no control. You should be aware that the occurrence of the events described in these risk factors and elsewhere in this Annual Report on Form 10-K/A could materially and adversely affect our business, operating results and financial condition. We disclaim any obligation to update information contained in any forward-looking statement.

Restatement of Consolidated Financial Results of Operations

On October 26, 2005, our Audit Committee, acting on a recommendation from our management, determined that our audited financial statements for the fiscal year ended January 1, 2005, and our unaudited quarterly financial statements for the periods ended April 2, 2005 and July 2, 2005, respectively, should be restated to revise the accounting for certain post-sale warranty services and other items. The restatement impacts the year ended January 1, 2005 presented herein and is further discussed in Note 2 to the condensed consolidated financial statements included herein.

Subsequent to the filing of this Form 10-K/A, we will file an Amendment No. 1 on Form 10-Q/A for the periods ended April 2, 2005 and July 2, 2005, respectively, to reflect restatements of our consolidated balance sheet as of each respective quarter end and our consolidated statements of operations and cash flows for the three-month periods ended April 2, 2005 and July 2, 2005 and the six-month period ended July 2, 2005 and the comparable prior year periods.

The restatement affects the financial statements for the year ended January 1, 2005 and as such, the unaudited quarterly financial statements in the Quarterly Reports on Form 10-Q for the periods ended April 3, 2004, July 3, 2004 and October 2, 2004, should no longer be relied upon. We have not amended and do not intend to amend our previously filed Quarterly Reports on Form 10-Q for the periods affected by the restatement prior to January 1, 2005 as the 2004 restatement information will be reflected in the Quarterly Reports on Form 10-Q/A for the three-month periods ended April 2, 2005 and July 2, 2005 and in the Quarterly Report on Form 10-Q for the three-month period ended October 1, 2005 with the statement of operations information included in this Form 10-K/A.

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This Form 10-K/A reflects adjustments to net revenues and operating expenses related to the restatement of our financial results. Below is a description of the significant adjustments impacting the financial results for the periods presented and relates to our (i) deferral of revenue associated with extended warranty contracts purchased by certain customers at the time of equipment sale, (ii) the alignment of the warranty accrual with the actual warranty periods for certain customers and (iii) accrual of certain foreign sales commission expenses into the appropriate period.

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Revenue Deferral Associated with Extended Warranty

The effect of the restatement is to defer revenue associated with extended warranty provisions of certain customer supply arrangements. We generally sell the majority of our products with a twelve month repair or replacement warranty. We identified certain transactions in each quarter of fiscal 2004 whereby the terms of the product sale included a separately priced extended warranty provision beyond the standard twelve-month warranty. In accordance with Financial Accounting Standards Board Technical Bulletin 90-1, *Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts*, revenue for separately priced extended warranty contracts should be deferred and recognized ratably over the term of the extended warranty contract. We are restating our financial statements to recognize such deferred revenue on a straight-line basis over the contract period. The restatement adjustments resulted in a decrease to product sales previously reported in our Form 10-K for the year ended January 1, 2005 of \$0.8 million.

Alignment of Warranty Accrual with Actual Warranty Periods

We provide a warranty accrual at the time of revenue recognition. As a result of the additional procedures we performed, we discovered that, in certain instances, the warranty periods used in determining the warranty accrual did not coincide with the actual warranty periods for products under warranty coverage. Accordingly, adjustments were recorded to the warranty accrual and related costs of product sales for the fiscal years 2005 and 2004. The restatement adjustments resulted in an increase to the warranty expense, previously reported in our Form 10-K, for the year ended January 1, 2005 of \$0.3 million.

Accrual of Unpaid Sales Commission

As part of our overall compensation strategy, we pay a commission to our field sales personnel for their services in selling our products and obtaining customer orders. The sales commissions are paid to the field sales personnel only after the customer has fully paid for the equipment or services received. Customer payment is often received a number of months after revenue is recognized. At one of our foreign locations, we erroneously recorded the expense upon payment of the sales commissions to our field sales personnel rather than when the related revenue and other associated costs of revenues were recognized. Accordingly, adjustments were recorded to reflect the sales commission expense in the periods in which we recognized the related revenue. The restatement adjustments resulted in an increase to selling expense previously reported in our Form 10-K for the year ended January 1, 2005 of \$0.3 million.

Effect of Restatement Upon Previously Reported Balances

The restatement affected each three-month period beginning with the first quarter of fiscal 2004 through the second quarter of 2005. We will file an Amendment No. 1 on Form 10-Q/A for each of the quarters ended April 2, 2005 and July 2, 2005 to reflect restatements of our consolidated balance sheet as of each respective quarter end and our consolidated statements of operations and cash flows for the three-month periods ended April 2, 2005 and July 2, 2005 as well as the six-month period ended July 2, 2005 and the comparable prior year periods.

The condensed consolidated financial statements as of January 1, 2005 contained herein have been restated to incorporate all these adjustments and the related tax effects as described herein. The restatement adjustments described herein required us to make a number of significant accounting judgments. The following table sets forth selected consolidated financial data, showing our previously reported and restated amounts at January 1, 2005 (in thousands, except per share amounts):

	As Previously Reported	As Restated	Inc (Dec)
Accrued payroll and related expenses	\$ 2,206	\$ 2,512	\$ 306 ^C
Deferred revenue	\$ 2,742	\$ 3,506	\$ 764 ^A
Other current liabilities	\$ 1,840	\$ 2,097	\$ 257 ^B
Total current liabilities	\$ 12,613	\$ 13,940	\$ 1,327
Retained earnings	\$ 12,034	\$ 10,707	\$ (1,327)

^A Adjustment relates to revenue deferral associated with extended warranty contracts

^B Adjustment relates to the alignment of warranty accrual with actual warranty periods

^C Adjustment relates to accrual of unpaid sales commission

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The impact of all adjustments discussed herein to the condensed consolidated statement of operations was to decrease our previously reported net income per diluted share for the year ended January 1, 2005 by \$0.10. The following table sets forth selected consolidated financial data, showing our previously reported and restated amounts for the year ended January 1, 2005 (in thousands, except per share amounts):

	Year Ended		
	January 1, 2005		
	As Previously Reported	As Restated	Inc (Dec)
Net revenues			
Product sales	\$ 62,911	\$ 62,147	\$ (764) ^A
Service	\$ 7,784	\$ 7,784	\$
Cost of product sales	\$ 27,555	\$ 27,812	\$ 257 ^B
Selling expenses	\$ 11,442	\$ 11,748	\$ 306 ^C
Income from operations	\$ 5,330	\$ 4,003	\$ (1,327)
Provision for income taxes	\$ 426	\$ 426	\$
Net income	\$ 5,026	\$ 3,699	\$ (1,327)
Net income per share:			
Basic	\$ 0.41	\$ 0.30	\$ (0.11)
Diluted	\$ 0.38	\$ 0.28	\$ (0.10)

^A Adjustment relates to revenue deferral associated with extended warranty contracts

^B Adjustment relates to the alignment of warranty accrual with actual warranty periods

^C Adjustment relates to accrual of unpaid sales commission

We have determined the cumulative effect of these errors was approximately \$0.4 million as of January 3, 2004. The effect was not material to any relevant prior period and had the amounts been recorded correctly in the prior periods, there would have been no significant effect on reported net loss, comprehensive loss or total stockholders' equity. To correct this misstatement, we recorded the cumulative \$0.4 million in the condensed consolidated statement of operations in the three-month period ended April 3, 2004.

Overview

We are an innovator in the field of metrology systems for the semiconductor and flat panel display manufacturing industries. Our systems are designed to precisely monitor film thickness and critical dimensions that are necessary to control the manufacturing process and provide increased production yields and performance.

Capital expenditures by manufacturers of semiconductors and flat panel displays, especially in Asia, and their suppliers are critical to our success. The demand by these manufacturers and suppliers is driven by the expected market demand for new products and new applications. The increasing complexity of the 300mm manufacturing processes for semiconductors and larger flat panel displays is an important factor in the demand for our innovative metrology systems. The incorporation of smaller features sizes, copper interconnect technology and optical critical

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dimension technology are expected to result in increased demand. Our strategy is to continue to innovate organically as well to evaluate strategic acquisitions in order to address business challenges and opportunities.

Our revenues are derived from product sales and customer service, which include sales of accessories and service for the installed base of our products. For the year ended January 1, 2005, we derived 88.9% of our total net revenues from product sales and 11.1% of our total net revenues from services.

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Important Themes and Significant Trends

The semiconductor equipment industry is characterized by cyclical growth. Recently, the industry emerged from an exceptionally long, cyclical downturn. Changing trends in the semiconductor and flat panel display manufacturing industries are increasing the need for metrology as a major component of manufacturing systems. These trends include:

Conversion to 300mm Wafer Size. Semiconductor manufacturers are converting to 300mm wafers to achieve better production efficiencies. Most facilities are incorporating this wafer size, and our newest products are well-positioned to serve these facilities. It is important that we are successful in product evaluations with these new 300mm facilities in order to continue to gain market share.

Incorporation of Optical Critical Dimension Metrology in the Patterning Process. Our customers use photolithographic processes to create patterns on wafers. Critical dimensions must be carefully controlled during this process. Our proprietary optical critical dimension systems can provide the critical process control of these circuit dimensions that is necessary for successful manufacturing of these state of the art devices.

Copper Interconnect Technology. The need for ever increasing device circuit speed coupled with lower power consumption has pushed semiconductor device manufacturers to begin the replacement of the subtractive aluminum interconnect process with copper damascene technology. This new copper processing technology has driven the need for new metrology techniques such as non-destructive laser profiling and the use of optical critical dimension (OCD) technology for control of the copper process.

Incorporation of 65nm and 45nm Feature Sizes. In an effort to reduce costs and increase device performance, semiconductor manufacturers are decreasing both the dye size and feature size. Monitoring the increased tolerance requirements on smaller features sizes requires increased use of metrology systems. Our thin film and critical dimension metrology systems are well suited and are being adopted for these next generation processes.

Reduced Number of Customers. Because of the escalating cost of 300mm manufacturing facilities, fewer semiconductor manufacturers can afford the significant investment in these next generation facilities. Therefore, fewer opportunities for semiconductors equipment companies exist. Given that the available number of potential customers is decreasing, previous customer relationships, product positioning and critical mass take on greater importance.

Adoption of New Types of Thin Film Materials. Manufacturers are adopting new processes and technologies that increase the importance and utilization of thin film metrology systems. To achieve greater semiconductor device speed, manufacturers are utilizing copper and new, low dielectric constant (low k) insulating materials. Our advanced metrology solutions are required in the manufacturing process to characterize these materials.

Need for Improved Process Control to Drive Process Efficiencies. Competitive forces influencing semiconductor device manufacturers, such as price-cutting and shorter product life cycles, place pressure on manufacturers to rapidly achieve production efficiency. Device manufacturers are using our integrated and standalone metrology systems throughout the fab to ensure that manufacturing processes scale rapidly, are accurate and can be repeated on a consistent basis.

Critical Accounting Policies

The preparation of our financial statements conforms with accounting principles generally accepted in the United States of America, which requires management to make estimates and judgments in applying our accounting policies that have an important impact on our reported

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amounts of assets, liabilities, revenue, expenses and related disclosures at the date of our financial statements. On an on-going basis, management evaluates its estimates including those related to bad debts, inventory valuations, warranty obligations and income taxes. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from management's estimates. We believe that the application of the following accounting policies requires significant judgments and estimates on the part of management. For a summary of all of our accounting policies, including those discussed below, see Note 1 to The Consolidated Financial Statements.

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Revenue Recognition Nanometrics recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price is fixed or determinable, and collectibility is reasonably assured. Product revenue includes hardware and software that is incidental to the products. For product sales to existing customers, revenue recognition generally occurs at the time of shipment, as our terms are FOB shipping point, if we have met defined customer acceptance experience levels with both the customer and the specific type of equipment. All other product revenues are recognized upon customer acceptance. In Japan, where risk of loss and title transfers to the customer upon customer acceptance, revenue is recognized upon customer acceptance.

All of our products are assembled prior to shipment to our customers. We often perform limited installation for our customers, however such installation is inconsequential and perfunctory as it is also performed by third parties. Revenue related to spare parts sales is recognized on shipment and is included as part of service revenue. Service revenue also includes service contracts and non-warranty repairs of systems. On occasion, customers request a warranty period longer than our standard 12 month warranty. In those instances where extended warranty services are separately quoted to the customer, we follow the guidance of Financial Accounting Standards Board Technical Bulletin 90-1, *Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts*, associated revenue is deferred and recognized to income ratably over the term of the contract. Whereas service revenue related to service contracts is recognized ratably over the period under contract, service revenue related to repairs of systems is recognized as services are performed. Unearned maintenance and service contract revenue is included in deferred revenue. Furthermore, we do not provide our customers with any return rights. Service contracts may be purchased by the customer when the warranty period expires.

In limited situations we have multiple deliverables in our customer arrangements. Those situations include the sale of repair services and parts together where revenues are recognized when both the services and parts have been delivered. We also provide technical support to our customers as part of our warranty program. Upon recognition of product revenue, a liability is recorded for anticipated warranty costs.

Allowance for Doubtful Accounts We maintain allowances for estimated losses resulting from the inability of our customers to make required payments. Credit limits are established through a process of reviewing the financial history and stability of our customers. Where appropriate and available, we obtain credit rating reports and financial statements of customers when determining or modifying their credit limits. We regularly evaluate the collectibility of our trade receivable balances based on a combination of factors such as the length of time the receivables are past due, customary payment practices in the respective geographies and our historical collection experience with customers. We believe that our doubtful accounts allowance reflects our risk associated with smaller rather than larger customers and that our reported allowances are adequate. If however, the financial conditions of customers were to deteriorate, resulting in their inability to make payments, we may need to record additional allowances which would result in additional general and administrative expenses being recorded for the period in which such determination was made.

Inventories We are exposed to a number of economic and industry factors that could result in portions of our inventory becoming either obsolete or in excess of anticipated usage, or saleable only for amounts that are less than their carrying amounts. These factors include, but are not limited to, technological changes in our market, our ability to meet changing customer requirements, competitive pressures in products and prices, and the availability of key components from our suppliers. We have established inventory reserves when conditions exist that suggest that our inventory may be in excess of anticipated demand or is obsolete based upon our assumptions about future demand for our products and market conditions. We regularly evaluate our ability to realize the value of our inventory based on a combination of factors including the following: historical usage rates, forecasted sales of usage, product end-of-life dates, estimated current and future market values and new product introductions. For demonstration inventory, we also consider the potential cost to refurbish the inventory prior to sale. When recorded, our reserves are intended to reduce the carrying value of our inventory to its net realizable value. If actual demand for our products deteriorates, or market conditions are less favorable than those that we project, additional reserves may be required. Inventories are stated at the lower of cost, using the first-in, first-out method, or market value.

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Product Warranties Nanometrics sells the majority of its products with a twelve month repair or replacement warranty from the date of shipment. The Company provides an accrual for estimated future warranty costs based upon the historical relationship of warranty costs to revenues. The estimated future warranty obligations related to product sales are reported in the period in which the related revenue is recognized. The estimated future warranty obligations are affected by the warranty periods, sales volumes, product failure rates, material usage, labor and replacement costs incurred in correcting a product failure. If actual product failure rates, material usage, labor or replacement costs differ from the Company's estimates, revisions to the estimated warranty obligations would be required. For new product introductions where limited or no historical information exists, the Company may use warranty information from other previous product introductions to guide it in estimating its warranty accrual. The warranty accrual represents the best estimate of the amount necessary to settle future and existing claims on products sold as of the balance sheet date. The Company periodically assesses the adequacy of its recorded warranty reserve and adjusts the amounts in accordance with changes in these factors.

Income Tax Assets and Liabilities We account for income taxes based on Statement of Financial Accounting Standards (SFAS) No. 109 *Accounting for Income Taxes*, whereby deferred tax assets and liabilities must be recognized using enacted tax rates for the effect of temporary differences between the book and tax accounting for assets and liabilities. Also, deferred tax assets must be reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized in the future. We evaluate the deferred tax assets on a quarterly basis to determine whether or not a valuation allowance is appropriate. Factors used in this determination include future expected income and the underlying asset or liability which generated the temporary tax difference. Our income tax provision is primarily impacted by federal statutory rates, state and foreign income taxes and changes in our valuation allowance.

Stock-Based Compensation We currently account for stock-based compensation issued to employees using the intrinsic value method in accordance with the provisions of Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees*, as allowed by SFAS No. 123, *Accounting for Stock Based Compensation* as amended by SFAS No. 148, *Accounting for Stock Based Compensation Transition and Disclosures, an Amendment of FASB Statement No. 123*. Under the intrinsic value method, we do not recognize any compensation expense, as the exercise price of all stock options is equal to the fair market value at the time the options are granted. We disclose the pro forma effect of recognizing compensation expense on stock options granted to employees in the footnotes to the consolidated financial statements. These pro forma effects are based on the fair value of the options using the Black-Scholes valuation model using assumptions which are based on our historical experience.

Our accounting treatment of stock options will significantly change during 2005 due to our planned adoption of SFAS No. 123R (SFAS 123(R)), *Share-Based Payment*, which is effective for periods beginning after June 15, 2005. See Recent Accounting Pronouncements.

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The following table presents our consolidated statements of operations data as a percentage of total net revenues for the years ended December 28, 2002, January 3, 2004 and January 1, 2005:

	Years Ended		
	December 28, 2002	January 3, 2004	January 1, 2005
Net revenues:			
Products	82.6%	83.1%	88.9%
Service	17.4	16.9	11.1
Total net revenues	100.0	100.0	100.0
Cost and expenses:			
Cost of products	38.1	42.5	39.8
Cost of service	16.6	15.9	12.0
Research and development	39.6	32.2	18.3
Selling	31.3	27.6	16.8
General and administrative	14.7	11.3	7.4
Goodwill impairment	3.1		
Total cost and expenses	143.4	129.5	94.3
Loss from operations	(43.4)	(29.5)	5.7
Other income (expense):			
Interest income	1.6	1.0	0.4
Interest expense	(0.2)	(0.2)	(0.1)
Other, net	0.3	0.9	(0.1)
Total other income, net	1.7	1.6	0.2
Income (loss) before provision (benefit) for income taxes	(41.7)	(27.9)	5.9
Provision (benefit) for income taxes	(17.9)	14.1	0.6
Net income (loss)	(23.8)%	(42.0)%	5.3%

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Years ended December 28, 2002, January 3, 2004 and January 1, 2005

Total net revenues. Our net revenues were comprised of the following categories:

	Years Ended		Percentage Change
	January 3, 2004	January 1, 2005	
Automated systems	\$ 25,620	\$ 38,100	48.7%
Integrated systems	6,106	21,602	253.8
Tabletop systems	2,866	2,445	(14.7)
Service	7,010	7,784	11.0
Total net revenues	\$ 41,602	\$ 69,931	68.1

	Years Ended		Percentage Change
	December 28, 2002	January 3, 2004	
Automated systems	\$ 19,969	\$ 25,620	28.3%
Integrated systems	4,155	6,106	47.0
Tabletop systems	4,545	2,866	(36.9)
Service	6,054	7,010	15.8
Total net revenues	\$ 34,723	\$ 41,602	19.8

In 2004, revenue from automated systems increased by 48.7% and integrated system revenue increased by 253.8% from their 2003 levels, primarily due to higher volume sales for each product group. The higher volume sales for each product group is primarily due to our new 300 mm products, such as the Atlas automated metrology product and 9010 integrated metrology system. The increase in product revenue resulted from greater demand for semiconductor process control metrology equipment and flat panel display equipment, particularly in the U.S. and Asia. We believe that this increased demand was attributable primarily to customers adding capacity in semiconductor production facilities as demand for semiconductors increased as a result of the continuing economic recoveries in the U.S. and Japan in 2004. Service revenue increased 11.0% from \$7.0 million in 2003 to \$7.8 million in 2004. The increase in service revenue is primarily attributable to higher sales of parts and services in the U.S. and Asia in 2004, which we believe is due to a growing installed base of systems that have passed their warranty periods. The strengthening of the Japanese yen accounted for approximately 2.0% of total net revenues in 2004.

Total net revenues increased 19.8% from \$34.7 million in 2002 to \$41.6 million in 2003. Product revenue increased 20.7% from \$28.7 million in 2002 to \$34.6 million in 2003. Unit sales of existing automated and integrated systems increased from their 2002 levels. Additionally, our new products, such as the NanoOCD 9010 integrated product also contributed to our revenues. The increase in product revenue resulted from greater demand for semiconductor process control metrology equipment and flat panel display equipment, particularly in Asia. We believe that this increased demand was attributable primarily to customers adding capacity in semiconductor production facilities as demand for semiconductors increased as a result of the economic recoveries in the U.S. and Japan in 2003. Service revenue increased 15.8% from \$6.1 million in 2002 to \$7.0 million in 2003. The increase in service revenue was primarily attributable to higher sales of parts and services in the U.S. and Asia in

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2003, which we believe was due in part to increased demand for semiconductors at a time when capital expenditures by equipment manufacturers had been reduced, resulting in increased utilization of older systems by customers. Although fiscal 2003 included 53 weeks, the length of this accounting period did not materially impact our comparative sales trends.

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Cost of products. Cost of products as a percentage of product revenue decreased from 51.1% in 2003 to 44.8% in 2004 due primarily to increased product sales volume in 2004 resulting in lower per unit manufacturing costs. The lower product revenue in 2004 was partially offset by a write down of \$0.8 million in slower moving inventory in 2004 based on our estimate that future forecasted sales for certain product lines had permanently declined. Cost of product sales as a percentage of product sales increased from 46.2% in 2002 to 51.1% in 2003 due in part to lower sales prices on older products and higher costs associated with an increase in manufacturing capacity added to our U.S. facility. The increased manufacturing capacity is part of a continuing strategic plan to internalize the production of key parts and components, allowing us to have greater control over their development, delivery, quality and cost. The warranty accrual at January 1, 2005 was \$1.1 million, an increase of 106% compared to the same period in 2003. This increase resulted primarily from increased sales volume and the associated warranty costs.

Cost of service. Cost of service as a percentage of service revenue increased from 94.4% in 2003 to 108.0% in 2004 primarily as a result of higher service costs from an increase in headcount and related overhead to provide additional support for our growing customer base, particularly in Asia. We could not fully recoup these costs due to higher service demands from our customer base. Cost of service as a percentage of service revenue decreased from 95.2% in 2002 to 94.4% in 2003 primarily as a result of higher service sales that exceeded the increase in the associated variable cost of service sales in 2003 while fixed costs at the time remained relatively stable.

Research and development. Research and development expenses decreased 4.3% from \$13.4 million in 2003 to \$12.8 million in 2004 primarily from lower materials expenses in 2004 resulting from cost cutting measures in the first half of the year. Research and development expenses decreased 2.7% from \$13.8 million in 2002 to \$13.4 million in 2003 as a result of lower expenses associated with lower usage of materials used in the development of new products in 2003. In the United States, our research and development efforts are focused on semiconductor metrology. In South Korea, our research and development efforts are focused on the overlay metrology market. In Japan, our research and development efforts are focused on tabletop and flat panel display metrology. We are committed to the development of new and enhanced products and believe that new product introductions are required for us to maintain our competitive position. We expect research and development expenses to remain at current levels for the immediate future.

Selling. Selling expenses increased slightly to \$11.7 million in 2004 as compared to \$11.5 million in 2003. The increase in selling expenses was due to higher sales commissions in 2004 over 2003 levels as a result of higher sales volume in 2004. This increase in 2004 was partially offset by the redeployment of some resources into service support, which resulted in a decrease of about 49.0% of our selling expenses in Japan. Selling expenses increased 5.8% from \$10.9 million in 2002 to \$11.5 million in 2003 primarily due to increased headcount of sales and support employees and related expenses particularly in Asia in an effort to fully participate in the growth opportunities in that region.

General and administrative. General and administrative expenses increased 9.6% from \$4.7 million in 2003 to \$5.1 million in 2004 due in part to higher regulatory expenses. We expect our general and administrative expenses to continue to increase in the immediate future due to regulatory requirements. In addition, salary expenses were lower in 2003 resulting from shutdown days taken during that time as a cost cutting measure. General and administrative expenses decreased 8.1% from \$5.1 million in 2002 to \$4.7 million in 2003. This decrease resulted primarily from lower accounting software implementation costs in 2003.

Goodwill impairment. On January 1, 2002, we adopted SFAS No. 142, *Goodwill and Other Intangible Assets*. Upon implementation of this Statement, the transition impairment test was performed as of January 1, 2002, and no impairment loss was recorded. SFAS No. 142 requires that goodwill be reviewed at least annually for impairment. We elected to test our goodwill for possible impairment in the fourth quarter of 2002. Based upon the results of the annual impairment test, we recognized a goodwill impairment loss of \$1,077,000 in the fourth quarter of 2002, representing the full value of goodwill. The fair value of the segment was estimated using a discounted cash flow methodology.

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Total other income, net. Total other income, net, which primarily consists of interest income, interest expense and foreign currency transaction gains/losses, decreased 82.2% from \$686,000 in 2003 to \$122,000 in 2004 primarily due to foreign currency transaction losses as well as lower interest income in 2004.

Provision for income taxes. Our effective tax rate was an expense of 10.3% in 2004. The tax expense in 2004 was primarily a result of foreign income taxes as the federal statutory income taxes were offset by a reduction in the valuation allowance. Our effective tax rate was an expense of 50.5% in 2003, versus a benefit of 43.0% in 2002. The tax expense in 2003 resulted from a provision for income taxes of approximately \$6.0 million which primarily represents a charge to record a valuation allowance against deferred income tax assets. The charge was taken as a result of pretax losses incurred over the past several quarters coupled with uncertainty about future expected income in the then-existing market environment, making it more likely than not at that time that the deferred tax asset would not be realized. In the future, we will continue to review our expectations for future taxable income to determine the amount of valuation allowance necessary to reserve against deferred tax assets.

Liquidity and Capital Resources

At January 1, 2005, our cash, cash equivalents and short-term investments totaled \$33.9 million compared to \$29.9 million at January 3, 2004. The short-term investments consist of U.S. Treasury Bills. Our working capital of \$68.6 million at January 1, 2005 increased from \$59.6 million at January 3, 2004.

Operating activities provided net cash of \$2.3 million in 2004. This source of cash in 2004 resulted primarily from net income and non-cash charges for depreciation and amortization and higher levels of current liabilities. These sources of cash were offset to a large extent by higher accounts receivable resulting from our revenue increase of 68.1% in 2004. The increase in accounts receivable was due to the higher concentration of revenue in the third and fourth quarters of 2004. We would expect this trend in operating cash flow and working capital to continue. Operating activities used \$8.3 million in 2002 and \$6.2 million in 2003. The cash usage in 2002 and 2003 resulted primarily from the net loss in those years offset by the effect of non-cash expenses. We also experienced higher levels of accounts receivable in 2003 resulting from increased sales towards the end of 2003.

Investing activities provided net cash of \$3.1 million in 2004, provided \$6.0 million of cash in 2003 and used \$31.7 million of cash in 2002. The timing of the purchase and initial maturities of U.S. Treasury Bills in 2002 resulted in their classification as cash and cash equivalents instead of as short-term investments. Our capital expenditures were \$871,000 in 2004, \$990,000 in 2003 and \$2.8 million in 2002. These expenditures were used primarily to continue the process of internalizing our manufacturing capacity in the United States through, for example, the purchase of a machine shop, machining equipment and improvements to our building. This internalization process was completed in the first quarter of 2004 and as a result we expect capital expenditures to decrease in the immediate future.

Financing activities provided net cash of \$2.3 million in 2004, \$655,000 of cash in 2003 and \$998,000 in 2002 primarily resulting from the sale of shares under our stock option plans, offset to some extent by the net repayment of debt obligations by our Japanese subsidiary.

We have evaluated and will continue to evaluate the acquisition of products, technologies or businesses that are complementary to our business. These activities may result in product and business investments, which may affect our cash position and working capital balances. Some of these activities might require significant cash outlays. However, we believe that our working capital, including cash, cash equivalents and short term investments, will be sufficient to meet our needs at least through the next twelve months.

Due to the cyclical nature of our business, we may seek outside financing opportunistically in the future. We believe our existing working capital, together with expected cash flows from operations and available sources of bank, equity and equipment financing, will be sufficient to support our operations in the future. On January 21, 2005, we entered into a definitive merger agreement with August Technology Corporation. If the merger is consummated, it may result in cash outflows related to integration activities. Estimates of these outflows are not currently known. Management of Nanometrics and August Technology are in the process of making these assessments. Notwithstanding the cash outflows that may result from integrating the two companies, we believe the merger, if consummated, may enhance the Company's liquidity and capital resources.

Table of Contents**Contractual obligations**

The following table summarizes our contractual cash obligations as of January 1, 2005, and the effect such obligations are expected to have on liquidity and cash flow in future periods (in thousands):

	<u>Total</u>	<u>Less than 1 Year</u>	<u>1-3 Years</u>	<u>3-5 Years</u>	<u>More than 5 Years</u>
Debt obligations(1)	\$ 3,234	\$ 1,164	\$ 852	\$ 812	\$ 406
Operating leases	908	530	348	30	
Other long-term liabilities	255		255		

- (1) Our debt obligations primarily relate to the expansion of our Japanese facilities to accommodate the production of larger flat panel display systems, and do not include interest, which we are obligated to pay.

We have no off-balance sheet financing arrangements.

Recent Accounting Pronouncements

In December 2004, the FASB issued SFAS 123(R), *Share-Based Payment*, which replaces SFAS 123 and supersedes APB Opinion No. 25. SFAS 123(R) requires that compensation costs relating to share-based payment transactions be recognized in financial statements. The pro forma disclosure previously permitted under SFAS 123 will no longer be an acceptable alternative to recognition of expenses in the financial statements. SFAS 123(R) is effective as of the beginning of the first reporting period that begins after June 15, 2005, with early adoption encouraged. We currently measure compensation costs related to share-based payments under APB 25, as allowed by SFAS 123, and provide disclosure in notes to financial statements as required by SFAS 123. We are required to adopt SFAS 123(R) starting in the third fiscal quarter of 2005. We expect the adoption of SFAS 123(R) will have a material adverse impact on our net income and net income per share. We are currently in the process of evaluating the extent of such impact. We have also not yet determined our method of adoption of FAS 123(R). Please see our disclosure under Footnote 1 to our Consolidated Financial Statements addressing stock-based compensation.

In November 2004, Statement of Financial Accounting Standards (SFAS) No. 151, *Inventory Costs – An Amendment of ARB No. 43, Chapter 4*, was issued which amends the guidance in Accounting Research Bulletin (ARB) No. 43, Chapter 4, *Inventory Pricing*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material. Among other provisions, the new rule requires that items such as idle facility expense, excessive spoilage, double freight, and rehandling costs be recognized as current-period charges regardless of whether they meet the criterion of *so abnormal* as stated in ARB No. 43. Additionally, SFAS 151 requires that the allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. SFAS 151 is effective for fiscal years beginning after June 15, 2005. We are currently evaluating the effect that the adoption of SFAS 151 will have on our consolidated results of operations and financial condition.

In December 2004, the FASB issued SFAS No. 153 (SFAS 153), *Exchanges of Nonmonetary Assets – an amendment to APB Opinion No. 29*. This statement amends APB 29 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. SFAS 153 is effective for the first fiscal period beginning after June 15, 2005. Adoption of this statement is not expected to have a material impact on our results of operations or

financial condition.

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In December 2004, FASB Staff Position No. FAS 109-2, *Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004* (FSP FAS 109-2) was issued, providing guidance under SFAS 109, Accounting for Income Taxes for recording the potential impact of the repatriation provisions of the American Jobs Creation Act of 2004, enacted on October 22, 2004. FSP FAS 109-2 allows time beyond the financial reporting period of enactment to evaluate the effects of the Jobs Act before applying the requirements of FSP FAS 109-2. Accordingly, we are evaluating the potential effects of the Jobs Act and have not adjusted our tax expense or deferred tax liability for the effect of any decision we might make to repatriate earnings.

In March 2004, the FASB issued EITF 03-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments* (EITF 03-1), which provided new guidance for assessing impairment losses on investments. Additionally, EITF 03-1 includes new disclosure requirements for investments that are deemed to be temporarily impaired. In September 2004, the FASB delayed the accounting provisions of EITF 03-1; however the disclosure requirements remain effective for annual periods ending after June 15, 2004. We will evaluate the accounting impact of EITF 03-1 once final guidance is issued. We are following the disclosure requirements of this EITF.

Factors That May Affect Future Operating Results

You should carefully consider the risks described below together with all of the other information included in this Annual Report on Form 10-K/A before making an investment decision. The risks and uncertainties described below are not the only ones that we face. If any of the following risks actually occurs, our business, financial condition or operating results could be harmed. In such case, the trading price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Business

Cyclicity in the semiconductor and flat panel display industries has led to substantial fluctuations in demand for our systems and may, from time to time, continue to do so.

Our operating results have varied significantly from period to period due to the cyclical nature of the semiconductor and flat panel display industries. The majority of our business depends upon the capital expenditures of semiconductor device and equipment manufacturers. These manufacturers' capital expenditures, in turn, depend upon the current and anticipated market demand for semiconductors and products using semiconductors. The semiconductor industry is cyclical and has historically experienced periodic downturns. These downturns have often resulted in substantial decreases in the demand for semiconductor manufacturing equipment, including metrology systems. We have found that the resulting decrease in capital expenditures has typically been more pronounced than the downturn in semiconductor device industry revenues. We expect the cyclical nature of the semiconductor industry, and therefore, our business, to continue in the foreseeable future. Recently, the semiconductor industry emerged from a sustained downturn, which had existed for the past few years. Should this trend reverse and the downturn resume, our business and results of operations would suffer.

Because we derive a significant portion of our revenues from sales in Asia, our revenues and results of operations could be adversely affected by the instability of Asian economies.

Revenues from customers in Asian markets represented approximately 63.3%, 72.7% and 68.8% of our total net revenues in 2002, 2003 and 2004, respectively. Countries in the Asia Pacific region, including Japan, South Korea and Taiwan, each of which accounted for a significant

portion of our business in that region, had experienced general economic weaknesses in 2002 and 2003, which adversely affected our revenues at that time.

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We depend on Applied Materials and other OEM suppliers for sales of our integrated metrology systems, and the loss of Applied Materials or any of our other OEM suppliers as a customer could harm our business.

We believe that sales of integrated metrology systems will continue to be an important source of our revenues. Sales of our integrated metrology systems depend upon the ability of Applied Materials to sell semiconductor equipment products that include our metrology systems as components. If Applied Materials is unable to sell such products, or if Applied Materials chooses to focus its attention on products that do not integrate our systems, our business could suffer. If we were to lose Applied Materials as a customer for any reason, our ability to realize sales from integrated metrology systems would be significantly diminished, which would harm our business.

Our largest customers account for a substantial portion of our revenue, and our revenue would materially decline if one or more of these customers were to purchase significantly fewer of our systems or if they delayed or cancelled a large order.

Historically, a significant portion of our revenues in each quarter and each year has been derived from sales to a relatively few number of customers, and we expect this trend to continue. There are only a limited number of large companies operating in the semiconductor and flat panel display industries. Accordingly, we expect that we will continue to depend on a small number of large customers for a significant portion of our revenues for at least the next several years. If any of our key customers were to purchase significantly fewer systems, or if a large order were delayed or cancelled, our revenues would significantly decline. In 2004, sales to Applied Materials accounted for 21.4% and sales to Samsung accounted for 14.7% of our total net revenues, respectively. In 2003, sales to Applied Materials accounted for 15.4% and sales to Hynix accounted for 12.0% of our total net revenues, respectively. In 2002, sales to Applied Materials accounted for 13.8% and sales to TSMC accounted for 10.9% of our total net revenues, respectively.

The success of our product development efforts depends on our ability to anticipate market trends and the price, performance and functionality requirements of semiconductor device manufacturers. In order to anticipate these trends and ensure that critical development projects proceed in a coordinated manner, we must continue to collaborate closely with our customers. Our relationships with our customers provide us with access to valuable information regarding industry trends, which enables us to better plan our product development activities. If our current relationships with our large customers are impaired, or if we are unable to develop similar collaborative relationships with important customers in the future, our long-term ability to produce commercially successful systems could be adversely affected.

We may have difficulty meeting the requirements described in Section 404 of the Sarbanes-Oxley Act of 2002, including addressing certain significant deficiencies in our internal controls identified in connection with our fiscal 2004 year-end audit, and failure to meet such requirements could materially affect our stock price.

We may be required to file a report on internal accounting controls, in accordance with Section 404 of the Sarbanes-Oxley Act, with our Annual Report on Form 10-K for the year ending December 31, 2005. Accordingly, we would be required to increase the amount of documentation surrounding our internal control systems and provide evidence that our systems have been properly tested to support our management's conclusions. While we continue to improve our internal control systems, including through the companywide implementation of a new Enterprise Resource Planning System or ERP System, there can be no assurance that our report will not disclose a material weakness. Even if we do not identify such a material weakness, our auditors may identify a material weakness in their attestation. In the event that a material weakness is identified, our stock price may be adversely affected.

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In connection with the audit conducted by the independent registered public accounting firm BDO Seidman, LLP (BDO Seidman) of our 2004 consolidated financial statements, BDO Seidman advised our management and our Audit Committee of certain significant deficiencies in our internal controls and made certain recommendations. Under the auditing standards of the PCAOB, a significant deficiency represents a deficiency in the design or operation of internal controls in which there is a more than remote likelihood that a misstatement that is more than inconsequential but less than material could occur. Please refer to Item 9A, Management Report on Internal Control Over Financial Reporting, for details.

We are currently in the process of implementing the recommendations of BDO Seidman. Additionally, we are also in the process of augmenting our current control processes, repositioning current finance and accounting personnel and recruiting additional personnel to ensure consistently complete and accurate reporting of financial information. We believe we will satisfactorily address most of the significant deficiencies referenced above by the end of the third fiscal quarter of 2005, although there can be no assurance that we will do so, as the proposed merger with August Technology will require significant integration efforts by management. Furthermore, remediation of the Company's internal controls, required to fully comply with the Section 404 internal control assessment, may require more significant efforts by management than initially anticipated.

Our current and potential competitors have significantly greater resources than we do, and increased competition could impair sales of our products.

We operate in the highly competitive semiconductor and flat panel display industries and face competition from a number of companies, many of which have greater financial, engineering, manufacturing, marketing and customer support resources than we do. As a result, our competitors may be able to respond more quickly to new or emerging technologies or market developments by devoting greater resources to the development, promotion and sale of products, which could impair sales of our products. Moreover, there has been merger and acquisition activity among our competitors and potential competitors. These transactions by our competitors and potential competitors may provide them with a competitive advantage over us by enabling them to rapidly expand their product offerings and service capabilities to meet a broader range of customer needs. Many of our customers and potential customers in the semiconductor and flat panel display industries are large companies that require global support and service for their metrology systems. Some of our larger or more geographically diverse competitors might be better equipped to provide this global support.

If any of our systems fail to meet or exceed our internal quality specifications, we cannot ship them until such time as they have met such specifications. If we experience significant delays or are unable to ship our products to our customers as a result of our internal processes, or for any other reason, our business and reputation may suffer.

Our products are complex and require technical expertise to design and manufacture properly. Various problems occasionally arise during the manufacturing process that may cause delays and/or impair product quality. We must actively monitor our manufacturing processes to ensure that our products meet our internal quality specifications. Any significant delays stemming from the failure of our products to meet or exceed our internal quality specifications, or for any other reasons, would delay our shipments. Shipment delays could harm our business and reputation in the industry.

If we deliver systems with defects, our credibility will be harmed, revenue from, and market acceptance of, our systems will decrease and we could expend significant capital and resources as a result of such defects.

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Notwithstanding our internal quality specifications, our systems have sometimes contained errors, defects and bugs when introduced. If we deliver systems with errors, defects or bugs, our credibility and the market acceptance and sales of our systems would be harmed. Further, if our systems contain errors, defects or bugs, we may be required to expend significant capital and resources to alleviate such problems. Defects could also lead to product liability as a result of product liability lawsuits against us or against our customers. We have agreed to indemnify our customers in some circumstances against liability arising from defects in our systems. In the event of a successful product liability claim, we could be obligated to pay damages significantly in excess of our product liability insurance limits.

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Successful infringement claims by third parties could result in substantial damages, lost product sales and the loss of important intellectual property rights by us.

Our commercial success depends in part on our ability to avoid infringing or misappropriating patents or other proprietary rights owned by third parties. From time to time we may receive communications from third parties asserting that our metrology systems may contain design features which are claimed to infringe on their proprietary rights. For example, we announced on March 14, 2005 that we had received notice of a patent infringement lawsuit brought by Nova Measuring Instruments, Ltd., alleging infringement of United States Patent No. 6,752,689, or the 689 Patent. There can be no assurance that Nanometrics' new or current products do not infringe any valid intellectual property rights. Even if our products do not infringe, we may be required to expend significant sums of money to defend against infringement claims, as in the Nova Measuring Instruments, Ltd. lawsuit described above, or to actively protect our intellectual property rights through litigation.

We obtain some of the components and subassemblies included in our systems from a single source or a limited group of suppliers, and the partial or complete loss of one of these suppliers could cause production delays and significant loss of revenue.

We rely on outside vendors to manufacture many components and subassemblies. Certain components, subassemblies and services necessary for the manufacture of our systems are obtained from a sole supplier or limited group of suppliers. We do not maintain any long-term supply agreements with any of our suppliers. We have entered into arrangements with J.A. Woollam Company for the purchase of the spectroscopic ellipsometer component incorporated in our advanced measurement systems. Our reliance on a sole or a limited group of suppliers involves several risks, including the following:

we may be unable to obtain an adequate supply of required components;

we have reduced control over pricing and the timely delivery of components and subassemblies; and

our suppliers may be unable to develop technologically advanced products to support our growth and development of new systems.

Some of our suppliers have relatively limited financial and other resources. Because the manufacturing of certain of these components and subassemblies involves extremely complex processes and requires long lead times, we may experience delays or shortages caused by our suppliers. If we were forced to seek alternative sources of supply or to manufacture such components or subassemblies internally, we could be forced to redesign our systems, which could cause production delays and prevent us from shipping our systems to customers on a timely basis. Any inability to obtain adequate deliveries from our suppliers, or any other circumstance that would restrict our ability to ship our products, could damage relationships with current and prospective customers, harm our business and result in significant loss of revenue.

Variations in the amount of time it takes for us to sell our systems may cause fluctuations in our operating results, which could adversely affect our stock price.

Variations in the length of our sales cycles could cause our revenues to fluctuate widely from period to period. Our customers generally take long periods of time to evaluate our metrology systems. We expend significant resources educating and providing information to our prospective customers regarding the uses and benefits of our systems. The length of time that it takes for us to complete a sale depends upon many factors, including:

the efforts of our sales force and our independent sales representatives;

the complexity of the customer's metrology needs;

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the internal technical capabilities and sophistication of the customer;

the customer's budgetary constraints; and

the quality and sophistication of the customer's current processing equipment.

Because of the number of factors influencing the sales process, the period between our initial contact with a customer and the time at which we recognize revenue from that customer, if at all, varies widely. Our sales cycles, including the time it takes for us to build a product to customer specifications after receiving an order, typically range from three to six months. Occasionally our sales cycles can be much longer, particularly with customers in Asia who may require longer evaluation periods. During the sales cycles, we commit substantial resources to our sales efforts in advance of receiving any revenue, and we may never receive any revenue from a customer despite our sales efforts.

If we do complete a sale, customers often purchase only one of our systems and then evaluate its performance for a lengthy period of time before purchasing additional systems. The purchases are generally made through purchase orders rather than through long-term contracts. The number of additional products that a customer purchases, if any, depends on many factors, including a customer's capacity requirements. The period between a customer's initial purchase and any subsequent purchases is unpredictable and can vary from three months to a year or longer. Variations in the length of this period could cause fluctuations in our operating results, which could adversely affect our stock price.

Relatively small fluctuations in our system sales volume may cause our operating results to vary significantly each quarter.

During any quarter, a significant portion of our revenue is derived from the sale of a relatively small number of systems. Our automated metrology systems range in price from approximately \$200,000 to over \$1,000,000 per system, our integrated metrology systems range in price from approximately \$80,000 to \$300,000 per system and our tabletop metrology systems range in price from approximately \$50,000 to \$200,000 per system. Accordingly, a small change in the number or types of systems that we sell could cause significant changes in our operating results.

We may experience material payment delays as a result of customer acceptance issues and such delays could negatively affect our results of operations.

As a result of customer acceptance issues, we may, from time to time, experience payment delays on some of our systems. Because a significant portion of our revenue is derived from the sale of a relatively small number of our systems, substantial payment delays by our customers could materially and adversely affect our results of operations.

We depend on orders that are received and shipped in the same quarter, and therefore our results of operations may be subject to significant variability from quarter to quarter.

Our net sales in any given quarter depend upon a combination of orders received in that quarter for shipment in that quarter and shipments from backlog. Our backlog at the beginning of each quarter does not include all systems sales needed to achieve expected revenues for that quarter. Consequently, we are dependent on obtaining orders for systems to be shipped in the same quarter that the order is received. Moreover,

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customers may reschedule shipments, and production difficulties could delay shipments. Accordingly, we have limited visibility into future product shipments, and our results of operations may be subject to significant variability from quarter to quarter.

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Because of the high cost of switching equipment vendors in our markets, it is sometimes difficult for us to attract customers from our competitors even if our metrology systems are superior to theirs.

We believe that once a semiconductor or flat panel display customer has selected one vendor's metrology system, the customer generally relies upon that system and, to the extent possible, subsequent generations of the same vendor's system, for the life of the application. Once a vendor's metrology system has been installed, a customer must often make substantial technical modifications and may experience downtime in order to switch to another vendor's metrology system. Accordingly, unless our systems offer performance or cost advantages that outweigh a customer's expense of switching to our systems, it will be difficult for us to achieve significant sales from that customer once it has selected another vendor's system for an application.

If we are not successful in developing new and enhanced metrology systems we will likely lose market share to our competitors.

We operate in an industry that is subject to technological changes, changes in customer demands and the introduction of new, higher performance systems with short product life cycles. To be competitive, we must continually design, develop and introduce in a timely manner new metrology systems that meet the performance and price demands of semiconductor and flat panel display manufacturers and suppliers. We must also continue to refine our current systems so that they remain competitive. We may experience difficulties or delays in our development efforts with respect to new systems, and we may not ultimately be successful in developing them. Any significant delay in releasing new systems could adversely affect our reputation, give a competitor a first-to-market advantage or cause a competitor to achieve greater market share.

Lack of market acceptance for our new products may affect our ability to generate revenue and may harm our business.

We have recently introduced several new products to market including the Nano OCD/DUV 9010, the Nanometrics Atlas, Atlas-M, Orion and the Nano OCD 9010M. We have invested substantial time and resources into the development of the products. However, we cannot accurately predict the future level of acceptance of our new products by our customers. As a result, we may not be able to generate anticipated revenue from sales of these products. While we anticipate that our new products will become an increasingly larger component of our business, their failure to gain acceptance with our customers could materially harm our business. Additionally, if our new products do gain market acceptance, our ability to sell our existing products may be impeded. As a result, there can be no assurance that the introduction of these products will be commercially successful or that these products will result in significant additional revenues or improved operating margins in future periods.

Our intellectual property may be infringed upon by third parties despite our efforts to protect it, which could threaten our future success and competitive position and adversely affect our operating results.

Our future success and competitive position depend in part upon our ability to obtain and maintain proprietary technology for our principal product families, and we rely, in part, on patent, trade secret and trademark law to protect that technology. If we fail to adequately protect our intellectual property, it will be easier for our competitors to sell competing products. We own or have licensed a number of patents relating to our metrology systems, and have filed applications for additional patents. Any of our pending patent applications may be rejected, and we may not in the future be able to develop additional proprietary technology that is patentable. In addition, the patents we do own or that have been issued or licensed to us may not provide us with competitive advantages and may be challenged by third parties. Third parties may also design around these patents.

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In addition to patent protection, we rely upon trade secret protection for our confidential and proprietary information and technology. We routinely enter into confidentiality agreements with our employees. However, in the event that these agreements may be breached, we may not have adequate remedies. Our confidential and proprietary information and technology might also be independently developed by or become otherwise known to third parties. We may be required to initiate litigation in order to enforce any patents issued to or licensed by us, or to determine the scope or validity of a third party's patent or other proprietary rights. Any such litigation, regardless of outcome, could be expensive and time consuming, and could subject us to significant liabilities or require us to re-engineer our product or obtain expensive licenses from third parties, any of which would adversely affect our business and operating results.

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If we choose to acquire new and complementary businesses, products or technologies instead of developing them ourselves, we may be unable to complete these acquisitions or may not be able to successfully integrate an acquired business in a cost-effective and non-disruptive manner.

Our success depends on our ability to continually enhance and broaden our product offerings in response to changing technologies, customer demands and competitive pressures. To achieve this, from time to time we have acquired complementary businesses, products, or technologies instead of developing them ourselves and may choose to do so in the future. For example, we recently announced our intent to merge with August Technology, a leader in macro defect inspection. We do not know if we will be able to complete any acquisitions, or whether we will be able to successfully integrate any acquired business, operate them profitably or retain their key employees. Integrating any business, product or technology that we acquire could be expensive and time consuming, disrupt our ongoing business and distract our management. In addition, in order to finance any acquisitions, we may be required to raise additional funds through public or private equity or debt financings. In that event, we could be forced to obtain financing on terms that are not favorable to us and, in the case of an equity financing, that result in dilution to our shareholders. If we are unable to integrate any acquired entities, products or technologies effectively, our business will suffer. Our ability to integrate other businesses, including August Technology, will be challenged further by our newly implemented ERP system.

We must attract and retain key personnel with relevant industry knowledge to help support our future growth.

Our success depends to a significant degree upon the continued contributions of our key management, engineering, sales and marketing, customer support, finance and manufacturing personnel. We generally do not enter into employment contracts with any of our key personnel. The loss of any of these key personnel, who would be difficult to replace, could harm our business and operating results. To support our future growth, we will need to attract and retain additional qualified employees. Competition for such personnel in our industry is ongoing, and we may not be successful in attracting and retaining qualified employees.

We manufacture all of our systems at a limited number of facilities, and any prolonged disruption in the operations of those facilities could reduce our revenues.

We produce all of our systems in our manufacturing facilities located in Milpitas, California and through our subsidiaries in Japan and South Korea. Our manufacturing processes are highly complex and require sophisticated, costly equipment and specially designed facilities. As a result, any prolonged disruption in the operations of our manufacturing facilities, such as those resulting from a fire or severe earthquake, could seriously harm our ability to satisfy our customer order deadlines. A significant portion of our operations is located in Japan and South Korea, which may be subject to regional political and economic instability.

Our efforts to protect our intellectual property may be less effective in some foreign countries where intellectual property rights are not as well protected as in the United States.

In 2002, 2003 and 2004, 69.0%, 74.8% and 71.8%, respectively, of our total net revenues were derived from sales to customers in foreign countries, including certain countries in Asia, such as Taiwan, South Korea and Japan. The laws of some foreign countries do not protect our proprietary rights to as great an extent as do the laws of the United States, and many U.S. companies have encountered substantial problems in protecting their proprietary rights against infringement in such countries. If we fail to adequately protect our intellectual property in these countries, it would be easier for our competitors to sell competing products.

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Continuing economic and political instability could affect our business and results of operations.

The ongoing threat of terrorism targeted at the United States or other regions where we conduct business increases the uncertainty in our markets and the economy in general. This uncertainty is likely to result in economic stagnation, which would harm our business. In addition, increased international political instability may hinder our ability to do business by increasing our costs of operations. For example, our transportation costs, insurance costs and sales efforts may become more expensive as a result of geopolitical tension. These tensions may also negatively affect our suppliers and customers. If this international economic and political instability continues or increases, our business and results of operations could be harmed.

We will incur increased costs as a result of recent changes in laws and regulations affecting public companies.

Compliance with recent changes in laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act, may result in increased accounting, legal and administrative costs. In particular, Section 404 of the Sarbanes-Oxley Act of 2002 and the rules of the Securities and Exchange Commission and the Public Company Accounting Oversight Board impose new requirements with respect to the evaluation of the effectiveness of the Company's internal controls. The cost of complying with these new requirements could be substantial.

Our quarterly operating results have varied in the past and probably will continue to vary significantly in the future, which will cause volatility in our stock price.

Our quarterly operating results have varied significantly in the past and are likely to vary in the future, which volatility could cause our stock price to decline. Some of the factors that may influence our operating results and subject our stock to extreme price and volume fluctuations include:

changes in customer demand for our systems;

economic conditions in the semiconductor and flat panel display industries;

the timing, cancellation or delay of customer orders and shipments;

market acceptance of our products and our customers' products;

competitive pressures on product prices and changes in pricing by our customers or suppliers;

the timing of new product announcements and product releases by us or our competitors and our ability to design, introduce and manufacture new products on a timely and cost-effective basis;

the timing of acquisitions of businesses, products or technologies;

the levels of our fixed expenses, including research and development costs associated with product development, relative to our revenue levels; and

fluctuations in foreign currency exchange rates, particularly the Japanese yen.

If our operating results in any period fall below the expectations of securities analysts and investors, the market price of our common stock would likely decline.

We are highly dependent on international sales and operations, which exposes us to foreign political and economic risks.

Sales to customers in foreign countries accounted for approximately 69.0%, 74.8% and 71.8% of our total net revenues in 2002, 2003 and 2004, respectively. We maintain facilities in Japan and South Korea. We anticipate that international sales will continue to account for a significant portion of our revenues. International sales and operations carry inherent risks such as: regulatory limitations imposed by foreign governments, obstacles to the protection of our intellectual property, political, military and terrorism risks, disruptions or delays in shipments caused by customs brokers or other government agencies, unexpected changes in regulatory requirements, tariffs, customs, duties and other trade barriers, difficulties in staffing and managing foreign operations, and potentially adverse tax consequences resulting from changes in tax laws.

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If any of these risks materialize and we are unable to manage them, our international sales and operations would suffer.

We are subject to various environmental laws and regulations that could impose substantial costs upon us and may adversely affect our business, operating results and financial condition.

Some of our operations use substances regulated under various federal, state, local, and international laws governing the environment, including those relating to the storage, use, discharge, disposal, labeling, and human exposure to hazardous and toxic materials. We could incur costs, fines and civil or criminal sanctions, third-party property damage or personal injury claims, or could be required to incur substantial investigation or remediation costs, if we were to violate or become liable under environmental laws. Liability under environmental laws can be joint and several and without regard to comparative fault. Compliance with current or future environmental laws and regulations could restrict our ability to expand our facilities or require us to acquire additional expensive equipment, modify our manufacturing processes, or incur other significant expenses. There can be no assurance that violations of environmental laws or regulations will not occur in the future as a result of the inability to obtain permits, human error, equipment failure or other causes.

Risks Relating to the Merger with August Technology Corporation

The issuance of shares of Nanometrics common stock to August Technology stockholders in the merger will substantially reduce the percentage interests of Nanometrics shareholders.

If we complete the merger, August Technology shareholders will receive 0.6401 of a share of Nanometrics common stock for each share of August Technology common stock they own at the completion of the merger. Based on the number of shares of Nanometrics and August Technology outstanding on January 21, 2005, August Technology shareholders would hold approximately 46.5% of the fully-diluted shares of common stock of the combined entity immediately after the merger, and Nanometrics shareholders would hold approximately 53.5% of the fully-diluted shares of common stock of the combined entity immediately after the merger. This would cause a significant reduction in the relative percentage interest of current Nanometrics shareholders in earnings, voting, liquidation value and book and market value.

Even though Nanometrics and August Technology have obtained the regulatory approvals required to complete the merger, governmental authorities could still seek to block or challenge the merger.

The merger is subject to review by the Department of Justice and the United States Federal Trade Commission, or the FTC, under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, or the HSR Act. Under the HSR Act, Nanometrics and August Technology are required to make pre-merger notification filings and to await the expiration or early termination of the statutory waiting period prior to completing the merger. All required regulatory filings have been made and we have been notified by the FTC that early termination of the waiting period associated with these filings has been granted and we have therefore obtained all regulatory clearances, consents and approvals required to complete the merger. However, after the statutory waiting periods have expired, and even after completion of the merger, governmental authorities could seek to block or challenge the merger as they deem necessary or desirable in the public interest. In addition, in some jurisdictions, a competitor, customer or other third party could initiate a private action under the antitrust laws challenging or seeking to enjoin the merger, before or after it is completed. Nanometrics may not prevail, or may incur significant costs, in defending or settling any action under the antitrust laws.

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Provisions of the merger agreement may deter alternative business combinations and could negatively impact the stock price of Nanometrics if the merger agreement is terminated in certain circumstances.

Restrictions in the merger agreement on solicitation generally prohibit Nanometrics from soliciting any acquisition proposal or offer for a merger of business combination with any other party, including a proposal that might be advantageous to the shareholders of Nanometrics when compared to the terms and conditions of the proposed merger. In addition, if the merger is not completed under certain circumstances specified in the merger agreement, Nanometrics may be required to pay August Technology's expenses in the amount of a break-up fee of \$8.3 million. These provisions may deter third parties from proposing or pursuing alternative business combinations that might result in greater value to Nanometrics shareholders than the merger. In the event the merger is terminated under circumstances that require Nanometrics to pay the break-up fee, our stock price may decline.

If the announced merger with August Technology is not completed, our business, reputation and stock price may suffer.

The definitive agreement we entered into with August Technology on January 21, 2005 contains customary closing conditions to closing, including the approval by the shareholders of both Nanometrics and August Technology, as well as regulatory approvals. If the transaction is not consummated as a result of a failure of one of these conditions to be met, our customers, prospective customers and investors in general may view this failure as a poor reflection on our business or prospects. As a result, if the transaction is not consummated as anticipated, we may experience adverse results in our business and the market price for our common stock may fall.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

During the preceding fiscal year, we were exposed to financial market risks related to foreign currency exchange rates and interest rates. We do not use derivative financial instruments. A hypothetical 10% change in the foreign currency exchange rates at January 3, 2004 and January 1, 2005 would not have a material impact on our net results of operations, as the income and expenses of our foreign operations would fluctuate at the same rate, and cash inflows and outflows would fluctuate at the same rate, since the currencies our foreign operations operate in are the same for each foreign country and there are no significant cash inflows or outflows for each respective foreign operation. However, the Company has approximately \$8.0 million of net assets in foreign locations and, as a result, a hypothetical 10% change in the foreign currency exchange rate at January 1, 2005 would result in an \$0.8 million increase or decrease in the net assets and a corresponding increase or decrease in other comprehensive income. Our investments in marketable securities are subject to interest rate risk. However, due to the short-term nature of these investments, interest rate changes would not have a material impact on their value at January 3, 2004 and January 1, 2005. We also have fixed rate yen denominated debt obligations in Japan that have no interest rate risk. At January 3, 2004 and January 1, 2005, our total debt obligation was \$3.8 million and \$3.2 million, respectively, with a long-term portion of \$2.6 million and \$2.1 million, respectively. A hypothetical 10% change in interest rates at January 1, 2005 would not have a material impact on our results of operations.

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ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by Item 8 of Form 10-K is presented here in the following order:

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
<u>Report of BDO Seidman, LLP, Independent Registered Public Accounting Firm</u>	43
<u>Report of Deloitte & Touche LLP, Independent Registered Public Accounting Firm</u>	44
<u>Consolidated Balance Sheets</u>	45
<u>Consolidated Statements of Operations</u>	46
<u>Consolidated Statements of Shareholders' Equity and Comprehensive Income (Loss)</u>	47
<u>Consolidated Statements of Cash Flows</u>	48
<u>Notes to Consolidated Financial Statements</u>	49

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REPORT OF BDO SEIDMAN, LLP, INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Nanometrics Incorporated:

We have audited the accompanying consolidated balance sheet of Nanometrics Incorporated as of January 1, 2005 and the related consolidated statements of operations, shareholders' equity and comprehensive income (loss), and cash flows for the year then ended, as restated (see Note 2). Our audit also included the consolidated financial statement schedule listed in Item 15. These financial statements and the schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and the schedule based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes 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 presentation of the financial statements and the schedule. We believe that our audit provides 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 Nanometrics Incorporated at January 1, 2005, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

(Signed BDO Seidman, LLP)

San Francisco, California

February 21, 2005, except as to Note 2 to the consolidated financial statements, which is as of November 21, 2005

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**REPORT OF DELOITTE & TOUCHE LLP, INDEPENDENT REGISTERED
PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of Nanometrics Incorporated:

We have audited the accompanying consolidated balance sheet of Nanometrics Incorporated and subsidiaries (the Company) as of January 3, 2004, and the related consolidated statements of operations, shareholders' equity and comprehensive income (loss), and cash flows for the years ended January 3, 2004 and December 28, 2002. Our audits also included the consolidated financial statement schedule for the years ended January 3, 2004 and December 28, 2002 listed in Item 15. These financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Nanometrics Incorporated and subsidiaries at January 3, 2004, and the results of their operations and their cash flows for the years ended January 3, 2004 and December 28, 2002, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule for the years ended January 3, 2004 and December 28, 2002, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

Deloitte & Touche LLP

San Jose, California

March 29, 2004

Table of Contents**NANOMETRICS INCORPORATED****CONSOLIDATED BALANCE SHEETS****(In thousands, except share amounts)**

	January 3,	January 1,
	2004	2005
		<i>As restated</i>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 7,949	\$ 15,949
Short-term investments	21,943	17,919
Accounts receivable, net of allowances of \$576 and \$603, as of January 3, 2004 and January 1, 2005, respectively	14,522	22,222
Inventories	24,264	25,494
Prepaid expenses and other	1,015	944
	<hr/>	<hr/>
Total current assets	69,693	82,528
Property, plant and equipment, net	49,738	49,035
Intangible assets	1,322	924
Other assets	987	1,282
	<hr/>	<hr/>
Total assets	\$ 121,740	\$ 133,769
	<hr/>	<hr/>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 2,047	\$ 3,146
Accrued payroll and related expenses	1,593	2,512
Deferred revenue	2,345	3,506
Other current liabilities	1,436	2,097
Income taxes payable	1,528	1,515
Current portion of debt obligations	1,157	1,164
	<hr/>	<hr/>
Total current liabilities	10,106	13,940
Deferred income taxes and other long-term liabilities	545	930
Debt obligations	2,648	2,070
	<hr/>	<hr/>
Total liabilities	13,299	16,940
	<hr/>	<hr/>
Commitments and contingencies (See Note 8)		
Shareholders' equity:		
Common stock, no par value; 50,000,000 shares authorized; 12,166,016 and 12,566,636 outstanding as of January 3, 2004 and January 1, 2005, respectively	101,099	104,191
Retained earnings	7,008	10,707
Accumulated other comprehensive income	334	1,931
	<hr/>	<hr/>
Total shareholders' equity	108,441	116,829

Total liabilities and shareholders' equity	<u>\$ 121,740</u>	<u>\$ 133,769</u>
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See notes to consolidated financial statements.

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NANOMETRICS INCORPORATED

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Years Ended		
	December 28, January 3,		January 1,
	2002	2004	2005
			<i>As restated</i>
Revenues:			
	\$ 28,669	\$ 34,592	\$
	6,054	7,010	
	<u>34,723</u>	<u>41,602</u>	
Costs and expenses:			
Cost of service	13,237	17,691	
and	5,765	6,620	
depreciation and	13,765	13,399	
amortization	10,862	11,496	
and	5,104	4,689	
research and	1,077		
development			
	<u>49,810</u>	<u>53,895</u>	
Income (loss)			
before taxes	(15,087)	(12,293)	
Income tax expense			
	583	397	
	<u>(94)</u>	<u>(96)</u>	

Any redemption notices with respect to the Preferred Shares will be sent to Cede & Co. If less than all Preferred Shares are being redeemed, DTC will reduce each Direct Participant's holdings of Preferred Shares in accordance with its procedure.

In those instances where a vote is required, neither DTC nor Cede & Co. itself will consent or vote with respect to the Preferred Shares. Under its usual procedures, DTC would mail an omnibus proxy to us as soon as possible before the record date. The omnibus proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants whose accounts the Preferred Shares are credited to on the record date, which are identified in a listing attached to the omnibus proxy.

Dividends on the Preferred Shares will be made directly to DTC's nominee (or its successor, if applicable). Our practice is to credit participants' accounts on the relevant payment date in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on that payment date.

Payments by Direct and Indirect Participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in street name. These payments will be the responsibility of the participant and not of DTC, us or any agent.

DTC may discontinue providing its services as securities depository with respect to the Preferred Shares at any time by giving reasonable notice to us. Additionally, we may decide to discontinue the book-entry only system for transfers with respect to the Preferred Shares. In that event, we will print and deliver certificates in fully registered form for Preferred Shares. If DTC notifies us that it is unwilling to continue as securities depository, or it is unwilling to continue or ceases to be a clearing agency registered under the Exchange Act and a successor depository is appointed by us within 90 days after receiving such notice or becoming aware that DTC is no longer so registered, we will issue Preferred Shares in definitive form, at our expense, upon registration of transfer of, or in exchange for, such global securities.

According to DTC, the foregoing information with respect to DTC has been provided to the financial community for informational purposes only and is not intended to serve as a representation, warranty or contract modification of any kind.

Global Clearance and Settlement Procedures

Initial settlement for the Preferred Shares will be made in immediately available funds. Secondary market trading among DTC's Participants will occur in the ordinary way in accordance with DTC's rules and will be settled in immediately available funds using DTC's Same-Day Funds Settlement Process.

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AUCTION PROCESS

The following describes the auction process used to determine the public offering price of the Preferred Shares. That process differs from methods traditionally used in other underwritten public offerings. Treasury and underwriters will determine the public offering price and the allocation of the Preferred Shares in this offering through an auction process conducted by the joint book-running managers, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Sandler O'Neill & Partners, L.P., in their capacity as the auction agents. This auction process will involve a modified Dutch auction mechanic in which the auction agents (working with a number of other network brokers) will receive and accept bids from bidders for the Preferred Shares. We have received regulatory approval from the Federal Reserve to submit one or more bids for a portion of the Preferred Shares in the auction. After the auction closes and bids become irrevocable (which will occur automatically at the submission deadline to the extent the winning bids have not been modified or withdrawn at that time), the auction agents will determine the clearing price for the sale of the Preferred Shares offered hereby and, if Treasury chooses to proceed with the offering, the underwriters will allocate Preferred Shares to the winning bidders. The clearing price for the Preferred Shares may bear little or no relationship to the price that would be established using traditional valuation methods. You should carefully consider the risks described under Risk Factors Risk Factors Related to the Auction Process beginning on page S-23 of this prospectus supplement.

Eligibility and Account Status

In order to participate in the auction process, bidders must have an account with, and submit bids to purchase Preferred Shares through, either an auction agent or one of the network brokers. Brokers that are not network brokers will need to submit their bids, either for their own account or on behalf of their customers, through an auction agent or a network broker. If you wish to bid in the auction and do not have an account with an auction agent or a network broker, you will either need to establish such an account prior to bidding in the auction (which may be difficult to do before the submission deadline) or contact your existing broker and request that it submit your bid through an auction agent or a network broker. Network brokers and other brokers will have deadlines related to the auction that are earlier than those imposed by the auction agents, as described below under The Auction Process The Bidding Process.

Because the Preferred Shares are complex financial instruments for which there is no established trading market, the auction agents, each network broker and any other broker that submits bids through the auction agents or network broker will be required to establish and enforce client suitability standards, including eligibility, account status and size, to evaluate whether an investment in the Preferred Shares is appropriate for any particular investor. Each of them will individually apply its own standards in making that determination, but in each case those standards will be implemented in accordance with the applicable requirements and guidelines of the Financial Industry Regulatory Authority (FINRA). If you do not meet the relevant suitability requirements of an auction agent or another broker, you will not be able to bid in the auction. Accounts at an auction agent or any other broker, including broker accounts, are also subject to the customary rules of those institutions. You should contact your brokerage firm to better understand how you may submit bids in the auction process.

An auction agent or network brokers may require bidders (including any brokers that may be bidding on behalf of their customers) to submit additional information, such as tax identification numbers, a valid e-mail address and other contact information, and other information that may be required to establish or maintain an account.

The auction agents and the network brokers, upon request, will provide certain information to you in connection with the auction process.

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with the offering, including this prospectus supplement and the accompanying prospectus and forms used by brokers, if any, to submit bids. Additionally, you should understand that:

before submitting a bid in the auction, you should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference, including all the risk factors;

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the minimum bid price was agreed by the auction agents and Treasury, and we did not participate in that determination and therefore cannot provide any information regarding the factors that Treasury and the auction agents considered in determining the minimum bid price;

if valid, irrevocable bids are received for 100% or more of the offered Preferred Shares at the submission deadline, the clearing price will be equal to the highest price at which all of the offered Preferred Shares can be sold in the auction. In this case, the clearing price will be determined based on the number of valid, irrevocable bids at the time of the submission deadline that Treasury decides, in its sole discretion, to accept (it being understood that Treasury must accept bids for 100% of the offered Preferred Shares if it accepts any bid);

if valid, irrevocable bids are received for at least half, but less than all, of the offered Preferred Shares at the submission deadline, then Treasury may (but is not required to) sell, at the minimum bid price per share in the auction (which will be deemed the clearing price), the number of Preferred Shares it chooses to sell up to the number of bids received in the auction, so long as at least half of the offered Preferred Shares are sold;

if bids are received for less than half of the offered Preferred Shares, Treasury will not sell any Preferred Shares in this offering;

if there is little or no demand for the Preferred Shares at or above the public offering price once trading begins, the trading price of the Preferred Shares will decline;

the liquidity of any market for the Preferred Shares may be affected by the number of Preferred Shares that Treasury elects to sell in this offering, and the price of the Preferred Shares may decline if the Preferred Shares are illiquid;

the auction agents, in their sole discretion, have the right to reconfirm any bid by contacting the purported bidder directly and to impose size limits on the aggregate size of bids that it chooses to accept from any bidder, including network brokers (although the auction agents are under no obligation to reconfirm bids for any reason, except as may be required by applicable securities laws). If you are requested to reconfirm a bid and fail to do so in a timely manner, the auction agents may deem your bid to have been withdrawn, but alternatively may in their discretion choose to accept any such bid even if it has not been reconfirmed;

the auction agents may reject any bid that they determine, in their discretion, has a potentially manipulative, disruptive or other adverse effect on the auction process or the offering; and

the auction agents will not provide bidders with any information about the bids of other bidders or auction transactions or with advice regarding bidding strategies, in connection with the auction process.

None of the underwriters, Treasury or us have undertaken any efforts to qualify the Preferred Shares for sale outside the United States. Except to the limited extent that this offering will be open to certain non-U.S. investors under private placement exemptions in certain countries other than the United States, investors located outside the United States should not expect to be eligible to participate in this offering.

Even if a bidder places a bid in the auction, it may not receive an allocation of the Preferred Shares in the offering for a number of reasons described below. You should consider all the information in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in determining whether to submit a bid, the number of Preferred Shares you seek to purchase and the price per share you are willing to pay.

The following brokers have agreed to be network brokers for purposes of the auction process: BB&T Capital Markets, a division of Scott & Stringfellow, LLC, Blaylock Robert Van, LLC, Boenning & Scattergood, Inc., Cabrera Capital Markets, LLC, Cantor Fitzgerald & Co., CastleOak Securities, L.P., Compass Point Research & Trading, LLC, D.A. Davidson & Co., Davenport & Co., FBR Capital Markets & Co., FIG Partners, LLC, Guggenheim Securities, Janney Montgomery Scott LLC, Jefferies & Company, Inc., Joseph Gunnar & Co., Keefe, Bruyette & Woods, Inc., Lebenthal & Co., LLC, M.R. Beal & Company,

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Raymond James & Associates, Inc., Smith, Moore & Co., Sterne, Agee & Leach, Inc., Stifel, Nicolaus & Company, Incorporated, TD Ameritrade, Inc., The Williams Capital Group, L.P., Toussaint Capital Partners and Wedbush Morgan Securities Inc. The network brokers will not share in any underwriting discounts or paid by us in connection with the offering of the Preferred Shares but may, subject to applicable FINRA and rules and regulations, charge a separate commission to their own customers.

The Auction Process

The following describes how the auction agents will conduct the auction process:

General

The auction will commence at 10:00 a.m., New York City time, on the date specified by the auction agents in press release issued such day, and will end at 6:30 p.m., New York City time, on the second business day immediately thereafter (the submission deadline). Unless you submit your bids through an auction agent, your broker will have an earlier deadline for accepting bids. If a malfunction, technical or mechanical problem, calamity, crisis or other similar event occurs that the auction agents believe may interfere with the auction process, the auction agents may (in consultation with Treasury) decide to extend the auction or cancel and reschedule the auction. The auction agents and the network brokers will advise bidders of any such decision to extend or cancel and reschedule the auction using e-mail, telephone or facsimile, and will attempt to make such notification prior to the time the auction is scheduled to close. If the auction process is extended such that it closes at a later time on the same business day, any bids previously submitted will continue to be valid unless amended or cancelled by the bidder, but if the auction is extended such that it closes on the following business day or later, or is cancelled, all bids will be cancelled at the time of such extension or cancellation.

The auction agents and the network brokers will contact potential investors with information about the auction process and how to participate and will solicit bids from prospective investors via electronic message, telephone and facsimile. The minimum bid price is \$840.00 per Preferred Share with a minimum size for any bid of one Preferred Share.

The Bidding Process

The auction agents and the network brokers will only accept bids in the auction process in increments of whole Preferred Shares; no fractional interests will be sold.

No maximum price or auction price range has been established in connection with the auction process, which means that there is no ceiling on the price per share that you or any other bidder can bid in the auction. Each bidder must specify a price at or above the minimum bid price of \$840.00 (such bid price to be in increments of \$0.01) with a minimum bid size of one Preferred Share or such bid will be rejected.

Once the auction begins, you may submit your bids either directly through an auction agent or through any network broker. Bids through the network brokers will be aggregated and submitted to the auction agents as aggregate bids at each price increment by those brokers. Bids will only be accepted if they are made on an unconditional basis (i.e., no all-or-none bids will be accepted).

In connection with submitting a bid, you will be required to provide the following information: the number of Preferred Shares that you are interested in purchasing (only in whole shares - no fractional interests); the price per share you are willing to pay (such bid price to be in increments of \$0.01) at or above the minimum bid price of \$840.00 per Preferred Share with a minimum size for any bid of one Preferred Share); and any additional information that may be required to enable an auction agent and/or network broker to identify and confirm your eligibility and suitability for participating in this offering, and, if you submit a successful bid, consummate a sale of Preferred Shares to you.

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You may submit multiple bids. Canceling one bid does not cancel any other bid. However, as bids are independent, each bid may result in an allocation of Preferred Shares. Consequently, the sum of your bid size should be no more than the total number of Preferred Shares you are willing to purchase. In addition, the auction agents may impose size limits on the aggregate size of bids that they choose to accept from any bidder (including any network broker), although the auction agents are under no obligation to do so or to reconfirm bids for any reason, except as may be required by applicable securities laws.

At any time prior to the submission deadline, you may modify your bids to increase or decrease the number of Preferred Shares bid for or the price bid per share and may withdraw your bid and reenter the auction. Network brokers, however, will impose earlier submission deadlines than that imposed by the auction agents in order to have sufficient time to aggregate bids received from their respective customers and to transmit the aggregate bids to the auction agents before the auction closes. If you are bidding through a network broker, or another broker transmitting bids through an auction agent or a network broker, you should be aware of any earlier submission deadlines that may be imposed by your broker.

Conditions for valid bids, including eligibility standards and account funding requirements, may vary from broker to broker. Some brokers, for example, may require a prospective investor to maintain a minimum account balance or to ensure that its account balance is equal to or in excess of the amount of its bid. No funds will be transferred to the underwriters until the acceptance of the bid and the allocation of Preferred Shares.

A bid received by an auction agent or any network broker involves no obligation or commitment of any kind prior to the submission deadline. Therefore, you will be able to withdraw a bid at any time prior to the submission deadline (or any deadline imposed by a network broker, if you are bidding through a network broker). Following the submission deadline, however, all bids that have not been modified or withdrawn by you prior to the submission deadline will be considered final and irrevocable and may be accepted. The auction agents and Treasury will rely on your bid in setting the public offering price and in sending notices of acceptance to successful bidders.

If you are requested to reconfirm a bid and fail to do so in a timely manner, the auction agents may deem your bid to have been withdrawn. The auction agents may, however, choose to accept your bid even if it has not been reconfirmed.

The auction agents may reject any bid that they determine, in their discretion, has a potentially manipulative, disruptive or other adverse effect on the auction process or the offering.

The auction agents will not provide bidders with any information about the bids of other bidders or auction transactions or with advice regarding bidding strategies, in connection with the auction process.

No funds will be transferred to the underwriters until the acceptance of the bid and the allocation of the Preferred Shares. However, the auction agents or any network broker may require you to deposit funds or securities in your brokerage accounts with value sufficient to cover the aggregate dollar amount of your bids. Bids may be rejected if you do not provide the required funds or securities within the required time. The auction agents or any network broker may, however, decide to accept successful bids regardless of whether you have deposited funds or securities in your brokerage accounts. In any case, if you are a successful bidder, you will be obligated to purchase the Preferred Shares allocated to you in the allocation process and will be required to deposit funds in your brokerage accounts prior to settlement, which is expected to occur three or four business days after the notices of acceptance are sent to you.

Pricing and Allocation

The auction agents will manage the master order book that will aggregate all bids and will include the identities of the bidders (or their brokers, in the case of bids submitted through a network broker). The master order book will not be available for viewing by bidders. Bidders whose bids are accepted will be informed about the result of the auction bids.

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If valid, irrevocable bids are received for 100% or more of the offered Preferred Shares, the clearing price will be equal to the highest price at which all of the offered Preferred Shares can be sold in the auction. In this case, the clearing price will be determined based on the number of valid, irrevocable bids at the time of the submission deadline that Treasury decides, in its sole discretion, to accept (it being understood that Treasury must accept bids for 100% of the offered Preferred Shares if it accepts any bid). If valid, irrevocable bids for 100% or more of the offered Preferred Shares are received, any accepted bids submitted in the auction above the clearing price will receive allocations in full, while each bid submitted at the clearing price will be allocated the number of Preferred Shares represented by such bids, in the case bids for 100% of the offered Preferred Shares are received, or a number of Preferred Shares approximately equal to the pro-rata allocation percentage multiplied by the number of Preferred Shares represented by such bid, rounded to the nearest whole number of Preferred Shares (subject to rounding to eliminate odd-lots), in the case bids for more than 100% of the offered Preferred Shares are received. If valid, irrevocable bids are received for at least half, but less than all, of the offered Preferred Shares at the submission deadline, then Treasury may (but is not required to) sell, at the minimum bid price in the auction (which will be deemed the clearing price), the number of Preferred Shares it chooses to sell up to the number of bids received in the auction, so long as at least half of the offered Preferred Shares are sold, and in such a case Treasury chooses to sell fewer Preferred Shares than the number of Preferred Shares for which bids were received, then all bids will experience equal pro-rata allocation.

If bids are received for less than half of the offered Preferred Shares, Treasury will not sell any Preferred Shares in this offering.

Unless Treasury decides not to sell any Preferred Shares or as otherwise described below, all Preferred Shares will be sold to bidders at the clearing price plus accrued dividends thereon.

Promptly after the auction agents determine the clearing price, they will communicate that clearing price to Treasury. Treasury may decide not to sell any Preferred Shares after the clearing price is determined or, in the case where bids are reserved for at least half, but less than all, of the offered Preferred Shares, may decide to sell a portion (but not less than half) of the offered Preferred Shares. Once Treasury confirms its acceptance of the clearing price and the number of Preferred Shares to be sold, the auction agents will confirm allocations of Preferred Shares to its clients and the network brokers. The underwriters will sell all Preferred Shares at the clearing price per share plus accrued dividends.

If Treasury elects to sell Preferred Shares in the offering, allocation of the Preferred Shares will be determined first, allocating Preferred Shares to any bids made above the clearing price, and second, allocating Preferred Shares (on a pro-rata basis if appropriate) among bids made at the clearing price. Any pro-rata allocation percentage for bids made at the clearing price will be determined by dividing the number of Preferred Shares allocated at the bidding increment equal to the clearing price by the number of Preferred Shares represented by all bids at that bidding increment. Each accepted bid submitted at the clearing price will be allocated a number of Preferred Shares approximately equal to the pro-rata allocation percentage multiplied by the number of Preferred Shares represented by its bid, rounded to the nearest whole number of Preferred Shares. In no case, however, will any rounded amount exceed the original bid size.

After Treasury confirms its acceptance of the clearing price and the number of Preferred Shares to be sold, the auction agents and each network broker that has submitted successful bids will notify you, in the event your bids have been accepted by Treasury, by electronic message, telephone, facsimile or otherwise that the auction has closed and that your bids have been accepted by Treasury (subject, in some cases, to pro-rata, as described in this prospectus supplement). They may also provide you with a preliminary allocation estimate, which will be subsequently followed by a final

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allocation and confirmation of sale. In the event your bids are not accepted, you may be notified that your bid has not been accepted. As a result of the varying delivery times involved in sending e-mails over the Internet and other methods of delivery, you may receive notices of acceptance before or after other bidders.

The clearing price and number of Preferred Shares to be sold are expected to be announced via press release one business day following the end of the auction. The price will also be included in the notice of acceptance and confirmation of sale that will be sent to successful bidders, and will also be included in the final prospectus supplement for the offering.

Sales to investors will be settled through your account with the broker through which your bid was submitted. If you submit bids that are accepted by Treasury, you will be obligated to purchase the Preferred Shares allocated to you regardless of whether you are aware that the notice of acceptance of your bid has been sent. Once an underwriter has sent out a notice of acceptance and confirmation of sale, it will not cancel or reject your bid. The auction agents and Treasury will rely on your bid in setting the public offering price and in sending notices of acceptance to successful bidders. As a result, you will be responsible for paying for all of the Preferred Shares finally allocated to you at the public offering price.

You should carefully review the procedures of, and communications from, the institution through which you purchase Preferred Shares.

Auction Process Developments

You should keep in contact with the institution through which your bid has been submitted and monitor your relevant e-mail accounts, telephone and facsimile for notifications related to this offering, which may include

Potential Request for Reconfirmation. The auction agents, in their sole discretion, may ask you to reconfirm your bid by directly contacting you (or your broker, if you submitted your bid through a broker other than an auction agent), although the auction agents are under no obligation to reconfirm bids for any reason, except as may be required by applicable securities laws. If you are requested to reconfirm a bid and fail to do so in a timely manner, the auction agents may deem your bid to have been withdrawn. The auction agents may, however, choose to accept your bid even if it has not been reconfirmed.

Notice of Acceptance. Notification as to whether any of your bids are successful and have been accepted by Treasury. This notification will include the final clearing price. If your bids have been accepted by Treasury, you will be informed about the results of the auction process.

SELLING SHAREHOLDER

The table below sets forth information concerning the resale of the Preferred Shares by Treasury. We will not receive any proceeds from the sale of any Preferred Shares sold by Treasury. Our operations are regulated by various U.S. governmental authorities, including in certain respects by Treasury. Other than through its role as a regulator and the acquisition of the Preferred Shares, Treasury has not held any position or office or had any material relationship with us or any of our predecessors or affiliates within the past three years.

Treasury acquired the Preferred Shares as part of the Troubled Asset Relief Program, which was established pursuant to the EESA. EESA was enacted into law on October 3, 2008 to restore confidence and stabilize the U.S. banking system and to encourage financial institutions to increase their lending to customers and to each other.

The following description was provided by Treasury and is derived from the website of Treasury. Treasury is an executive agency of the United States government responsible for promoting economic prosperity and ensuring

financial security of the United States. Treasury is responsible for a wide range of activities, such as advising the President of the United States on economic and financial issues, encouraging sustainable economic growth and fostering improved governance in financial institutions. Treasury operates

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and maintains systems that are critical to the nation's financial infrastructure, such as the production of coin and currency, the disbursement of payments to the American public, revenue collection and the borrowing of funds necessary to run the federal government. Treasury works with other federal agencies, foreign governments, international financial institutions to encourage global economic growth, raise standards of living and, to the possible, predict and prevent economic and financial crises. Treasury also performs a critical and far-reaching role in enhancing national security by implementing economic sanctions against foreign threats to the United States, identifying and targeting the financial support networks of national security threats and improving the safety of our financial systems. In addition, under the EESA, Treasury was given certain authority and facilities to monitor the liquidity and stability of the financial system.

The doctrine of sovereign immunity, as limited by the FTCA, provides that claims may not be brought against the United States of America or any agency or instrumentality thereof unless specifically permitted by act of Congress.

The FTCA bars claims for fraud or misrepresentation. The courts have held, in cases involving federal agencies and instrumentalities, that the United States may assert its sovereign immunity to claims brought under the federal securities laws. Thus, any attempt to assert a claim against Treasury alleging a violation of the federal securities laws, including the Securities Act and the Exchange Act, resulting from an alleged material misstatement in or material omission from this prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus are a part, or any other act or omission in connection with the offering to which this prospectus supplement and the accompanying prospectus relate, likely would be barred. In addition, Treasury and its members, officers, agents, and employees are exempt from liability for any violation or alleged violation of the anti-fraud provisions of Section 10(b) of the Exchange Act by virtue of Section 3(c) thereof. The underwriters are not claiming to be agents of Treasury in this offering. Accordingly, any attempt to assert such a claim against the members, officers, agents or employees of Treasury for a violation of the Securities Act or the Exchange Act resulting from an alleged material misstatement in or material omission in this prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus are a part or resulting from any other act or omission in connection with the offering to which this prospectus supplement and the accompanying prospectus relates likely would be barred. See Risk Factors Treasury is a federal agency and your ability to bring a claim against Treasury under federal securities laws in connection with a purchase of Preferred Shares may be limited.

The table below sets forth information with respect to the number of Preferred Shares beneficially owned by Treasury as of June 27, 2012, the number of Preferred Shares being offered by Treasury in this offering, and the number of Preferred Shares to be beneficially owned by Treasury after this offering. The percentages below are calculated based on 25,054 Preferred Shares issued and outstanding as of June 27, 2012.

Name and Address of Beneficial Owner	Beneficial Ownership Prior to the Offering ⁽¹⁾⁽²⁾		Preferred Shares Being Offered	Beneficial Ownership After the Offering	
	Number of Preferred Shares Beneficially Owned ⁽¹⁾	Percent		Number of Preferred Shares Beneficially Owned ⁽¹⁾⁽²⁾	Percent
United States Department of the Treasury 1500 Pennsylvania Avenue, N.W. Washington, D.C. 20220	25,054	100 %	25,054	0	0 %

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In accordance with Rule 13d-3 under the Exchange Act, a person is deemed to be the beneficial owner, for (1) purposes of this table, of any Preferred Shares over which such person has voting or investment power and which such person has the right to acquire beneficial ownership within 60 days.

(2) Treasury also owns a warrant to purchase 357,234 shares of our common stock.

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U.S. FEDERAL INCOME TAX CONSEQUENCES

The following discussion summarizes the material U.S. federal income tax consequences applicable to U.S. holders and non-U.S. holders (each as defined below) with respect to the purchase, ownership and disposition of the Preferred Shares. This summary is based upon current provisions of the Internal Revenue Code of 1986, as amended from time to time (the Code), Treasury regulations and judicial and administrative authority, all of which are subject to differing interpretations or change, possibly with retroactive effect. This summary is limited to U.S. investors who will hold the Preferred Shares as capital assets and does not discuss all aspects of U.S. federal income taxation that may be important to particular investors in light of their individual circumstances. This discussion does not address the tax consequences to investors who are subject to special tax rules, such as banks and other financial institutions, insurance companies, governments and governmental entities, broker-dealers, partnerships and their partners, tax-exempt organizations, investors that will hold the Preferred Shares as part of a straddle, hedge, conversion, constructive sale, or other integrated security transaction for U.S. federal income tax purposes, U.S. expatriates, or U.S. holders that have a functional currency that is not the U.S. dollar, all of which may be subject to tax rules that differ significantly from those summarized below. In addition, this summary does not address any alternative minimum tax consequences or any state, local or non-U.S. tax consequences. Every prospective investor is urged to consult its own tax advisors regarding the U.S. federal, state, local, and non-U.S. income and other tax considerations of the purchase, ownership, and disposition of the Preferred Shares.

For purposes of this summary, you are a U.S. holder if you are a beneficial owner of the Preferred Shares that are for U.S. federal income tax purposes (i) an individual citizen or resident of the United States, (ii) a corporation created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) a trust if it (A) is subject to the primary supervision of a court within the United States and one or more persons have the authority to control all substantial decisions of the trust, or (B) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person. You are a non-U.S. holder if you are a beneficial owner of the Preferred Shares that is an individual, corporation, estate or trust that is not a U.S. holder.

If a partnership (including any other entity treated as a partnership for U.S. federal income tax purposes) is a holder of the Preferred Shares, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. If you are a partnership or a partner of a partnership holding Preferred Shares, you should consult your own tax advisors as to the particular U.S. federal income tax consequences of the purchase, ownership and disposition of the Preferred Shares.

U.S. Holders

Distributions on the Preferred Shares. In general, if distributions are made with respect to the Preferred Shares, the distributions will be treated as dividends to the extent of our current and accumulated earnings and profits, as determined for U.S. federal income tax purposes. Any portion of a distribution in excess of our current and accumulated earnings and profits is treated first as a nontaxable return of capital reducing your tax basis in the Preferred Shares. Any amount in excess of your tax basis is treated as capital gain, the tax treatment of which is discussed below under Sale or Redemptions of the Preferred Shares.

Dividends received by individual holders of the Preferred Shares will generally be subject to a reduced maximum tax rate of 15% if such dividends are treated as qualified dividend income for U.S. federal income tax purposes. The rate reduction does not apply to dividends that are paid to individual stockholders with respect to Preferred Shares.

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Shares that are held for 60 days or less during the 121-day period beginning on the date which is 60 days before the date on which the Preferred Shares become ex-dividend. Furthermore, the rate reduction does not apply to dividends received to the extent that an individual holder elects to treat the dividends as investment income for purposes of determining the holder's limit for the deduction of investment interest under Section 163(d) of the Code. The 15% dividend rate is scheduled to expire December 31, 2012, at which time the rate will revert back to the ordinary income rates previously in effect and applicable to dividends unless the Code is amended to provide for a different rate. In addition, under the

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Health Care and Education Reconciliation Act of 2010, dividends received after December 31, 2012 by U.S. holders that are individuals could be subject to the 3.8% tax on net investment income. You should consult your own tax advisors regarding the implications of these rules in light of your particular circumstances.

Dividends received by corporate holders of the Preferred Shares may be eligible for a dividends received deduction equal to 70% of the amount of the distribution, subject to applicable limitations, including limitations relating to debt financed portfolio stock under Section 246A of the Code and to the holding period requirements of Section 246 of the Code. In addition, any amount received by a corporate holder that is treated as a dividend may, depending on the circumstances, constitute an extraordinary dividend subject to the provisions of Section 1059 of the Code (except as may otherwise be provided in Treasury regulations yet to be promulgated). Under Section 1059, a corporate holder that has held shares for two years or less before the dividend announcement date generally must reduce the tax basis of all of the holder's shares (but not below zero) by the non-taxed portion of the extraordinary dividend and, if the non-taxed portion exceeds the holder's tax basis for the shares, must recognize the excess as gain from the sale or exchange of the shares in the year the payment is received. Individual holders of Preferred Shares that receive any extraordinary dividends that are treated as qualified dividend income (as discussed above) will be required to treat any losses on the sale of such Preferred Shares as long-term capital losses to the extent of such dividends. We strongly encourage you to consult your own tax advisor regarding the extent to which any, to which these provisions may apply to you in light of your particular facts and circumstances.

Sale or Redemption of the Preferred Shares. On the sale or exchange of the Preferred Shares to a party other than us, you generally will realize capital gain or loss in an amount equal to the difference between (a) the amount of cash and the fair market value of any property you receive on the sale and (b) your tax basis in the Preferred Shares. We strongly encourage you to consult your own tax advisors regarding applicable rates, holding period and netting rules for capital gains and losses in light of your particular facts and circumstances. Certain limitations exist on the deduction of capital losses by both corporate and non-corporate taxpayers.

On the redemption of Preferred Shares by us, your surrender of the Preferred Shares for the redemption proceeds will be treated either as a payment received upon sale or exchange of the Preferred Shares or as a distribution with respect to all of your equity interests in us. Resolution of this issue will turn on the application of Section 302 of the Code to your individual facts and circumstances.

The redemption will be treated as gain or loss from the sale or exchange of Preferred Shares (as discussed above) if:

the redemption is substantially disproportionate with respect to you within the meaning of Section 302(b)(2) of the Code;

your interest in the Preferred Shares and any other equity interest in us is completely terminated (within the meaning of Section 302(b)(3) of the Code) as a result of such redemption; or

the redemption is not essentially equivalent to a dividend (within the meaning of Section 302(b)(1) of the Code). In general, redemption proceeds are not essentially equivalent to a dividend if the redemption results in a meaningful reduction of your interest in the issuer.

In determining whether any of these tests has been met, you must take into account not only the Preferred Shares and other equity interests in us that you actually own, but also shares and other equity interests that you constructively own within the meaning of Section 318 of the Code.

If none of the above tests giving rise to sale or exchange treatment is satisfied, then a payment made in redemption of the Preferred Shares will be treated as a distribution that is subject to the tax treatment described above under Distributions on the Preferred Shares. The amount of the distribution will be equal to the amount of cash

fair market value of property you receive without any offset for your tax basis in the Preferred Shares. Your basis in the redeemed Preferred Shares should be transferred to your remaining Preferred Shares. If, however, you have no remaining Preferred Shares, your basis could be lost.

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Any redemption proceeds that are attributable to any declared but unpaid dividends on the Preferred Shares generally be subject to the rules described above under U.S. Holders Distributions on the Preferred Shares

We strongly encourage you to consult your own tax advisor regarding: (a) whether a redemption payment qualify for sale or exchange treatment under Section 302 of the Code or, alternatively, will be characterized as a dividend distribution; and (b) the resulting tax consequences to you in light of your individual facts and circumstances.

Information Reporting and Backup Withholding. Information reporting will generally apply to noncorporate U.S. holders with respect to payments of dividends on the Preferred Shares and to certain payments of proceeds on the sale or other disposition of the Preferred Shares. Certain noncorporate U.S. holders may be subject to U.S. backup withholding (currently at a rate of 28%) on payments of dividends on the Preferred Shares and certain payments of proceeds on the sale or other disposition of the Preferred Shares unless the beneficial owner of the Preferred Shares furnishes the payor or its agent with a taxpayer identification number, certified under penalty of perjury, and certain other information, or otherwise establishes, in the manner prescribed by law, an exemption from backup withholding.

U.S. backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a credit against a U.S. holder's U.S. federal income tax liability, which may entitle the U.S. holder to a refund, provided the U.S. holder timely furnishes the required information to the Internal Revenue Service (IRS).

Non-U.S. Holders

Distributions on the Preferred Shares. Distributions treated as dividends as described above under U.S. Holders Distributions on the Preferred Shares paid to a non-U.S. holder of the Preferred Shares will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. However, distributions that are effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States are not subject to the withholding tax, provided certain certification and disclosure requirements are satisfied. Instead, such distributions are subject to U.S. federal income tax on a net income basis in the same manner as if the non-U.S. holder were a United States person as defined under the Code, unless an applicable income tax treaty provides otherwise. Any such effectively connected dividends received by a foreign corporation may be subject to an additional branch profits tax at a 30% rate or a lower rate as may be specified by an applicable income tax treaty.

For purposes of obtaining a reduced rate of withholding under an income tax treaty or an exemption from withholding for dividends effectively connected to a U.S. trade or business, a non-U.S. holder will generally be required to provide a U.S. taxpayer identification number as well as certain information concerning the holder's country of residence and entitlement to tax benefits. A non-U.S. holder can generally meet the certification requirements by providing a properly executed IRS Form W-8BEN (if the holder is claiming the benefits of an applicable income tax treaty) or Form W-8ECI (if the dividends are effectively connected with a trade or business in the United States) or suitable substitute form.

Sale or Redemption of the Preferred Shares. A non-U.S. holder generally will not be subject to U.S. federal income or withholding tax on gain realized on the sale, exchange, redemption (except as discussed below) or other disposition of the Preferred Shares except for (i) certain non-resident alien individuals that are present in the United States for 183 or more days in the taxable year of the sale or disposition, (ii) gain that is effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States (and, if a

treaty applies, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States (iii) non-U.S. holders that are subject to tax pursuant to certain provisions of U.S. federal income tax law applicable to certain expatriates, and (iv) gain if we are or have been a United States real property holding corporation for U.S. federal income tax purposes.

We would not be treated as a United States real property holding corporation if less than 50% of our assets throughout a prescribed testing period consist of interests in real property located within the United States excluding, for this purpose, interest in real property solely in a capacity as a creditor. To the extent that

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we are or have been a United States real property holding corporation for U.S. federal income tax purposes. If a non-U.S. holder was not eligible for a treaty exemption, any gain on the sale of our Preferred Shares would be treated as effectively connected with a trade or business within the United States and the purchaser of the stock could be required to withhold 10% of the purchase price and remit such amount to the IRS. Gain that is treated as effectively connected with a trade or business within the United States will be subject to U.S. federal income tax on a net income basis in the same manner as if the non-U.S. holder was a United States person as defined under the Code, unless an applicable income tax treaty provides otherwise. Any such effectively connected income received by a foreign corporation may be subject to an additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

We believe that we are not currently and do not anticipate becoming a United States real property holding corporation for U.S. federal income tax purposes.

A payment made to a non-U.S. holder in redemption of the Preferred Shares may be treated as a dividend, rather than as a payment in exchange for such stock, in the circumstances discussed above under U.S. Holders' Redemption of the Preferred Shares, in which event such payment would be subject to tax as discussed above under Distributions on the Preferred Shares. Prospective investors should consult their own tax advisors to determine the proper tax treatment of any payment received in redemption of the Preferred Shares.

Information Reporting and Backup Withholding. Information returns will be filed with the IRS reporting payments of dividends on the Preferred Shares and the amount of tax, if any, withheld with respect to those payments. Copies of information returns reporting such dividends and withholding may also be made available to the tax authorities in the country in which a non-U.S. holder resides under the provisions of an applicable income tax treaty. Unless the non-U.S. holder complies with certification procedures to establish that it is not a United States person, information returns may be filed with the IRS in connection with the proceeds from a sale or other disposition of the Preferred Shares and the non-U.S. holder may be subject to U.S. backup withholding on dividend payments on the Preferred Shares or on the proceeds from a sale or other disposition of the Preferred Shares. Satisfaction of the certification procedures required to claim a reduced rate of withholding under a treaty described above in the section titled Distributions on the Preferred Shares will satisfy the certification requirements required to avoid backup withholding as well. The amount of any backup withholding from a payment to a non-U.S. holder will be allowed as a credit against such holder's U.S. federal income tax liability and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS. Non-U.S. holders are urged to consult their own tax advisors regarding the application of backup withholding in their particular circumstances and the availability of and procedure for obtaining an exemption from backup withholding under current Treasury Department regulations.

New Legislation Relating to Foreign Accounts

Legislation enacted in 2010 may impose withholding taxes on certain types of payments made to foreign financial institutions and certain other non-U.S. entities after December 31, 2012. The legislation generally imposes a 30% withholding tax on dividends on or gross proceeds from the sale or other disposition of Preferred Shares paid to a foreign financial institution unless the foreign financial institution enters into an agreement with Treasury Department, among other things, undertake to identify accounts held by certain U.S. persons or U.S.-owned foreign entities and annually report certain information about such accounts, and withhold 30% on payments to account holders. Certain actions prevent it from complying with these reporting and other requirements. In addition, the legislation generally imposes a 30% withholding tax on the same types of payments to a foreign non-financial entity unless the entity certifies that it does not have any substantial U.S. owners or furnishes identifying information regarding

each substantial U.S. owner. Under recently issued IRS guidance, these rules generally would apply to payments of dividends on the Preferred Shares made after December 31, 2013, and payments of gross proceeds from the disposition of the Preferred Shares made after December 31, 2014. Prospective investors should consult their tax advisors regarding this legislation.

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Treasury is offering the Preferred Shares through Merrill Lynch, Pierce, Fenner & Smith Incorporated and Sandler O'Neill & Partners, L.P. as representatives of the several underwriters. The terms and conditions set forth in the underwriting agreement, dated June 27, 2012, govern the sale and purchase of the Preferred Shares. Each underwriter named below has severally agreed to purchase from Treasury, and Treasury has agreed to sell to each underwriter, the number of Preferred Shares set forth opposite the name of each underwriter below at the offering price less the underwriting discounts set forth on the cover page of this prospectus supplement.

Underwriter	Number of Preferred Shares
Merrill Lynch, Pierce, Fenner & Smith Incorporated	11,588
Sandler O'Neill & Partners, L.P.	11,588
Great Pacific Fixed Income Securities, Inc.	626
Loop Capital Markets LLC	626
Samuel A. Ramirez & Company, Inc.	626
Total	25,054

The underwriting agreement provides that the obligations of the several underwriters to purchase the Preferred Shares offered hereby are subject to certain conditions precedent and that the underwriters will purchase all Preferred Shares that Treasury determines to sell, if any are purchased. The number of Preferred Shares that Treasury may determine to sell will depend, in part, upon the success of the auction process. See Auction Process The Auction Process Pricing and Allocation.

The underwriters plan to offer the Preferred Shares for sale pursuant to the auction process described above under Auction Process. Preferred Shares sold by the underwriters to the public will be sold at the clearing price determined through that auction process plus accrued dividends thereon. During the auction period, bids may be placed for Preferred Shares at any price in increments of \$0.01. The offering of the Preferred Shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part. As described under Auction Process, Treasury may decide not to sell any Preferred Shares in the auction process, regardless of the clearing price set in the auction process.

The underwriters are committed to purchase and pay for all such Preferred Shares, if any are purchased. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or this offering may be terminated. The underwriting agreement provides that the obligations of the underwriters are conditional and may be terminated at their discretion based on the assessment of the state of the financial markets. The obligations of the underwriters may also be terminated if the occurrence of the events specified in the underwriting agreement.

The following table shows the per share and total underwriting discounts and commissions that the underwriters will receive and the proceeds Treasury will receive.

Preferred Shares	Per Share	Total
Price to public ⁽¹⁾	\$ 933.3600	\$ 23,384,401.4400

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Underwriting discounts and commissions to be paid by Treasury ⁽²⁾	\$ 14.0004	\$ 350,766.0200
Proceeds to Treasury ⁽¹⁾	\$ 919.3596	\$ 23,033,635.4200

(1) Plus accrued dividends from and including May 15, 2012.

Treasury has agreed to pay all underwriting discounts and commissions and transfer taxes. We have agreed to
(2) pay all transaction fees, if any, applicable to the sale of the Preferred Shares and certain fees and disbursements
of counsel for Treasury incurred in connection with this offering.

We estimate that the total expenses of this offering, other than the underwriting discounts and commissions and
transfer taxes, if any, will be approximately \$88,301.88 and are payable by us.

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Restriction on Sales of Securities

We and Treasury have agreed, for the period beginning on and including the date of this prospectus supplement through and including the date that is 30 days after the date of this prospectus supplement, that we will not, without the prior written consent of the representatives, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell by option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant exercisable or exchangeable, for preferred stock or file any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of preferred stock.

The restrictions described in the immediately preceding paragraph will not apply to sales by Treasury of any Preferred Shares back to us. The underwriters may, in their sole discretion and at any time and from time to time without notice, release all or any portion of the Preferred Shares and other securities from the foregoing restrictions.

Indemnity

We have agreed to indemnify Treasury and the underwriters and persons who control the underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of these liabilities.

Stabilization

In connection with this offering, the underwriters may engage in stabilizing transactions.

Stabilizing transactions permit bids to purchase Preferred Shares so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of Preferred Shares while this offering is in progress.

These stabilizing transactions may have the effect of raising or maintaining the market price of our Preferred Shares or preventing or retarding a decline in the market price of our Preferred Shares. As a result, the price of Preferred Shares in the open market may be higher than it would otherwise be in the absence of these transactions.

Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our Preferred Shares. These transactions may be effected in the open market or otherwise and, if commenced, may be discontinued at any time.

Listing

The Preferred Shares will not be listed for trading on any stock exchange or available for quotation on any national securities quotation system.

Selling Restrictions

United Kingdom

Each underwriter shall be deemed to have represented, warranted and agreed that:

it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the "FSMA")) received by it in connection with the issue or sale of the Preferred Shares in circumstances in which Section 21(1) of the FSMA does not apply to our company; and it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by or on its behalf in relation to the Preferred Shares in, from or otherwise involving the United Kingdom.

This prospectus supplement and the accompanying prospectus are only being distributed to, and is only directed to:

(i) persons who are outside the United Kingdom or (ii) investment professionals falling within Article 19(5)

of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) high net worth individuals, companies, unincorporated associations and other persons, falling within Article

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49(2)(a) to (d) of the Order or (iv) other persons to whom it may be lawfully communicated in accordance with the Order (all such persons together being referred to as relevant persons). The Preferred Shares are only available to relevant persons and investment activity will only be engaged in with, relevant persons. Any person that is not a relevant person should not act or rely on this prospectus supplement or the accompanying prospectus or either of their respective contents.

European Economic Area

In relation to each Member State of the European Economic Area (the EEA) that has implemented the Prospectus Directive (each, a Relevant Member State), an offer to the public of any Preferred Shares that are the subject of the offering contemplated in this prospectus supplement may not be made in that Relevant Member State, except where an offer to the public in that Relevant Member State of any Preferred Shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) at any time to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) at any time to fewer than 100 or, if the Relevant Member State has implemented the relevant provisions of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors, as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the underwriters; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of the Preferred Shares shall result in a requirement for us or the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer to the public of any Preferred Shares in relation to Preferred Shares in any Relevant Member State means the communication in any form and by any means sufficient information on the terms of the offer and the Preferred Shares to be offered so as to enable an investor to decide to purchase the Preferred Shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

Conflict of Interest; Other Relationships

From time to time, the underwriters and their affiliates have provided, and may continue to provide, investment banking and other financial advisory services to us in the ordinary course of their businesses, and have received and may continue to receive, compensation for such services.

In the ordinary course of their various business activities, the underwriters and their respective affiliates may hold or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investment and securities activities may involve securities and/or instruments of the Company. The underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend

clients that they acquire, long and/or short positions in such securities and instruments.

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LEGAL MATTERS

The validity of the Preferred Shares offered by this prospectus supplement and certain other legal matters were passed upon for us by Brooks, Pierce, McLendon, Humphrey & Leonard, L.L.P. The underwriters are represented by Sidley Austin LLP, New York, New York.

EXPERTS

Our consolidated financial statements as of December 31, 2011 and 2010 and for each of the years in the three-year period ended December 31, 2011 have been incorporated by reference in this prospectus supplement and the accompanying prospectus in reliance upon the report of Porter Keadle Moore, LLC, registered independent public accountants, incorporated by reference herein and therein and upon the authority of said firm as experts in accounting and auditing.

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PROSPECTUS

**25,054 SHARES OF FIXED RATE CUMULATIVE
PERPETUAL PREFERRED STOCK, SERIES A
LIQUIDATION PREFERENCE AMOUNT \$1,000 PE
SHARE**

**357,234 SHARES OF COMMON STOCK AND A
WARRANT TO PURCHASE SUCH SHARES**

This prospectus relates to the potential resale from time to time by selling securityholders of 25,054 shares of Fixed Rate Cumulative Perpetual Preferred Stock, Series A (the Series A Preferred Stock), liquidation preference amount \$1,000 per share, a warrant to purchase 357,234 shares of our Common Stock (the Warrant), and 357,234 shares of our Common Stock issuable from time to time upon exercise of the Warrant. In this prospectus, we sometimes refer to the shares of Series A Preferred Stock as the Preferred Shares, and along with the Warrant and the shares of Common Stock issuable upon exercise of the Warrant, collectively as the securities. We issued the Preferred Shares and the Warrant to the United States Department of the Treasury (Treasury) on December 22, 2008, as part of Treasury's Troubled Asset Relief Program Capital Purchase Program (the CPP) in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended (the Securities Act).

Dividends on the Preferred Shares are payable quarterly in arrears on each February 15, May 15, August 15, and November 15. The initial dividend rate is 5% per annum for the first five years, and will increase to 9% per annum on and after February 15, 2014 if not otherwise redeemed earlier by us. We may redeem the Preferred Shares at any time, in whole or in part, at our option, subject to prior approval by the appropriate federal banking agency, for a redemption price equal to 100% of the liquidation preference amount per Preferred Share plus any accrued and unpaid dividends up to but excluding the date of redemption.

The initial selling securityholder and its successors, including transferees, to which we collectively refer as the selling shareholders, may offer the Preferred Shares and/or the Warrant from time to time directly or through underwriters, broker-dealers or agents and in one or more public or private transactions and at fixed prices, prevailing market prices, at prices related to prevailing market prices, at negotiated prices or at prices determined by auction or by other methods. If these securities are sold through underwriters, broker-dealers or agents, the selling securityholders will be responsible for underwriting discounts or commissions or agents' commissions, and will not receive any proceeds from the sale of securities by the selling securityholders.

Neither the Preferred Shares nor the Warrant are listed on any exchange. Unless requested by the initial selling securityholder, we do not intend to list the Preferred Shares on any exchange. We do not intend to list the Warrant on any exchange. Our Common Stock is traded on the NASDAQ Global Market under the symbol PEBK. On December 22, 2012, the last reported sale price of our Common Stock on the NASDAQ Global Market was \$8.02 per share. You are urged to obtain a current market quotation of our Common Stock.

Investing in the securities involves risks. You should read the Risk Factors section beginning on page 10 of this prospectus and in our Annual Report on Form 10-K for the year ended December 31, 2011 before making a decision to invest in the securities.

None of the Securities and Exchange Commission (the SEC), the Federal Deposit Insurance Corporation (the FDIC), the Board of Governors of the Federal Reserve System (the Federal Reserve), any securities commission or any other federal or state bank regulatory agency has approved or disapproved these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The securities are not savings accounts, deposits, or other obligations of any bank and are not insured by FDIC or any other governmental agency.

The date of this prospectus is June 25, 2012

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC using a shelf registration process. Under this shelf process, the selling securityholders may, from time to time, sell in one or more offerings, securities described in this prospectus.

We may provide a prospectus supplement containing specific information about the terms of a particular offering by the selling securityholders. The prospectus supplement may add, update or change information in this prospectus. If the information in this prospectus is inconsistent with a prospectus supplement, you should rely on the information in that prospectus supplement. We urge you to read both this prospectus and, if applicable, the prospectus supplement together with additional information described under the headings "Where You Can Find More Information" and "Incorporation by Reference" on pages 1 and 2 in this prospectus.

In this prospectus, we frequently use the terms "we," "us," and "ours" to refer to Peoples Bancorp of North Carolina (Peoples or the Company) and its subsidiaries.

You should not assume that the information contained in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front cover of such documents. Neither the delivery of this prospectus or any applicable prospectus supplement nor any distribution of securities pursuant to such documents creates any implication, under any circumstances, that there has been no change in the information set forth in this prospectus or any applicable prospectus supplement or in our affairs since the date of this prospectus or any applicable prospectus supplement.

FORWARD-LOOKING STATEMENTS

This prospectus includes, and any accompanying prospectus supplement and documents incorporated by reference may contain, forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). Forward-looking statements discuss future expectations, describe future plans and strategies, contain projections of results of operations, financial condition or state other forward-looking information. Forward-looking statements are generally identifiable by the use of forward-looking terminology such as anticipate, believe, continue, could, endeavor, estimate, expect, forecast, goal, intend, may, objective, potential, preliminary, pro-forma, project, seek, should, will and other similar words and expressions of future intent.

Our ability to predict results or the actual effect of future plans or strategies is inherently uncertain. Although we believe that the expectations reflected in such forward-looking statements are based on reasonable assumptions, actual results and performance could differ materially from those set forth in the forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to, (1) competition in the markets we serve, (2) changes in the interest rate environment, (3) general national, regional or local economic conditions may be less favorable than expected, resulting in, among other things, a deterioration in credit quality and the possible impairment of collectibility of loans, (4) legislative or regulatory changes, including changes in accounting standards, (5) significant changes in the federal and state legal and regulatory environments and laws, (6) the impact of changes in monetary and fiscal policies, laws, rules and regulations and (7) other risk factors identified in other filings with the SEC, including but not limited to those described in our Annual Report on Form 10-K for the year ended December 31, 2011.

We do not have a policy of updating or revising forward-looking statements except as otherwise required by law, and silence by management over time should not be construed to mean that actual events are occurring as estimated in such forward-looking statements. Further information on other factors that could affect us is included in the SEC filings incorporated by reference in this prospectus. See also "Risk Factors" contained herein and

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act, and file with the SEC proxy statements, Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as required for a U.S. listed company. You may read and copy any document we file at the SEC's

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public reference room at 100 F Street, NE, Room 1580, Washington, D.C. 20549. Please call the SEC at 1-888-SEC-0330 for further information. Our SEC filings are also available to the public from the SEC's website at www.sec.gov or on our website at www.peoplesbanknc.com under Investor Relations. Except for the incorporated documents, information on, or that can be accessible through, our website does not constitute a part of, and is not incorporated by reference in, this prospectus.

This prospectus is part of a registration statement filed with the SEC and does not contain all of the information included in the registration statement. For a more complete understanding of this offering, you should refer to the complete registration statement, including exhibits, on Form S-1 that may be obtained as described above. Whenever a reference is made in this prospectus or any prospectus supplement to any contract or other document of ours, you should refer to the exhibits that are a part of the registration statement for a copy of the referenced contract or document. Statements contained in this prospectus concerning the provisions of any documents are necessarily summaries of those documents, and each statement is qualified in its entirety by reference to the full text of the document filed with the SEC.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disseminate important information to you by referring you to those documents filed separately with the SEC. The information we incorporate by reference is an important part of this prospectus. We incorporate by reference the documents listed below, except to the extent that any information contained in those documents is deemed to be furnished in accordance with SEC rules. The documents we incorporate by reference, all of which we have previously filed with the SEC, include:

Our Annual Report on Form 10-K for the year ended December 31, 2011, filed with the SEC on March 27, 2012;
Our Quarterly Report on Form 10-Q for the period ended March 31, 2012, filed with the SEC on May 3, 2012;
Our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 2, 2012; and
Our Current Reports on Form 8-K filed with the SEC on January 30, 2012, April 23, 2012, May 7, 2012 and May 15, 2012.

Any statement contained in a document that is incorporated by reference will be modified or superseded for all purposes to the extent that a statement contained in a later document or in this prospectus modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus except as so modified or superseded.

You may request a copy of any of these incorporated documents at no cost, by contacting our Corporate Treasurer, A. Joseph Lampron, Jr. at jlampron@peoplesbanknc.com, or at the following address or telephone number: Peoples Bancorp of North Carolina, Inc., 518 West C Street, Newton, North Carolina 28658, telephone: (813) 464-5620.

These incorporated documents may also be available on our website at www.peoplesbanknc.com. Except for the incorporated documents, information on, or that can be accessible through, our website does not constitute a part of, and is not incorporated by reference in, this prospectus.

SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus and may not contain all the information that you need to consider in making your investment decision to purchase the securities. You should carefully read this entire prospectus, as well as the information incorporated by reference herein and therein, before deciding whether to invest in the securities. You should carefully consider the sections entitled "Risk Factors" in this prospectus and the documents incorporated by reference herein and therein to determine whether an investment in the securities is appropriate for you.

The Company

Peoples Bancorp of North Carolina, Inc. is a registered bank holding company incorporated under the laws of North Carolina, and headquartered in Newton, North Carolina. Formed in 1999 to serve as the holding

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company for Peoples Bank, our principal source of income is dividends received from Peoples Bank. The bank was formed in 1912, is a North Carolina chartered commercial bank that serves the Catawba Valley and surrounding communities through 22 banking offices, including four offices focused on serving the Latino population under the name Banco de la Gente.

As of March 31, 2012, we had total consolidated assets of \$1.1 billion, net loans of \$641.7 million, deposits of \$807.8 million, investment securities of \$305.5 million, and shareholders' equity of \$104.4 million.

Our Common Stock is listed on the NASDAQ Global Market under the symbol PEBK. Our principal offices are located at 518 West C Street, Newton, North Carolina 28658. Our telephone number is (828) 464-XXXX. Our website is www.peoplesbanknc.com. Except for documents expressly incorporated herein, information that can be accessed through our website does not constitute a part of, and is not incorporated by reference into, this prospectus.

Additional information about us can be found in our Annual Report on Form 10-K for the year ended December 31, 2011 and other documents we have filed with the SEC that are incorporated herein by reference. See [Where You Can Find More Information](#) and [Incorporation by Reference](#).

Securities Being Offered

On December 23, 2008, pursuant to the Treasury's Troubled Asset Relief Program Capital Purchase Program, we sold to the Treasury 25,054 shares of our Series A Preferred Stock, liquidation preference amount \$1,000 per share, for an aggregate purchase price of \$25,054,000, and concurrently issued to the Treasury a ten-year Warrant to purchase up to 357,234 shares of our Common Stock at an exercise price of \$10.52 per share. The issuance of the Series A Preferred Stock and the Warrant were completed in a private placement to the Treasury exempt from the registration requirements of the Securities Act. We were required under the terms of the related Securities Purchase Agreement between us and the Treasury to register for resale the shares of the Series A Preferred Stock and the Warrant and the shares of our Common Stock underlying the Warrant. The terms of the Series A Preferred Stock, the Warrant and our Common Stock are described under [Description of Series A Preferred Stock](#), [Description of Warrant to Purchase Common Stock](#), and [Description of Common Stock](#).

The Securities Purchase Agreement and the letter agreement are attached as Exhibit 10.1 to our Current Report on Form 8-K filed on December 29, 2008, and incorporated into this prospectus by reference. See [Where You Can Find More Information](#) and [Incorporation by Reference](#).

Summary Consolidated Financial Data

The following tables present our selected consolidated financial data as of or for each of the five years ended December 31, 2011, and as of and for the three months ended March 31, 2012 and 2011. Financial data as of or for each of the five years ended December 31, 2011 is derived from our audited consolidated financial statements. Financial data as of or for the three months ended March 31, 2012 and 2011 is unaudited. However, in the opinion of our management, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of the results of operations for the unaudited periods have been made. No adjustments were made other than normal recurring entries. The results of operations for the three months ended March 31, 2012 are not necessarily indicative of the results of operations that may be expected for the entire year.

You should read these tables together with the historical consolidated financial information contained in our consolidated financial statements and related notes, and Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2011, which has been filed with the SEC and is incorporated by reference in this prospectus.

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Summary Consolidated Financial Data

Dollars in Thousands Except Per Share Amounts

	At or for the three months ended March 31,		At or for the years ended December 31,				
	2012	2011	2011	2010	2009	2008	2007
Summary of Operations							
Interest income	\$ 10,362	11,558	45,259	47,680	50,037	56,322	61,732
Interest expense	2,218	3,044	10,946	14,348	17,187	23,526	27,585
Net interest earnings	8,144	8,514	34,313	33,332	32,850	32,796	34,147
Provision for loan losses	2,049	2,950	12,632	16,438	10,535	4,794	2,038
Net interest earnings after provision for loan losses	6,095	5,564	21,681	16,894	22,315	28,002	32,109
Non-interest income	3,380	3,602	14,513	13,884	11,823	10,495	8,816
Non-interest expense	7,271	7,400	29,572	28,948	29,883	28,893	25,993
Earnings before taxes	2,204	1,766	6,622	1,830	4,255	9,604	14,932
Income taxes	545	405	1,463	(11)	1,339	3,213	5,340
Net earnings	1,659	1,361	5,159	1,841	2,916	6,391	9,592
Dividends and accretion of preferred stock	348	348	1,393	1,394	1,246		
Net earnings available to common shareholders	\$ 1,311	1,013	3,766	447	1,670	6,391	9,592
Selected Period Ending Balances							
Assets	\$ 1,053,327	1,072,046	1,067,063	1,067,652	1,048,494	968,762	907,262
Available for sale securities	299,303	271,570	321,388	272,449	195,115	124,916	120,968
Loans, net	641,731	695,756	653,893	710,667	762,643	770,163	713,174
Mortgage loans held for sale	6,256	2,415	5,146	3,814	2,840		
Interest-earning assets	994,267	1,009,447	1,004,131	1,010,983	988,017	921,101	853,878
Deposits	807,799	838,980	827,111	838,712	809,343	721,062	693,639
	941,897	957,330	820,452	850,233	826,838	758,334	718,870

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Interest-bearing liabilities							
Shareholders' equity	104,406	97,201	103,027	96,858	99,223	101,128	70,102
Shares outstanding*	5,544,160	5,542,703	5,544,160	5,541,413	5,539,056	5,539,056	5,624,2

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	At or for the three months ended March 31,		At or for the years ended December 31,					
	2012	2011	2011	2010	2009	2008	2007	
Selected Average								
Balances								
Assets	\$ 1,059,411	1,068,523	1,074,250	1,078,136	1,016,257	929,799	840,000	
Available for sale securities	313,452	268,218	295,413	219,797	161,135	115,853	120,000	
Loans	671,580	721,717	697,527	757,532	782,464	747,203	660,000	
Interest-earning assets	997,847	1,011,055	1,015,451	999,054	956,680	876,425	800,000	
Deposits	814,258	839,968	835,550	840,343	772,075	720,918	650,000	
Interest-bearing liabilities	806,297	844,855	836,382	849,870	796,260	740,478	660,000	
Shareholders' equity	105,202	97,592	102,568	101,529	101,162	76,241	70,000	
Shares outstanding*	5,544,160	5,541,542	5,542,548	5,539,308	5,539,056	5,588,314	5,588,314	
Profitability Ratios**								
Return on average total assets	0.63	% 0.52	% 0.48	% 0.17	% 0.29	% 0.69	% 1.00	
Return on average shareholders' equity	6.34	% 5.66	% 5.03	% 1.81	% 2.88	% 8.38	% 13.00	
Dividend payout ratio***	29.61	% 10.96	% 11.78	% 100.11	% 86.22	% 41.93	% 24.00	
Liquidity and Capital Ratios (averages)								
Loan to deposit	82.48	% 85.92	% 83.48	% 90.15	% 101.35	% 103.65	% 100.00	
Shareholders' equity to total assets	9.93	% 9.13	% 9.55	% 9.42	% 9.95	% 8.20	% 8.00	
Per share of Common Stock*								
Basic net income	\$0.24	0.18	0.68	0.08	0.30	1.14	1.00	
Diluted net income	0.24	0.18	0.68	0.08	0.30	1.13	1.00	
Cash dividends	0.07	0.02	0.08	0.08	0.26	0.48	0.00	
Book value	14.31	13.02	14.06	12.96	13.39	13.73	12.00	

* Shares outstanding and per share computations have been retroactively restated to reflect a 3-for-2 stock split which occurred in the second quarter of 2007.

**

Annualized for interim periods.

As a percentage of net earnings available to common shareholders.

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RISK FACTORS

An investment in our securities involves certain risks. You should consider carefully the risks and uncertainties described in, or incorporated by reference in, this prospectus, including the risks described below and under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2011, and in other reports that we file with the SEC, along with the other information included or incorporated by reference in this prospectus, in evaluating an investment in our securities. The information included or incorporated by reference in this prospectus may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. For a description of these reports and documents, and information about where you can find them, see the sections entitled "Where You Can Find More Information" and "Incorporation by Reference" in this prospectus.

The risks and uncertainties described in this prospectus and the documents incorporated by reference in this prospectus are not the only ones facing us. Additional risks and uncertainties that we do not presently know or that we currently believe are not material may also adversely affect our business. If any of the risks and uncertainties described in this prospectus or the documents incorporated by reference herein actually occur, our business, financial condition and results of operations could be adversely affected in a material way. This could cause the value of the securities to decline, and you may lose part or all of your investment.

Risks Related to an Investment in the Preferred Shares

The Preferred Shares are equity and are subordinated to all of our existing and future indebtedness; we are highly dependent on dividends and other amounts from our subsidiaries in order to pay dividends on, and to redeem at our option subject to prior regulatory approval, the Preferred Shares; our receipt of dividends from Peoples Bank and our other subsidiaries is subject to various prohibitions and other restrictions; and the Preferred Shares place no limitations on the amount of indebtedness we and our subsidiaries may incur in the future.

The Preferred Shares are equity interests in the Company and do not constitute indebtedness. As such, the Preferred Shares, like our Common Stock, rank junior to all existing and future indebtedness and other non-equity claims on the Company with respect to assets available to satisfy claims on the Company, including in the event of liquidation of the Company. Additionally, unlike indebtedness, where principal and interest would customarily be payable on specified due dates, in the case of perpetual preferred stock like the Preferred Shares, there is no fixed maturity date (although the Preferred Shares are subject to redemption at our option) and dividends are payable only if, when and as authorized and declared by our Board of Directors and depend on, among other factors, our historical and projected results of operations, liquidity, cash flows, capital levels, financial condition, debt service requirements and other cash needs and financing covenants of the Company and its subsidiaries and on applicable state law, federal and state regulatory prohibitions and other restrictions and any other factors our Board of Directors deems relevant at the time.

The Preferred Shares are not savings accounts, deposits or other obligations of any depository institution and are not insured or guaranteed by the FDIC or any other governmental agency or instrumentality. Furthermore, the Company is a legal entity that is separate and distinct from its subsidiaries, and its subsidiaries have no obligation, contingent or otherwise, to make any payments in respect of the Preferred Shares or to make funds available therefor. Because the Company is a holding company that maintains only limited cash at that level, its ability to pay dividends on, and redeem at its option subject to prior regulatory approval, the Preferred Shares will be highly dependent upon the receipt of dividends, fees and other amounts from its subsidiaries, and so will be highly

dependent upon the historical and projected results of operations, liquidity, cash flows and financial condition of its subsidiaries. In addition, the right of the Company to participate in any distribution of assets of any of its subsidiaries upon their respective liquidation or reorganization will be subject to the prior claims of the creditors (including any depositors) and preferred equity holders of the applicable subsidiary, except to the extent that the Company is a creditor, and is recognized as a creditor, of such subsidiary. Accordingly, the holders of the Preferred Shares will be structurally subordinated to all existing and future obligations and preferred equity of the Company's subsidiaries.

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There are also various legal and regulatory prohibitions and other restrictions on the ability of the Company's depository institution subsidiary to pay dividends, extend credit or otherwise transfer funds to the Company or its affiliates. Such dividend payments are subject to regulatory tests, generally based on current and retained earnings of such subsidiaries and other factors, and, may require regulatory approval in the future. Dividend payments to the Company from its depository institution subsidiary may also be prohibited if such payments would impair the capital of the applicable subsidiary and in certain other cases. In addition, regulatory rules limit the aggregate amount of a depository institution's loans to, and investments in, any single affiliate in varying thresholds and may prevent the Company from borrowing from its depository institution subsidiary and require any permitted borrowings to be collateralized.

The Company also is subject to various legal and regulatory policies and requirements impacting the Company's ability to pay dividends on, or redeem, the Preferred Shares. Under the Federal Reserve's capital regulations in order to ensure Tier 1 capital treatment for the Preferred Shares, the Company's redemption of any of the Preferred Shares is subject to prior regulatory approval. The Federal Reserve also may require the Company to consult with it prior to increasing dividends. In addition, as a matter of policy, the Federal Reserve may restrict or prohibit payment of dividends if (i) the Company's net income available to shareholders for the past four quarters, less dividends previously paid during that period, is not sufficient to fully fund the dividends; (ii) the Company's prospective rate of earnings retention is not consistent with its capital needs and overall current and prospective financial condition; (iii) the Company will not meet, or is in danger of not meeting, its minimum regulatory capital ratios; or (iv) the Federal Reserve otherwise determines that the payment of dividends would constitute an unsafe or unsound practice. Recent and future regulatory developments may result in additional restrictions on the Company's ability to pay dividends.

In addition, the terms of the Preferred Shares do not limit the amount of debt or other obligations we or our subsidiaries may incur in the future. Accordingly, we and our subsidiaries may incur substantial amounts of additional debt and other obligations that will rank senior to the Preferred Shares or to which the Preferred Shares will be structurally subordinated.

An active trading market for the Preferred Shares may not develop or be maintained.

The Preferred Shares are not currently listed on any securities exchange or available for quotation on any national quotation system and we do not anticipate listing the Preferred Shares. There can be no assurance that an active trading market for the Preferred Shares will develop or, if developed, will be maintained. If an active market is developed and maintained, the market value and liquidity of the Preferred Shares may be materially and adversely affected.

The Preferred Shares may be junior in rights and preferences to our future preferred stock.

Subject to approval by the holders of at least 66 2/3% of the Preferred Shares then outstanding, voting as a separate class, we may issue preferred stock in the future, the terms of which are expressly senior to the Preferred Shares. The terms of any such future preferred stock expressly senior to the Preferred Shares may prohibit or otherwise restrict dividend payments on the Preferred Shares. For example, the terms of any such senior preferred stock may provide that, unless full dividends for all of our outstanding preferred stock senior to the Preferred Shares have been paid for the relevant periods, no dividends will be paid on the Preferred Shares, and no Preferred Shares may be repurchased, redeemed, or otherwise acquired by us. In addition, in the event of our liquidation, dissolution

winding-up, the terms of any such senior preferred stock would likely prohibit us from making any payments on the Preferred Shares until all amounts due to holders of such senior preferred stock are paid in full.

Holders of the Preferred Shares have limited voting rights.

Unless and until we are in arrears on our dividend payments on the Preferred Shares for six quarterly periods whether or not consecutive, the holders of the Preferred Shares will have no voting rights except with respect to certain fundamental changes in the terms of the Preferred Shares and certain other matters and except as may be required by applicable law. If dividends on the Preferred Shares are not paid in full for six quarterly periods whether or not consecutive, the total number of positions on the Company's Board of Directors will automatically increase by two and the holders of the Preferred Shares, acting as a class with

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any other shares of our preferred stock with parity voting rights to the Preferred Shares, will have the right to elect two individuals to serve in the new director positions; provided, that no person may be so elected as a director if such election would cause the Company to violate any corporate governance requirements of any securities exchange or other national securities trading facility on which its securities may then be listed or traded. This right and the terms of such director election shall terminate when we have paid in full all accrued and unpaid dividends for all past dividend periods. See "Description of Preferred Shares-Voting Rights" in this prospectus.

We are subject to extensive regulation, and ownership of the Preferred Shares may have regulatory implications for holders thereof.

We are subject to extensive federal and state banking laws, including the Bank Holding Company Act of 1956, as amended (the "BHCA"), and federal and state banking regulations, that impact the rights and obligations of holders of the Preferred Shares, including, for example, our ability to declare and pay dividends on, and to redeem, the Preferred Shares. Although the Company does not believe the Preferred Shares are considered "voting securities" under the BHCA currently, if they were to become voting securities for the purposes of the BHCA, whether because the Company has missed six dividend payments and holders of the Preferred Shares have the right to elect directors as a result, or for other reasons, a holder of 25% or more of the Preferred Shares, or a holder of a lesser percentage of the Preferred Shares that is deemed to exercise a "controlling influence" over us, may become subject to regulation under the BHCA. In addition, if the Preferred Shares become "voting securities," then (a) any bank holding company or foreign bank that is subject to the BHCA may need approval to acquire or retain more than 5% of the total outstanding Preferred Shares, and (b) any holder (or group of holders acting in concert) may need regulatory approval to acquire or retain 10% or more of the Preferred Shares. A holder or group of holders may also be deemed to control us if they own one-third or more of our total equity, both voting and non-voting, aggregated across all shares held by the investor across all classes of stock. Holders of the Preferred Shares should consult their legal counsel with regard to regulatory implications.

Our compensation expense may increase substantially after Treasury's acquisition of the Preferred Shares.

As a result of our participation in the CPP, among other things, we are subject to Treasury's current standards for executive compensation and corporate governance for the period during which Treasury holds our Preferred Shares. These standards were most recently set forth in the Interim Final Rule on TARP Standards for Executive Compensation and Corporate Governance, published June 15, 2009. If Treasury no longer owns any of the Preferred Shares, these executive compensation and corporate governance standards will no longer be applicable, and our compensation expense for our executive officers and other senior employees may increase substantially.

If we redeem the Preferred Shares, you may be unable to reinvest the redemption proceeds in a comparable investment at the same or greater rate of return.

We have the right to redeem the Preferred Shares, in whole or in part, at our option at any time, subject to regulatory approval. If prevailing interest rates are relatively low if or when we choose to redeem the Preferred Shares and receive regulatory approval to do so, you generally will not be able to reinvest the redemption proceeds in a comparable investment at the same or greater rate of return. Furthermore, if we redeem the Preferred Shares in part, the liquidity of the outstanding Preferred Shares may be more limited.

If we do not redeem the Preferred Shares prior to February 15, 2014, the cost of this capital to us will increase substantially and could have a material adverse effect on our liquidity and cash flows.

We have the right to redeem the Preferred Shares, in whole or in part, at our option at any time subject to prior regulatory approval. If we do not redeem the Preferred Shares prior to February 15, 2014, the cost of this capital to us will increase substantially on and after such date, with the dividend rate increasing from 5.0% per annum to 9.0% per annum, which could have a material adverse effect on our liquidity, cash flows, financial condition and results of operations. See "Description of Preferred Shares-Redemptions and Repurchases" in this prospectus. Any redemption by us of the Preferred Shares would require prior regulatory approval from the Federal Reserve Bank of New York.

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Treasury is a federal agency and your ability to bring a claim against Treasury under the federal securities laws in connection with a purchase of Preferred Shares may be limited.

The doctrine of sovereign immunity, as limited by the Federal Tort Claims Act (the FTCA), provides that a claim may not be brought against the United States of America or any agency or instrumentality thereof unless specifically permitted by act of Congress. The FTCA bars claims for fraud or misrepresentation. At least one federal court, in a case involving a federal agency, has held that the United States may assert its sovereign immunity to claims brought under the federal securities laws. In addition, Treasury and its officers, agents, and employees are exempt from liability for any violation or alleged violation of the anti-fraud provisions of Section 10(b) of the Exchange Act by virtue of Section 3(c) thereof. The underwriters are not claiming to be agents of Treasury in this offering. Accordingly, any attempt to assert such a claim against the officers, agents or employees of Treasury for a violation of the Securities Act or the Exchange Act resulting from an alleged material misstatement in or material omission from this prospectus, the registration statement of which this prospectus is a part, or the documents incorporated by reference in this prospectus are a part or resulting from any other act or omission in connection with the offering of the Preferred Shares by Treasury would likely be barred.

USE OF PROCEEDS

All securities sold pursuant to this prospectus will be sold by the selling securityholders and we will not receive any proceeds from such sales.

DESCRIPTION OF PREFERRED SHARES

This section summarizes specific terms and provisions of the Preferred Shares that may be resold by the selling securityholders. The description of the Preferred Shares contained in this section is qualified in its entirety by the actual terms of the Preferred Shares, as are stated in the designation of preferences, limitations and relative rights of Fixed Rate Cumulative Perpetual Preferred Stock, Series A attached to the Articles of Amendment of the Company filed with the North Carolina Secretary of State on December 19, 2008, a copy of which was attached as Exhibit 3.1 to our Current Report on Form 8-K filed with the SEC on December 29, 2008, and incorporated by reference into this prospectus. See [Where You Can Find More Information](#) and [Incorporation by Reference](#) in this prospectus.

General

The Preferred Shares constitute a series of our perpetual, cumulative, preferred stock, consisting of 25,054 shares with no par value. The Preferred Shares have a liquidation preference amount of \$1,000 per share. The Preferred Shares have no maturity date. We issued the Preferred Shares to Treasury on December 23, 2008 for an aggregate purchase price of \$25,054,000. The Preferred Shares were issued in connection with the CPP in a private placement exempt from the registration requirements of the Securities Act. The Preferred Shares qualify as Tier 1 capital for regulatory purposes.

Dividends

Rate. Dividends on the Preferred Shares are payable quarterly in arrears, when, as and if authorized and declared by our Board of Directors out of legally available funds, on a cumulative basis on the \$1,000 per share liquidation preference amount plus the amount of accrued and unpaid dividends for any prior dividend periods, at a rate

5% per annum, from the original issuance date to but excluding the first day of the first dividend period commencing on or after the fifth anniversary of the original issuance date (i.e., 5% per annum from December 2008 to but excluding February 15, 2014), and (ii) 9% per annum, from and after the first day of the first dividend period commencing on or after the fifth anniversary of the original issuance date (i.e., 9% per annum on and after February 15, 2014). Dividends are payable quarterly in arrears on February 15, May 15, August 15 and November

15 of each year. Each dividend will be payable to holders of record as they appear on our stock register on the applicable record date, which will be the 15th calendar day immediately preceding the related dividend payment date (whether or not a business day), or such other record date determined by our Board of Directors that is more than 60 nor less than ten days prior to the related dividend payment date. Each period from and including the dividend payment date (or the date of the issuance of the Preferred Shares) to but excluding the following dividend payment date is referred to as a

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dividend period. Dividends payable for each dividend period are computed on the basis of a 360-day consisting of twelve 30-day months. If a scheduled dividend payment date falls on a day that is not a business day, the dividend will be paid on the next business day as if it were paid on the scheduled dividend payment date. No interest or other additional amount will accrue on the dividend. The term "business day" means any day other than Saturday, Sunday and any day on which banking institutions in the State of New York generally are authorized to close, or any day required by law or other governmental actions to close.

Dividends on the Preferred Shares are cumulative. If for any reason our Board of Directors does not declare a dividend on the Preferred Shares for a particular dividend period, or if the Board of Directors declares less than a full dividend, we will remain obligated to pay the unpaid portion of the dividend for that period and the unpaid dividend will compound on each subsequent dividend date (meaning that dividends for future dividend periods will accrue on any unpaid dividend amounts for prior dividend periods).

We are not obligated to pay holders of the Preferred Shares any dividend in excess of the dividends on the Preferred Shares that are payable as described above. There is no sinking fund with respect to dividends on the Preferred Shares.

Priority of Dividends. So long as the Preferred Shares remain outstanding, we may not declare or pay a dividend or other distribution on our Common Stock or any other shares of Junior Stock (other than dividends payable solely in Common Stock) or Parity Stock (other than dividends paid on a pro rata basis with the Preferred Shares) and we generally may not directly or indirectly purchase, redeem or otherwise acquire any shares of Common Stock, Junior Stock or Parity Stock unless all accrued and unpaid dividends on the Preferred Shares for all dividend periods are paid in full.

Junior Stock means our Common Stock and any other class or series of our stock the terms of which expressly provide that it ranks junior to the Preferred Shares as to dividend rights and/or as to rights on liquidation, dissolution or winding up of the Company. We currently have no outstanding class or series of stock constituting Junior Stock other than our Common Stock.

Parity Stock means any class or series of our stock, other than the Preferred Shares, the terms of which expressly provide that such class or series will rank senior or junior to the Preferred Shares as to dividend rights and/or as to rights on liquidation, dissolution or winding up of the Company, in each case without regard to whether dividends accrue cumulatively or non-cumulatively. We currently have no outstanding class or series of stock constituting Parity Stock.

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, the holders of the Preferred Shares will be entitled to receive for each Preferred Share, out of the assets of the Company or proceeds available for distribution to our shareholders, subject to any rights of our creditors, before any distribution of assets or proceeds is made to or set aside for the holders of our Common Stock and any other class or series of our stock ranking junior to the Preferred Shares, payment of an amount equal to the sum of (i) the \$1,000 liquidation preference amount per Preferred Share and (ii) the amount of any accrued and unpaid dividends on the Preferred Share (including dividends accrued on any unpaid dividends). To the extent the assets or proceeds available for distribution to shareholders are not sufficient to fully pay the liquidation payments owing to the holders of the Preferred Shares and the holders of any other class or series of our stock ranking equally with the Preferred Shares, the holders of the Preferred Shares and such other stock will share ratably in the distribution.

For purposes of the liquidation rights of the Preferred Shares, neither a merger nor a consolidation of the Company with another entity, including a merger or consolidation in which the holders of Preferred Shares receive cash, securities or other property for their shares, nor a sale, lease or exchange of all or substantially all of the Company's assets will constitute a liquidation, dissolution or winding up of the affairs of the Company.

Redemptions and Repurchases; Sinking Fund

We may redeem the Preferred Shares, at any time, in whole or in part, at our option, subject to prior approval by the appropriate federal banking agency, for a redemption price equal to 100% of the liquidation preference amount per Preferred Share plus any accrued and unpaid dividends to but excluding the date of

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redemption (including dividends accrued on any unpaid dividends), provided that any declared but unpaid dividends will be payable on a redemption date that occurs subsequent to the record date for the dividend will be payable to the holder of record of the redeemed Preferred Shares on the dividend record date.

To exercise the redemption right described above, we must give notice of the redemption to the holders of record of the Preferred Shares by first class mail, not less than 30 days and not more than 60 days before the date of redemption. Each notice of redemption given to a holder of Preferred Shares must state: (i) the redemption price to be paid, (ii) the number of Preferred Shares to be redeemed and, if less than all the Preferred Shares held by such holder, the number of such Preferred Shares to be redeemed from such holder; (iii) the redemption price to be paid, and (iv) the place or places where certificates for such Preferred Shares are to be surrendered for payment of the redemption price. In the case of a partial redemption of the Preferred Shares, the Preferred Shares to be redeemed will be selected either pro rata or in such other manner as our Board of Directors determines to be fair and equitable.

The Securities Purchase Agreement between us and Treasury provides that so long as Treasury continues to hold any Preferred Shares, we may not repurchase any Preferred Shares from any other holder of such Preferred Shares unless we offer to repurchase a ratable portion of the Preferred Shares then held by Treasury on the same terms and conditions.

Preferred Shares that we redeem, repurchase or otherwise acquire will revert to authorized but unissued shares of preferred stock, which may then be reissued by us as any series of preferred stock other than the Preferred Shares.

The Preferred Shares are not subject to any mandatory redemption, sinking fund or other similar provisions. Holders of the Preferred Shares have no right to require redemption or repurchase of any shares of Designated Preferred Stock.

No Conversion Rights

Holders of the Preferred Shares have no right to exchange or convert their shares into Common Stock or any other securities.

Voting Rights

The holders of the Preferred Shares do not have voting rights other than those described below, except to the extent specifically required by North Carolina law.

Whenever dividends have not been paid on the Preferred Shares for six or more quarterly dividend periods, whether or not consecutive, the authorized number of directors of the Company will automatically increase by one and the holders of the Preferred Shares will have the right, with the holders of shares of any other classes or series of Voting Parity Stock (as defined below) outstanding at the time, voting together as a class, to elect two directors (the Preferred Directors) to fill such newly created directorships at our next annual meeting of shareholders (or special meeting called for that purpose prior to the next annual meeting) and at each subsequent annual meeting of shareholders until all accrued and unpaid dividends (including dividends accumulated on any unpaid dividends) for all past dividend periods on all outstanding Preferred Shares have been paid in full at which time this right will terminate with respect to the Preferred Shares, subject to revesting in the event of each and every subsequent default by the Company in the payment of dividends on the Preferred Shares.

No person may be elected as a Preferred Director who would cause the Company to violate any corporate governance requirements of any securities exchange or other trading facility on which its securities may be listed or traded. Upon any termination of the right of the holders of the Preferred Shares and Voting Parity Stock as a class to vote for directors as described above, the Preferred Directors will cease to be qualified as directors and the terms of office of all Preferred Directors then in office will terminate immediately and the authorized number of directors will be reduced by the number of Preferred Directors which had been elected by the holders of the Preferred Shares and the Voting Parity Stock. Any Preferred Director may be removed at any time, with or without cause, and any vacancy created by such a removal may be filled, only by the affirmative vote of the holders of a majority of the outstanding Preferred Shares voting separately as a class, together with the holders of shares of Voting Parity Stock, to the extent the voting rights of such holders

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described above are then exercisable. If the office of any Preferred Director becomes vacant for any reason other than removal from office, the remaining Preferred Director may choose a successor who will hold office for the unexpired term of the office in which the vacancy occurred.

The term "Voting Parity Stock" means with regard to any matter as to which the holders of the Preferred Shares are entitled to vote, any series of Parity Stock (as defined under "Dividends-Priority of Dividends" above) upon which voting rights similar to those of the Preferred Shares have been conferred and are exercisable with respect to that matter. We currently have no outstanding shares of Voting Parity Stock.

Although the Company does not believe the Preferred Shares are considered "voting securities" currently, if they were to become voting securities for the purposes of the BHCA, whether because the Company has missed or delayed dividend payments and holders of the Preferred Shares have the right to elect directors as a result, or for other reasons, a holder of 25% or more of the Preferred Shares, or a holder of a lesser percentage of our Preferred Shares that is deemed to exercise a "controlling influence" over us, may become subject to regulation under the BHCA. In addition, if the Preferred Shares become "voting securities," then (a) any bank holding company or foreign bank holding company is subject to the BHCA may need approval to acquire or retain more than 5% of the then outstanding Preferred Shares, and (b) any holder (or group of holders acting in concert) may need regulatory approval to acquire or retain 10% or more of the Preferred Shares. A holder or group of holders may also be deemed to control us if they own one-third or more of our total equity, both voting and non-voting, aggregating all shares held by the investor across all classes of stock. Holders of the Preferred Shares should consult their own counsel with regard to regulatory implications.

In addition, the BHCA and federal banking regulations require prior Federal Reserve approval before an investor acquires control of a bank holding company. A holder or group of holders will be deemed to control the Company if it owns or controls 25% or more of a class of outstanding shares of our "voting stock," controls in any manner the election of a majority of our Board of Directors, or otherwise exercises a "controlling influence" over us. A group of holders may also be deemed to control the Company if they own one-third or more of its total equity, both voting and non-voting, aggregating all shares held by the investor across all classes of stock. Any holder that controls the Company and is a "company" under the BHCA may be subject to ongoing regulation and supervision as a bank holding company in accordance with the BHCA.

In addition to any other vote or consent required by North Carolina law or by our Articles of Incorporation, the vote or consent of the holders of at least 66 2/3% of the outstanding Preferred Shares, voting as a separate class, is required in order to do the following:

amend or alter our Articles of Incorporation to authorize or create or increase the authorized amount of, or the issuance of, any shares of, or any securities convertible into or exchangeable or exercisable for shares of, any other series of our capital stock ranking senior to the Preferred Shares with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Company; or amend, alter or repeal any provision of our Articles of Incorporation in a manner that adversely affects the rights, preferences, privileges or voting powers of the Preferred Shares; or consummate a binding share exchange or reclassification involving the Preferred Shares or a merger or consolidation of the Company with another entity, unless (i) the Preferred Shares remain outstanding or, in the case of a merger or consolidation in which the Company is not the surviving or resulting entity, are converted or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (ii) the Preferred Shares remaining outstanding or such preference securities, have such rights, preferences, privileges, voting powers, limitations and restrictions, taken as a whole, as are not materially less favorable than the rights, preferences, privileges, voting powers, limitations and restrictions of the Preferred Shares immediately prior to the consummation of the transaction.

consummation of the transaction, taken as a whole;

provided, however, that (1) any increase in the amount of our authorized shares of preferred stock, including authorized Preferred Shares necessary to satisfy preemptive or similar rights granted by us to other persons

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prior to December 23, 2008, and (2) the creation and issuance, or an increase in the authorized or issued amount of any other series of preferred stock, or any securities convertible into or exchangeable or exercisable for any series of preferred stock, ranking equally with and/or junior to the Preferred Shares with respect to the payment of dividends, whether such dividends are cumulative or non-cumulative, and the distribution of assets upon liquidation, dissolution or winding up, will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Preferred Shares and will not require the vote or consent of the holders of the Preferred Shares.

To the extent holders of the Preferred Shares are entitled to vote, holders of Preferred Shares will be entitled to one vote for each Preferred Share then held.

The voting provisions described above will not apply if, at or prior to the time when the vote or consent of the holders of the Preferred Shares would otherwise be required, all outstanding Preferred Shares have been redeemed by the Company or called for redemption upon proper notice and sufficient funds have been set aside by the Company for the benefit of the holders of Preferred Shares to effect the redemption.

DESCRIPTION OF WARRANT TO PURCHASE COMMON STOCK

This section summarizes specific terms and provisions of the Warrant that may be resolved by the selling securityholders. The description of the Warrant contained in this section is qualified in its entirety by the actual terms of the Warrant, a copy of which was attached as Exhibit 4.2 to our Current Report on Form 8-K filed with the SEC on December 29, 2008, and incorporated by reference into this prospectus. See [Where You Can Find More Information](#) and [Incorporation by Reference](#) in this prospectus.

Shares of Common Stock Subject to the Warrant

The Warrant is exercisable for 357,234 shares of our Common Stock. We did not complete any qualified equity offerings on or prior to December 31, 2009 that would have reduced the number of shares of Common Stock for which the Warrant was exercisable. The number of shares subject to the Warrant are subject to the further adjustments described below under the heading [Adjustments to the Warrant](#).

Exercise of the Warrant

The initial exercise price applicable to the Warrant is \$10.52 per share of Common Stock for which the Warrant may be exercised. The Warrant may be exercised at any time on or before December 23, 2018 by surrendering the Warrant and a completed notice of exercise attached as an annex to the Warrant and the payment of the exercise price for the shares of Common Stock for which the Warrant is being exercised. The exercise price may be satisfied either by the withholding by the Company of such number of shares of Common Stock issuable upon exercise of the Warrant equal to the value of the aggregate exercise price of the Warrant determined by reference to the market price of our Common Stock on the trading day on which the Warrant is exercised or, if agreed to by us and the Warrantheholder, by the payment of cash equal to the aggregate exercise price. The exercise price applicable to the Warrant is subject to the further adjustments described below under the heading [Adjustments to the Warrant](#).

The Warrant may be partially exercised. The holder of the Warrant is entitled to receive, within three business days of partial exercise, a new substantially identical Warrant for the unexercised shares.

Upon exercise of the Warrant, certificates for the shares of Common Stock issuable upon exercise will be issued to the Warrantholder. We will not issue fractional shares upon any exercise of the Warrant. Instead, the Warrantholder will be entitled to a cash payment equal to the market price of our Common Stock on the last trading day preceding the exercise of the Warrant (less the pro-rated exercise price of the Warrant) for any fractional shares that would have otherwise been issuable upon exercise of the Warrant. We will at all times reserve the aggregate number of shares of our Common Stock for which the Warrant may be exercised.

Rights as a Shareholder

The Warrantholder shall have no rights or privileges that the holders of our Common Stock have, including voting rights, until the Warrant has been exercised, and then only with respect to shares of Common Stock issued in connection with such exercise.

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Transferability

The Warrant, and all rights under the Warrant, are transferable, in whole or part.

Voting of Warrant Shares

Treasury has agreed that it will not vote any of the shares of Common Stock that it acquires upon exercise of the Warrant. This does not apply to any other person who acquires any portion of the Warrant, or the shares of Common Stock underlying the Warrant, from Treasury.

Adjustments to the Warrant

Adjustments in Connection with Stock Splits, Subdivisions, Reclassifications and Combinations. The number of shares for which the Warrant may be exercised and the exercise price applicable to the Warrant will be proportionately adjusted in the event we pay stock dividends or make distributions of our Common Stock, or we subdivide, combine or reclassify outstanding shares of our Common Stock.

Other Distributions. If we declare any dividends or distributions other than our historical, ordinary cash dividends, dividends paid in our Common Stock and other dividends or distributions in connection with stock splits, subdivisions, reclassifications and combinations covered in the preceding paragraph, the exercise price of the Warrant will be adjusted to reflect such distribution.

Certain Repurchases. If we effect a pro rata repurchase of Common Stock both the number of shares issued upon exercise of the Warrant and the exercise price will be adjusted to reflect such a repurchase.

Business Combinations. In the event of a merger, consolidation or similar transaction involving the Company requiring shareholder approval, the Warrantholder's right to receive shares of our Common Stock upon exercise of the Warrant will be converted into the right to exercise the Warrant for the consideration that would have been payable to the Warrantholder with respect to the shares of Common Stock for which the Warrant may be exercised, as if the Warrant had been exercised prior to such merger, consolidation or similar transaction. For purposes of the provision described in the preceding sentence, if the holders of our Common Stock have the right to elect the amount or type of consideration to be received by them in the business combination, then the consideration that the Warrantholder will be entitled to receive upon exercise will be the amount and type of consideration received by a majority of the holders of the Common Stock who affirmatively make an election.

Board Determination. The exercise price of the Warrant and the number of shares underlying the Warrant will be adjusted upon a determination by our board of directors to make an adjustment to the anti-dilution provisions as may be reasonably necessary, in the good faith opinion of the board, to protect the purchase rights of the Warrantholder.

DESCRIPTION OF COMMON STOCK

This section summarizes specific terms and provisions of our Common Stock that may be resold by the securityholders upon exercise of the Warrant. This summary does not purport to be complete in all respects. This description is subject to and qualified in its entirety by reference to the North Carolina Business Corporation Act (NCBCA), federal law, our articles of incorporation, as amended (Articles of Incorporation) and our Bylaws.

articles of incorporation and the two articles of amendment have been filed with the SEC as Exhibit (3)(i) to Form 8-A filed on September 2, 1999, Exhibit (3)(1) to the Current Report on Form 8-K filed on December 2008, and Exhibit (3)(2) to the Annual Report on Form 10-K filed on March 25, 2010, respectively, and are incorporated by reference into this prospectus. Our Amended and Restated Bylaws have been filed with the SEC as Exhibit (3)(ii) to our Annual Report on Form 10-K filed on March 25, 2010, and is incorporated by reference into this prospectus. See [Where You Can Find More Information](#) and [Incorporation by Reference](#) in this prospectus.

General

Our Articles of Incorporation authorize the issuance of 20,000,000 shares of Common Stock, no par value per share. As of May 8, 2012, there were 5,544,160 shares of Common Stock issued and outstanding, held of record by approximately 718 stockholders. In addition, as of May 8, 2012, 330,486 shares of our

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Common Stock are reserved for issuance upon exercise of stock options issued pursuant to our stock compensation plans and grants of restricted stock, and 357,234 shares of our Common Stock are reserved for issuance upon exercise of the Warrant. Our Common Stock is listed for quotation on the NASDAQ Global Market under the symbol PEBK. Outstanding shares of our Common Stock are validly issued, fully paid and non-assessable. Each share of our Common Stock has the same relative rights and is identical in all respects to each other share of our Common Stock.

Pre-emptive Rights; Redemption Rights; Terms of Conversion; Sinking Fund and Redemption Provision

Our Common Stock has no preemptive rights, redemption rights, conversion rights, sinking fund or redemption provisions.

Voting Rights

Each holder of Common Stock is entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Stockholders are not entitled to cumulate their votes for the election of directors. Directors are elected by a plurality of the votes cast. Each director is elected to a term ending as of the next succeeding annual meeting or until his or her earlier death, resignation, retirement, removal or disqualification.

Liquidation Rights

In the event of the Company's liquidation, dissolution or winding up, holders of Common Stock are entitled to share ratably in all the Company's assets remaining after payment of liabilities, including but not limited to outstanding subordinated debentures, and the liquidation preference of any then outstanding preferred shares. Because the Company is a bank holding company, its rights and the rights of its creditors and shareholders to receive the assets of any subsidiary upon liquidation or recapitalization may be subject to prior claims of the subsidiary's creditors, except to the extent that the Company may itself be a creditor with recognized claims against the subsidiary.

Dividend Rights

Holders of our Common Stock are entitled to receive ratably such dividends as may be declared by our Board of Directors out of legally available funds. The ability of our Board of Directors to declare and pay dividends on our Common Stock is subject to the terms of applicable North Carolina law, banking regulations and the terms of our participation in the CPP. The Company's principal source of income is dividends that are declared and paid by Peoples Bank, on its capital stock. Therefore, the ability of the Company to pay dividends is dependent upon receipt of dividends from Peoples Bank. North Carolina commercial banks, such as Peoples Bank, are subject to legal limitations on the amounts of dividends they are permitted to pay. Peoples Bank may pay dividends from undivided profits, which are determined by deducting and charging certain items against actual profits, including any contributions to surplus required by North Carolina law. Also, an insured depository institution, such as Peoples Bank, is prohibited from making capital distributions, including the payment of dividends, if, after making such distribution, the institution would become undercapitalized, as such term is defined in the applicable banking regulations. Also, we may not pay dividends on our capital stock if we are in default or have elected to defer payments of interest under our junior subordinated debentures. The declaration and payment of future dividends

holders of our Common Stock will also depend upon our earnings and financial condition, the capital requirements of our subsidiaries, regulatory conditions and other factors as our Board of Directors may deem relevant.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Registrar and Transfer Company, Cranford, New Jersey.

CERTAIN RESTRICTIONS HAVING POTENTIAL ANTI-TAKEOVER EFFECT

Acquisitions of the Company and acquisitions of our capital stock are restricted by certain provisions in our Articles of Incorporation and Bylaws, and by various federal and state laws and regulations. The following description of certain of those provisions is necessarily general and reference should be made in each instance to our Articles of Incorporation and Bylaws, copies of which have been filed with the SEC, or the applicable federal and state laws and regulations. See [Where You Can Find More Information](#) and [Incorporation by Reference](#) in this prospectus.

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Board of Directors

Our Articles of Incorporation and Bylaws provide that the number of directors shall not be less than five nor than 15. The number of directors currently is ten, but such number may be changed by resolution of our Board of Directors. These provisions have the effect of enabling our Board of Directors to elect directors friendly to management in the event of a non-negotiated take over attempt and may make it more difficult for a person seeking to acquire control of the Company to gain majority representation on our Board of Directors in a relatively short period of time.

Cumulative Voting

Our Articles of Incorporation do not provide for cumulative voting for any purpose. Cumulative voting in the election of directors entitles a shareholder to cast a total number of votes equal to the number of directors to be elected multiplied by the number of his or her shares and to distribute that number of votes among such number of nominees as the shareholder chooses. The absence of cumulative voting for directors limits the ability of a minority shareholder to elect directors. Because the holder of less than a majority of our shares cannot be assured representation on our Board of Directors, the absence of cumulative voting may discourage accumulations of shares or proxy contests that would result in changes in our management.

Special Meetings

Our Bylaws provide that special meetings of shareholders may be called by the Chairman of the Board, the Executive Officer, the President, or by our Board of Directors. If a special meeting is not called by such persons or entities, shareholder proposals cannot be presented to the shareholders for action until the next annual meeting.

Preemptive Rights

Our Articles of Incorporation do not provide for preemptive rights with respect to any shares which may be issued by the Company.

Capital Stock

Our Articles of Incorporation authorize the issuance of 20,000,000 shares of Common Stock and 5,000,000 shares of preferred stock. This provides our Board of Directors with flexibility to issue additional shares, without further shareholder approval except as expressly required by applicable stock exchange listing standards, for proper corporate purposes, including financings, acquisitions, stock dividends, stock splits, employee stock options and other appropriate purposes. However, issuance of additional authorized shares may also have the effect of impeding or deterring future attempts to gain control of the Company. Subject to certain restrictions established to protect the holders of the Preferred Shares, our Board of Directors also has sole authority to determine the terms of any one or more series of preferred stock, including voting rights, conversion rates, dividend rights, and liquidation preferences, which could adversely affect the voting power of the holders of the Common Stock and discourage an attempt to acquire control of the Company. Our Board of Directors has the power, to the extent consistent with its fiduciary duties, to issue preferred stock to persons friendly to management or otherwise in order to impede attempts by third parties to acquire voting control of the Company and to impede other transactions not favorable to management.

Director Nominations

Our Bylaws require a shareholder who intends to nominate a candidate for election to our Board of Directors to give written notice to our Secretary at least 30 days (but not more than 50 days) in advance of the date of the meeting at which such nomination will be made. The nomination notice is also required to include specified information concerning the nominee and the proposing shareholder.

Supermajority Voting Provisions

Our Articles of Incorporation require the affirmative vote of 75% of the outstanding shares entitled to vote to approve a merger, consolidation, or other business combination, unless the transaction is approved, prior to consummation, by the vote of at least 75% of the members of the Continuing Directors (as defined in our Articles of Incorporation) of our Board of Directors. Continuing Directors generally includes all

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members of our Board of Directors who are not affiliated with any individual, partnership, trust or other person or entity (or the affiliates and associates of such person or entity) which becomes a beneficial owner of 10% or more of the voting shares of the Company after the date of incorporation. This provision could tend to make the acquisition of the Company more difficult to accomplish without the cooperation or favorable recommendation of our Board of Directors. When evaluating such business combinations, our Board of Directors will consider (i) the social and economic effects of acceptance of such an offer on our depositors, borrowers, other customers, employees, and creditors and our subsidiaries, and on the communities in which we and our subsidiaries operate; (ii) our ability, and the ability of our subsidiaries, to fulfill the objectives of a bank and/or bank holding company, as applicable, and of commercial banking entities, as applicable, under applicable federal and state statutes and regulations; (iii) the business and financial condition and prospects and earnings prospects of the person or group proposing the combination, including, but not limited to, debt service and other existing financial obligations, financial obligations to be incurred in connection with the combination, and other likely financial obligations of such person or group, and the possible effect of such conditions and prospects upon the Company and our subsidiaries and the communities in which the Company and our subsidiaries are located; (iv) the competence, experience, and integrity of the person or group proposing the combination and its or their management; and (v) the prospects for successful conclusion of the proposed combination.

Change in Control Regulations

Federal law requires the approval of the Federal Reserve prior to any person or entity, or any persons or entities acting in concert, acquiring 10% or more of our common stock, and prior to certain other actions that are deemed pursuant to regulations of the Federal Reserve to constitute control. In addition, North Carolina law requires the approval of the Commissioner prior to acquiring control of a North Carolina bank.

PLAN OF DISTRIBUTION

The selling security holders and their successors, including their transferees, may sell the securities directly to purchasers or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling securityholders or the purchasers of the securities. The amount of discounts, concessions or commissions as to any particular underwriter, broker-dealer or agent may be in excess of those customary in the types of transactions involved.

The securities may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale, at negotiated prices or at prices determined by auction or other methods. Among other transactions, these sales may be effected in transactions, which may involve credit or block transactions, by one or more of the following methods:

on any national securities exchange or quotation service on which the Series A Preferred Stock or the Common Stock may be listed or quoted at the time of sale, including, as of the date of this prospectus, the NASDAQ Capital Market in the case of our Common Stock,

in the over-the-counter market,

in transactions otherwise than on these exchanges or services or in the over-the-counter market, or through the writing of options, whether the options are listed on an options exchange or otherwise.

In addition, any securities that qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus.

In connection with the sale of the securities or otherwise, the selling securityholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the Common Stock issuable upon exercise of the Warrant in the course of hedging the positions they assume. The selling securityholders may sell short the Common Stock issuable upon exercise of the Warrant and deliver Common Stock to close out their positions, or loan or pledge the Series A Preferred Stock or the Common Stock issuable upon exercise of the Warrant to broker-dealers that in turn may sell these securities.

The aggregate proceeds to the selling securityholders from the sale of the securities will be the purchase price of the securities less discounts and commissions, if any.

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In effecting sales, broker-dealers or agents engaged by the selling securityholders may arrange for other broker-dealers to participate. Broker-dealers or agents may receive commissions, discounts or concessions from the selling securityholders in amounts to be negotiated immediately prior to the sale.

In offering the securities covered by this prospectus, the selling securityholders and any broker-dealers who execute sales for the selling securityholders may be deemed to be underwriters within the meaning of Section 2(a)(11) of the Securities Act in connection with such sales. Any profits realized by the selling securityholders from the compensation of any broker-dealer may be deemed to be underwriting discounts and commissions. Selling securityholders who are underwriters within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory and regulatory liabilities, including liabilities imposed pursuant to Sections 11, 12 and 17 of the Securities Act and Rule 15c-2 under the Exchange Act.

In order to comply with the securities laws of certain states, if applicable, the securities must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from such registration or qualification requirement is available and is complied with.

The anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of securities pursuant to this prospectus and to the activities of the selling securityholders. In addition, we will make copies of this prospectus available to the selling securityholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act, which may include delivery through the facilities of the NASDAQ Global Market pursuant to Rule 153 under the Securities Act.

At the time a particular offer of securities is made, if required, a prospectus supplement will set forth the number and type of securities being offered and the terms of the offering, including the name of any underwriter, dealer, agent, the purchase price paid by any underwriter, any discount, commission and other item constituting the compensation, any discount, commission or concession allowed or reallocated or paid to any dealer, and the proposed selling price to the public.

Neither the Series A Preferred Stock nor the Warrant is listed on an exchange. Unless requested by the Treasury, we do not intend to list the Series A Preferred Stock on any exchange. We do not intend to list the Warrant on any exchange. No assurance can be given as to the liquidity of the trading market, if any, for the Series A Preferred Stock.

We have agreed to indemnify the selling securityholders under this prospectus against certain liabilities, including certain liabilities under the Securities Act. We have also agreed, among other things, to bear substantially all expenses (other than underwriting discounts and selling commissions) in connection with the registration and offering of the securities covered by this prospectus.

SELLING SECURITYHOLDER

On December 23, 2008, we issued the securities covered by this prospectus to the Treasury, which is the selling securityholder under this prospectus, in a transaction exempt from the registration requirements of the Securities Act. The Treasury, or its successors, including transferees, may from time to time offer and sell, pursuant to this prospectus or a supplement to this prospectus, any or all of the securities they own. The securities to be offered under this prospectus for the account of the selling securityholders are:

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25,054 shares of Series A Preferred Stock, representing beneficial ownership of 100% of the shares of Series Preferred Stock outstanding on the date of this prospectus,
a Warrant to purchase 357,234 shares of our Common Stock, representing beneficial ownership of approximately 6.4% of our outstanding Common Stock as of June 11, 2012; and
357,234 shares of our Common Stock issuable upon exercise of the Warrant, which shares, if issued, would represent ownership of approximately 6.1% of our outstanding Common Stock as of June 11, 2012.

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Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. To our knowledge, the Treasury has sole voting and investment power with respect to the securities.

We do not know when or in what amounts the selling securityholders may offer the securities for sale. The selling securityholders might not sell any or all of the securities offered by this prospectus. Because the selling securityholders may offer all or some of the securities pursuant to this offering, and because currently no sale of any of the securities is subject to any agreements, arrangements or understandings, we cannot estimate the number of the securities that will be held by the selling securityholders after completion of the offering.

Other than with respect to the acquisition and holding of the securities, the Treasury has not had a material relationship with us.

Information about the selling securityholders may change over time and changed information will be set forth in supplements to this prospectus if and when necessary.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Brooks, Pierce, Fennell & Smith, LLP, McLendon, Humphrey & Leonard, L.L.P.

EXPERTS

Our consolidated balance sheets as of December 31, 2011 and December 31, 2010 and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2011 appearing in our Annual Report on Form 10-K for the year ended December 31, 2011 have been incorporated by reference herein in reliance upon the report of Porter Keating & Moore, LLC, independent registered public accounting firm and upon the authority of that firm as experts in the field of accounting and auditing.

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**25,054 Shares of Fixed Rate Cumulative Perpetual
Preferred Stock, Series A**

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

BofA Merrill Lynch

Sandler O'Neill + Partners, L.P.

Co-Managers

Great Pacific Securities

Loop Capital Markets

Ramirez & Co., Inc.

June 27, 2012
