NANOMETRICS INC
Form 424B2
December 17, 2009
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The information in this prospectus supplement and the accompanying prospectus is not complete and may be changed. This prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 16, 2009

Filed pursuant to Rule 424(b)(2)
Registration Statement No. 333-163168

PRELIMINARY PROSPECTUS SUPPLEMENT

(To Prospectus dated November 23, 2009)

Shares

NANOMETRICS INCORPORATED
Common Stock

$ per share

We are offering shares of our common stock and the selling stockholder is offering shares of our common stock. We will not receive any proceeds from the sale of shares of our common stock by the selling stockholder.

On December 15, 2009, the last reported sale price of our common stock on the NASDAQ Global Market was $12.39.

Trading symbol: NASDAQ Global Market NANO

Investing in our common stock involves a high degree of risk. Please read Risk Factors beginning on page S-4.

	Per Share	Total
Public Offering Price	$	$
Underwriting Discounts and Commissions	$	$
Proceeds to Nanometrics (Before Expenses)	$	$
Proceeds to the Selling Stockholder (Before Expenses)	$	$

We have granted the underwriters an option for a period of 30 days to purchase an additional shares of our common stock to cover overallotments.

Delivery of the shares of common stock is expected to be made on or about December , 2009.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Sole Book-Running Manager

Piper Jaffray & Co.

Oppenheimer & Co. **RBC Capital Markets**

The date of this prospectus supplement is , 2009

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Prospectus Supplement

You should rely only on the information contained or incorporated by reference into this prospectus supplement and the accompanying prospectus or in any free writing prospectus that we may provide to you. Neither we nor the underwriters have authorized any other person to provide you with information different from that contained in this prospectus supplement and the accompanying prospectus or in any free writing prospectus that we may provide to you. We and the selling stockholder are offering to sell and are seeking offers to buy shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus is accurate only as of the date such information is presented regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or any sale of common stock. Our business, financial condition, results of operations and prospects may have changed since such date.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of shares of our common stock. The second part is the accompanying prospectus, which gives more general information. Generally, when we refer to the prospectus, we are referring to both parts of this document combined. If the description of this offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

We incorporate important information into this prospectus by reference. You may obtain the information incorporated by reference into this prospectus without charge by following the instructions under Where You Can Find More Information.

You should read this prospectus supplement along with the accompanying prospectus carefully before you invest. Both documents contain important information you should consider when making your investment decision. This prospectus supplement contains information about the shares of common stock offered in this offering and may add, update or change information in the accompanying prospectus.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to Nanometrics, we, us, our, or similar references mean Nanometrics Incorporated together with its subsidiaries.

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PROSPECTUS SUPPLEMENT SUMMARY

The following summary highlights basic information about Nanometrics and this offering. This summary does not contain all of the information you should consider before making a decision to invest in our common stock. You should review this entire prospectus supplement and the accompanying prospectus carefully, including the risks of investing in our common stock discussed in the Risk Factors section, our consolidated financial statements and notes thereto and the documents incorporated by reference.

Our Business

Nanometrics is a leading supplier of advanced process control metrology systems used primarily in the manufacturing and packaging of semiconductors, solar photovoltaics (PVs) and high-brightness LEDs (HB-LEDs), as well as by customers in the silicon wafer and data storage industries. Nanometrics standalone and integrated metrology systems measure various thin film properties, critical dimensions, overlay control, topography and optical, electrical and material properties, including the structural composition of silicon, compound semiconductor and PV devices, during various steps of the manufacturing process, from front end of line substrate manufacturing through die preparation for advanced packaging. These systems enable device manufacturers to improve yields, increase productivity and lower their manufacturing costs.

We have been a pioneer and innovator in the field of optical metrology. Nanometrics has an extensive installed base of over 6,000 systems in over 150 production factories worldwide. Our major customers include Samsung Electronics Co. Ltd., Intel Corporation, Toshiba Semiconductor, Western Digital Corporation, Hynix Semiconductor Inc., and Renesas Technology Corp.

We offer a comprehensive line of metrology products and technologies to address the manufacturing requirements of the high-tech industry. Our metrology systems can be categorized as follows:

- Standalone, fully automated systems for high-volume semiconductor manufacturing process control;
- Integrated systems incorporated onto semiconductor and solar PV processing systems that provide real-time measurements and feedback to improve process control and increase total system productivity; and
- Standalone, manual and semi-automated systems used to monitor material characteristics of various silicon and compound semiconductor devices and substrates.

Demand for our products continues to be driven by the increasing use of multiple thin film technologies by semiconductor manufacturers, and by the increased adoption of both integrated metrology and real-time process control. With feature sizes shrinking below 32 nanometers (nm), there is an increasing need for very tight process tolerances as well as productivity improvements in semiconductor fabrication facilities (fabs). As a result, semiconductor device and wafer manufacturers are investing in process control and metrology systems that improve their manufacturing efficiency by detecting process variations sooner and facilitating rapid diagnosis and corrective action. Our process control and metrology systems measure and characterize the physical dimensions, material composition, optical and electrical characteristics and other critical parameters of semiconductor devices during their fabrication and advanced packaging process steps. For the photolithography process, overlay and critical dimension systems provide enhanced control of layer alignment and device dimensions. For lattice engineering applications, metrology systems monitor the physical, optical, electrical and material characteristics of compound semiconductor, strained silicon and silicon-on-insulator (SOI) devices, including composition, crystal structure, layer thickness, dopant concentration, contamination and electron mobility.

We were incorporated in California in 1975 and reincorporated in Delaware in 2006. We maintain a website at www.nanometrics.com where our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports are available without charge, as soon as reasonably practicable following the time they are filed with or furnished to the SEC. Additional information about Nanometrics that is on our website is not, however, part of this prospectus. You may read and copy any materials we file with the SEC at the SEC s public reference room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0300. The SEC also maintains an electronic

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Internet site that contains our reports, proxy and information statements, and other information at http://www.sec.gov.

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The Offering

Common stock offered by us	shares
Common stock offering by the selling stockholder	shares
Common stock to be outstanding immediately after this offering	shares
Over-allotment option	We have granted the underwriters an option to purchase up to an additional shares solely to cover over-allotments.
Use of proceeds	We expect to use the net proceeds from this offering to pay off a portion of the amount owed by the Company to Zygo Corporation in connection with the Company s acquisition of certain assets, and for general corporate purposes. You should read the discussion under the heading Use of Proceeds on page S-7 for more information.
NASDAQ Global Market symbol	NANO
Risk Factors	Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page S-4 of this prospectus supplement and the other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider carefully before deciding to invest in our common stock.

The number of shares to be outstanding after this offering is based on 18,998,564 shares outstanding as of December 15, 2009 and excludes:

- an aggregate of 2,949,659 shares of our common stock subject to outstanding options as of December 15, 2009 at a weighted average exercise price of $5.93 per share; and

- an additional 2,838,522 shares of our common stock reserved for issuance upon exercise of options, or as restricted stock grants, restricted stock units or stock awards, that may be granted subsequent to December 15, 2009 under our 2005 Equity Incentive Plan, 2003 Employee Stock Purchase Plan, 2002 Non-Statutory Stock Option Plan, 2000 Employee Stock Option Plan, 2000 Director Stock Option Plan, and 1991 Stock Option Plan.

Unless otherwise stated in this prospectus supplement, we have assumed throughout this prospectus supplement that the over-allotment option granted to the underwriters will not be exercised.

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RISK FACTORS

Prior to making a decision about investing in our common stock, you should carefully consider the following risks and uncertainties, together with all of the other information contained in or incorporated by reference in this prospectus supplement or the accompanying prospectus. If any of the following risks actually occur, our business could be harmed. In such case, the trading price of our common stock could decline, and you may lose all or part of your investment.

Risk Factors Relating to our Common Stock and the Offering

Our stock price has fluctuated significantly; the trading price of our common stock may fluctuate significantly in the future. The trading price of our common stock has fluctuated significantly. In 2009, our stock price has ranged from a low of $1.05 on March 3, 2009 to a high of $14.06 on December 2, 2009. The trading price of our common stock may fluctuate significantly in the future as a result of a number of factors, including:

- actual and anticipated variations in our operating results;
- general economic and market conditions, including changes in demand for our products;
- interest rates;
- geopolitical conditions throughout the world;
- perceptions of the strengths and weaknesses of our industries;
- our ability to pay principal and interest on our debt when due;
- developments in our relationships with our lenders, customers and/or suppliers;
- announcements of alliances, mergers or other relationships by or between our competitors and/or our suppliers and customers; and
- quarterly variations in our results of operations due to, among other things, seasonality in demand for products and fluctuations in the cost of raw materials

The stock markets in general have experienced broad fluctuations that have often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. Accordingly, our common stock may trade at prices significantly below the offering price, and you could lose all or part of your investment in the event that you choose to sell your shares.

We have broad discretion to use a portion of the net proceeds from this offering; our investment of these proceeds may not yield a favorable return. We are required to use $2 million of the net proceeds from this offering to pay a portion of the amount owed by the Company to Zygo Corporation (Zygo) in connection with the Company s acquisition of certain assets of Zygo in June 2009. Our management has broad discretion as to how to spend and invest the remaining net proceeds after the required partial repayment of this liability, and we may spend or invest these net proceeds in ways with which our stockholders may not agree and that do not necessarily improve our operating results or enhance the value of our common stock. Accordingly, you will need to rely on our judgment with respect to the use of the remaining net proceeds, and you will not have the opportunity as part of your investment decision to assess whether they are being used or invested appropriately. Until the remaining net proceeds are used, we plan to invest the net proceeds of this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return.

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Our corporate documents and Delaware law make a takeover of our company more difficult, which could prevent certain changes in control and limit the market price of the common stock. Our charter and by-laws and Section 203 of the Delaware General Corporation Law contain provisions that could enable our management to resist a takeover of our company. For example, our board of directors has the authority, without further approval of our stockholders, to fix the rights and preferences, and to cause our company to issue, up to 3,000,000 shares of preferred stock. These provisions could discourage, delay, or prevent a change in the control of our company or a change in our management. They could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors and take other corporate actions. The existence of these provisions could limit the price that investors are willing to pay in the future for shares of the common stock. Some provisions in our charter and by-laws could deter third parties from acquiring us, which could limit the market price of the common stock.

We currently do not intend to pay dividends on our common stock and consequently, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates. We currently do not plan to pay dividends on shares of our common stock in the near future. Consequently, your only opportunity to achieve a return on your investment in us will be if the market price of our common stock appreciates.

Future equity issuances or a sale of a substantial number of shares of our common stock may cause the price of our common stock to decline. Because we may need to raise additional capital in the future to continue to expand our business and our research and development activities, among other things, we may conduct additional equity offerings. If we or our stockholders sell substantial amounts of our common stock (including shares issued upon the exercise of options and warrants) in the public market, the market price of our common stock could fall. A decline in the market price of our common stock could make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

If you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of your investment. The public offering price of the common stock will be substantially higher than the net tangible book value per share of our outstanding common stock. If you purchase shares of our common stock, you will incur immediate and substantial dilution in the amount of $ per share. See Dilution.

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FORWARD-LOOKING STATEMENTS

Our disclosure and analysis in this prospectus supplement, in the accompanying prospectus, in any related free writing prospectus, in the documents incorporated by reference and in some of our other public statements contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. This Act provides a safe harbor for forward-looking statements to encourage companies to provide prospective information about themselves so long as they identify these statements as forward-looking and provide meaningful cautionary statements identifying important factors that could cause actual results to differ from the projected results. In some cases, you can identify forward-looking statements by terminology such as anticipate, believe, continue, could, estimate, expect, intend, ma plan, potential, predict, should, or will, or the negative of those terms, or comparable terminology.

Any or all of our forward-looking statements in this prospectus supplement, in the accompanying prospectus, in any related free writing prospectus, in the documents incorporated by reference and in any other public statements we make may turn out to be inaccurate. Forward-looking statements reflect our current expectations or forecasts of future events or results and are inherently uncertain. Inaccurate assumptions we might make and known or unknown risks and uncertainties can affect the accuracy of our forward-looking statements. Accordingly, no forward-looking statement can be guaranteed and future events and actual or suggested results may differ materially. The following factors, among others, could cause actual results and future events to differ materially from those set forth or contemplated in the forward-looking statements:

- competition;
- the possibility of interruption of business activities due to equipment problems, accidents, strikes, weather or other factors;
- product development risk;
- changes in raw material prices and availability;
- changes in general economic conditions or developments with respect to specific industries or customers affecting demand for our products including unfavorable shifts in product mix;
- unanticipated costs, expenses or third-party claims;
- interest rate volatility;
- foreign currency exchange rate fluctuations;
- changes in assumptions used for determining employee benefit expense and obligations;
- other unforeseen developments in the industries in which we operate; and
- other factors that we describe in the Risk Factors section.

We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make in our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, as well as in any additional prospectus supplement relating to the accompanying prospectus and other public filings with the SEC.

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USE OF PROCEEDS

We estimate that the net proceeds from the sale of our common stock in this offering will be approximately $ million (approximately $ million if the underwriters overallotment option is exercised in full), after deducting underwriting discounts and commissions and our estimated offering expenses. We will not receive any proceeds from the sale of shares of our common stock by the selling stockholder.

We are required to use $2 million of the net proceeds from this offering to pay a portion of the amount owed by the Company to Zygo in connection with the Company s acquisition of certain assets of Zygo in June 2009. As of December 15, 2009 our current liability to Zygo in connection with the asset acquisition was approximately $3.4 million.

We expect to use any remaining net proceeds from this offering for general corporate purposes, which may include the acquisition of businesses, technologies and products that will complement our existing operations. We assess acquisition opportunities on an ongoing basis and from time to time have discussions with other companies about potential transactions. We currently do not have any agreement with respect to an acquisition, and we cannot assure you that we will make any acquisitions in the future.

These expected uses of net proceeds of this offering represent our current intentions based upon our present plans and business conditions. The amounts and timing of our actual expenditures will depend on numerous factors, including the pursuit of acquisitions or other strategic opportunities and any unforeseen cash needs. As a result, management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending these uses, we plan to invest the net proceeds in short-term interest-bearing obligations, investment-grade instruments, certificates of deposit or direct guaranteed obligations of the United States. The goal with respect to investment of these net proceeds is capital preservation and liquidity so that funds are readily available to fund our operations.

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PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY

Our common stock is traded on the NASDAQ Global Market under the symbol NANO. The following table sets forth, for the periods indicated, the high and low reported sale prices of our common stock as reported on the NASDAQ Global Market.

	High	Low
Fiscal Year ended December 29, 2007		
First quarter	$ 8.51	$ 6.63
Second quarter	$ 6.94	$ 5.74
Third quarter	$ 9.00	$ 6.12
Fourth quarter	$ 11.71	$ 7.48
Fiscal Year ended December 27, 2008		
First quarter	$ 9.93	$ 5.00
Second quarter	$ 8.50	$ 5.75
Third quarter	$ 6.09	$ 2.20
Fourth quarter	$ 3.04	$ 0.80
Fiscal Year ending January 2, 2010		
First quarter	$ 1.67	$ 1.05
Second quarter	$ 2.79	$ 1.11
Third quarter	$ 9.00	$ 2.46
Fourth quarter (through December 15, 2009)	$ 14.06	$ 5.35

As of December 15, 2009, there were approximately 273 holders of record of our common stock. On December 15, 2009, the last sale price reported on the NASDAQ Global Market for our common stock was $12.39 per share.

Dividends

We have never declared or paid any cash dividends on our common stock. We currently do not plan to pay dividends on shares of our common stock in the near future. Consequently, your only opportunity to achieve a return on your investment in us will be if the market price of our common stock appreciates.

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CAPITALIZATION

The following table shows our cash, cash equivalents and investments and capitalization as of September 26, 2009 on an actual basis and on an as adjusted basis to give effect to the sale of our common stock in this offering and the application of the net proceeds received in this offering as described under Use of Proceeds . You should read this table together with our financial statements and the related notes thereto, as well as Management s Discussion and Analysis of Financial Condition and Results of Operations and the other financial information, included elsewhere or incorporated by reference in this prospectus supplement or the accompanying prospectus.

	September 26, 2009	
	Actual	As Adjusted[1]
	(in thousands)	
Cash, cash equivalents and investments	$ 17,207	$
Other Current Liabilities	$ 6,808	$
Stockholders equity		
Preferred stock, $0.001 par value, 3,000,000 shares authorized; no shares issued or outstanding	$	$
Common stock, $0.001 par value; 47,000,000 shares authorized; 18,629,915 issued and outstanding; issued and outstanding as adjusted	19	
Additional paid-in capital	191,765	
Accumulated deficit	(112,666)	
Accumulated other comprehensive income (loss)	962	
Total shareholders equity	$ 80,080	$
Total capitalization	$	$

[1] Reflects the use of approximately $2 million of the net proceeds from this offering to reduce our obligations to Zygo in connection with the acquisition of certain assets of Zygo and for general corporate purposes. As of December 15, 2009 our current liability to Zygo in connection with the asset acquisition was approximately $3.4 million.

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DILUTION

If you invest in our common stock, your ownership interest will be diluted to the extent of the difference between the public offering price per share of common stock and the adjusted net tangible book value per share of common stock immediately after this offering. The net tangible book value of our common stock as of September 26, 2009 was $72,603,151, or $3.90 per share. Net tangible book value per share is determined by dividing (1) our total tangible assets less our total liabilities by (2) the number of shares of common stock outstanding.

After giving effect to our sale of shares of common stock in this offering at a public offering price of $ per share and after deducting underwriting discounts and estimated offering expenses payable by us, our adjusted net tangible book value as of September 26, 2009 would have been $ million, or $ per share. This represents an immediate increase in net tangible book value to existing stockholders of $ per share and an immediate dilution to new investors of $ per share. The following table illustrates this per share dilution:

Public offering price per share		$
Net tangible book value per share as of September 26, 2009	$ 3.90	
Increase per share attributable to sale of shares in this offering	$	
Adjusted net tangible book value per share after this offering		$
Dilution per share to new investors		$

If the underwriters exercise their over-allotment option in-full to purchase additional shares of common stock in this offering, the adjusted net tangible book value per share after the offering would be $ per share, the increase in the net tangible book value per share to existing stockholders would be $ per share and the dilution to new investors purchasing common stock in this offering would be $ per share.

The preceding discussion and table is based on the number of shares of common stock outstanding as of December 15, 2009 and excludes:

- an aggregate of 2,949,659 shares of our common stock subject to outstanding options as of December 10, 2009 at a weighted average exercise price of $5.93 per share; and

- an additional 2,838,522 shares of our common stock reserved for issuance upon exercise of options, or as restricted stock grants, restricted stock units or stock awards, that may be granted subsequent to December 10, 2009 under our 2005 Equity Incentive Plan, 2003 Employee Stock Purchase Plan, 2002 Non-Statutory Stock Option Plan, 2000 Employee Stock Option Plan, 2000 Director Stock Option Plan, and 1991 Stock Option Plan.

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UNDERWRITING

We and the selling stockholder are offering the shares of common stock described in this prospectus supplement through a number of underwriters. Piper Jaffray is acting as the sole book-running manager of the offering and as representative of the underwriters. Oppenheimer & Co. Inc. and RBC Capital Markets Corporation are acting as co-managers for this offering. We and the selling stockholder have entered into a firm commitment underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we and the selling stockholder have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discount set forth on the cover page of this prospectus supplement, the number of shares of common stock listed next to its name in the following table:

Underwriter	Number of Shares
Piper Jaffray & Co.	
Oppenheimer & Co. Inc.	
RBC Capital Markets Corporation	
Total	

The underwriters are committed to purchase all the shares of common stock offered by us and the selling stockholder if they purchase any shares, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus supplement and to certain dealers at that price less a concession not in excess of $ per share. After the offering, these figures may be changed by the underwriters. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters may exercise this option at any time and from time to time during the 30-day period from the date of this prospectus supplement. If any shares are purchased with this over-allotment option, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The following table shows the per share and total underwriting discount to be paid to the underwriters assuming both no exercise and full exercise of the underwriters option to purchase additional shares.

	Without over-allotment exercise	With full over-allotment exercise
Per Share	$	$
Total	$	$

We estimate that the total fees and expenses payable by us, excluding underwriting discount, will be approximately $, which includes $150,000 that we have agreed to reimburse the underwriters for the fees incurred by them in connection with the offering.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

We and certain of our directors and executive officers and the selling stockholder are subject to lock-up agreements that prohibit us and them from offering for sale, pledging, assigning, encumbering, announcing the intention to sell, selling, contracting to

sell, granting any option, right or warrant to purchase, or otherwise transferring or disposing of, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock for a period of at least 90 days following the date of this prospectus supplement without the prior written consent of Piper Jaffray. The lock-up agreements do not prohibit our directors and executive officers from transferring shares of our common stock for bona fide estate or tax planning purposes, subject to certain requirements, including that the transferee be subject to the same lock-up terms. The lock-up agreements do not prohibit us from issuing shares upon the exercise or conversion of securities outstanding on the date of this prospectus supplement. The lock-up provisions do not prevent us from selling shares to the underwriters pursuant to the underwriting agreement, or us from granting options to acquire securities under our existing stock option plans or issuing shares upon the exercise or conversion of securities outstanding on the date of this prospectus supplement.

The 90-day lock-up period in all of the lock-up agreements is subject to extension if (i) during the last 17 days of the lock-up period we issue an earnings release or material news or a material event relating to us occurs or (ii) prior to the expiration of the lock-up period, we announce that we will release earnings results during the 16-day period beginning on the last day of the lock-up period, in which case the restrictions imposed in these lock-up agreements shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event, unless Piper Jaffray waives the extension in writing.

Our shares are quoted on the NASDAQ Global Market under the symbol NANO.

To facilitate the offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock during and after the offering. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own accounts by selling more shares of common stock than we have sold to them. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. The underwriters may close out any short position by either exercising their option to purchase additional shares or purchasing shares in the open market.

In addition, the underwriters may stabilize or maintain the price of our common stock by bidding for or purchasing shares of common stock in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if shares of common stock previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of our common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of our common stock to the extent that it discourages resales of our common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time. The underwriters may also engage in passive market making transactions in our common stock. Passive market making consists of displaying bids on the NASDAQ Global Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of our common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

This prospectus supplement and the accompanying prospectus in electronic format may be made available on web sites maintained by the underwriters, and the underwriters may distribute prospectuses and prospectus supplements electronically.

From time to time in the ordinary course of their respective businesses, the underwriters and certain of their affiliates may in the future engage in commercial banking or investment banking transactions with us and our affiliates.

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LEGAL MATTERS

The validity of the issuance of the common stock offered by us in this offering will be passed upon for us by Perkins Coie LLP, Denver, Colorado. Certain legal matters in connection with the offering will be passed upon for the underwriters by Goodwin Procter LLP, New York, New York.

EXPERTS

The consolidated financial statements and schedule as of December 27, 2008 and December 29, 2007 and for each of the three years in the period ended December 27, 2008 incorporated by reference in this prospectus supplement have been so incorporated in reliance on the report of BDO Seidman, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information that we file with it into our registration statement on Form S-3 of which this prospectus supplement and the accompanying prospectus are a part, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus supplement and the accompanying prospectus. Information contained in this prospectus supplement modifies, supersedes and replaces information incorporated by reference into this prospectus supplement that we filed with the SEC prior to the date of this prospectus supplement, while information that we file later with the SEC and deemed to be incorporated by reference into this prospectus supplement will automatically update and supersede the information contained in this prospectus supplement. We incorporate by reference into the registration statement and this prospectus supplement the documents listed below, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement (other than Current Reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our Annual Report on Form 10-K for the fiscal year ended December 27, 2008, filed on March 27, 2009;

- our Definitive Proxy Statement filed with the Commission on April 21, 2009;

- our Quarterly Reports on Form 10-Q for the quarters ended March 28, 2009, June 27, 2009 and September 26, 2009, filed on May 12, 2009, August 11, 2009 and November 9, 2009, respectively;