

NVE CORP /NEW/  
Form 10-K  
May 02, 2012

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

**FORM 10-K**

(Mark One)

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

For the fiscal year ended **March 31, 2012**

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 **000-12196**

**NVE CORPORATION**

(Exact name of registrant as specified in its charter)

**Minnesota**

**41-1424202**

State or other jurisdiction of incorporation or organization

(I.R.S. Employer Identification No.)

**11409 Valley View Road, Eden Prairie, Minnesota**

**55344**

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code **(952) 829-9217**

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

Title of each class

Name of each exchange on which registered

**Common stock, \$0.01 par value ( Common Stock )**

**The NASDAQ Stock Market, LLC**

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

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) 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 large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company) Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes  No

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based on the closing price on September 30, 2011, the last business day of the Registrant's most recently completed second fiscal quarter, as reported on the NASDAQ Stock Market, was approximately \$205 million.

The number of shares of the registrant's Common Stock (par value \$0.01) outstanding as of April 27, 2012 was 4,824,745.

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#### **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of our Proxy Statement for our 2012 Annual Meeting of Stockholders are incorporated by reference into Items 10, 11, 12, 13, and 14 of Part III hereof.

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### **PART I**

#### **FORWARD-LOOKING STATEMENTS**

Some of the statements made in this Report or in the documents incorporated by reference in this Report and in other materials filed or to be filed by us with the Securities and Exchange Commission ( SEC ) as well as information included in verbal or written statements made by us constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are subject to the safe harbor provisions of the reform act. Forward-looking statements may be identified by the use of the terminology such as may, will, expect, anticipate, intend, believe, estimate, should, or continue, or the negatives of these terms or other variations on these words or comparable terminology. To the extent that this Report contains forward-looking statements regarding the financial condition, operating results, business prospects or any other aspect of NVE, you should be aware that our actual financial condition, operating results and business performance may differ materially from that projected or estimated by us in the forward-looking statements. We have attempted to identify, in context, some of the factors that we currently believe may cause actual future experience and results to differ from their current expectations. These differences may be caused by a variety of factors, including but not limited to risks associated with competition, progress in research and development activities by us and others, variations in costs that are beyond our control, decreased sales, loss of supply from any of our packaging vendors, failure to obtain new customers, inability to meet customer technical requirements, ineligibility for SBIR awards, litigation risks, and other specific risks that may be alluded to in this Report or in the documents incorporated by reference in this Report. For further information regarding our risks and uncertainties, see Item 1A Risk Factors of this Report.

#### **ITEM 1. BUSINESS.**

##### **In General**

NVE Corporation, referred to as NVE, we, us, or our, develops and sells devices that use spintronics, a nanotechnology that relies on electron spin rather than electron charge to acquire, store and transmit information. We manufacture high-performance spintronic products including sensors and couplers that are used to acquire and transmit data. We have also licensed our spintronic magnetoresistive random access memory technology, commonly known as MRAM.

##### **NVE History and Background**

NVE is a Minnesota corporation headquartered in a suburb of Minneapolis. We were founded in 1989 by James M. Daughton, Ph.D., a spintronics pioneer. Our common stock became publicly traded in 2000 through a reverse merger and became NASDAQ listed in 2003. Since our founding, we have been awarded more than \$50 million in government research contracts, including more than 30 MRAM development contracts. These contracts have helped us build our intellectual property portfolio. Over the years our product sales have increased and we have reduced our dependence on research contracts. Fiscal years referenced in this report end March 31.

##### **Industry Background**

Much of the electronics industry is devoted to the acquisition, storage, and transmission of information. We have focused on three applications for our spintronic technology: magnetic sensors, couplers, and memories. Sensors acquire information, couplers transmit information, and memories store information. In that sense, our technology can provide the eyes, nerves, and brains of electronic systems.

Magnetic sensors can be used for a number of purposes including detecting the position or speed of robotics and mechanisms, or for communicating with implantable medical devices. We believe our spintronic sensors are smaller, more precise, and more reliable than competing devices.

Couplers are widely used in factory automation, providing reliable digital communication between electronic subsystems in factories. For example, couplers are used to send data between robots and central controllers at very

high speed. As manufacturing automation expands, there is a need for higher speed data and more channel density. Because of their unique properties, we believe our couplers transmit more data at higher speeds and over longer distances than conventional devices.

Near-term potential MRAM applications include mission-critical storage such as military, industrial, and anti-tamper applications. Long term, MRAM could address the market for ubiquitous high-density memory.

### **Our Enabling Technology**

Our designs are generally based on either giant magnetoresistance or tunneling magnetoresistance. These structures produce a large change in electrical resistance depending on the electron spin orientation in a free layer.

In giant magnetoresistance (GMR) devices, resistance changes due to conduction electrons scattering at interfaces within the devices. The GMR effect is only significant if the layer thicknesses are less than the mean free path of conduction electrons, which is approximately five nanometers. Our critical GMR conductor layers may be less than two nanometers, or five atomic layers, thick. Technological advances in recent years have made it practical to manufacture such small dimensions.

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The second type of spintronic structure we use is based on tunneling magnetoresistance (TMR). Such devices are known as Spin-Dependent Tunnel (SDT) junctions, Magnetic Tunnel Junctions (MTJs), or Tunneling Magnetic Junctions (TMJs). SDT junctions use tunnel barriers that are so thin that electrons can tunnel through a normally insulating material to cause a resistance change. SDT barrier thicknesses can be in the range of one to four nanometers (less than ten molecular layers).

In our products, the spintronic elements are connected to integrated circuitry and packaged in much the same way as conventional integrated circuits.

### **Our Strategy**

Our vision is to become the leading developer of practical spintronics technology and devices. We plan to do that by selling the products described below and licensing our MRAM technology. To grow product sales, we plan to broaden our sensor and coupler product lines, and longer-term to target larger markets such as consumer electronics.

### **Our Products and Markets**

We operate in one reportable segment. For financial information concerning this segment see Note 8 Segment Information of the Financial Statements included in this report.

#### ***Sensor Products and Markets***

Our sensor products detect the strength or gradient of magnetic fields and are often used to determine position or speed. The GMR changes its electrical resistance depending on the magnetic field. In our devices, GMR is combined with conventional foundry integrated circuitry and packaged in much the same way as conventional integrated circuits. We sell standard or catalog sensors, and custom sensors designed to meet customers exact requirements. Our sensors are quite small, very sensitive to magnetic fields, precise, and reliable.

##### *Standard sensors*

Our standard, or catalog, sensors are generally used to detect the presence of a magnetic or metallic material to determine position or speed. We believe our spintronic sensors are smaller, more precise, and more reliable than competing devices. Our major market for standard sensors is factory automation.

##### *Custom and medical sensors*

Our primary custom products are sensors for medical devices, which are customized to our customers requirements and manufactured under stringent medical device quality standards. Most are used to replace electromechanical magnetic switches. We believe our sensors have important advantages in medical devices compared to electromechanical switches, including no moving parts for inherent reliability, and being smaller, more sensitive, and more precise. Our sensors can be customized using customer-specific integrated signal processing and design variations that can include the range and sensitivity to magnetic fields, electrical resistance, and multisensor elements configuration. Future custom sensor target markets include consumer electronics, automotive electronics, and biosensors.

#### ***Coupler Products and Markets***

Our spintronic couplers combine a GMR sensor element and an IsoLoop integrated microscopic coil. The coil creates a small magnetic field that is picked up by the spintronic sensor, transmitting data almost instantly. Couplers are also known as isolators because they electrically isolate the coupled systems. Our IsoLoop couplers are faster than the fastest optical couplers.

We have four lines of coupler products: cost-effective IL500-Series couplers; IL600-Series passive-input couplers; IL700/IL200-Series high-speed couplers; and IL4/IL3-Series isolated network couplers.

***MRAM Products and Markets***

MRAM uses spintronics to store data. It has been called the ideal or universal memory because of its potential to combine the speed of SRAM, the density of DRAM, and the nonvolatility of flash memory. Data is stored in the spin of the electrons in thin metal alloy films, and read with spin-dependent tunnel junctions. Unlike electrical charge, the spin of an electron is inherently permanent. We have invented several types of MRAM memory cells including inventions related to advanced MRAM designs and MRAM for tamper prevention or detection.

Our strategy is to develop, manufacture, and sell low bit-density MRAM for applications such as tamper prevention and detection. For high bit-density MRAM, our strategy is to license our technology to companies with large-scale memories manufacturing capabilities.



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### **Product Manufacturing**

The heart of our fabrication facility is a cleanroom area with specialized equipment to deposit, pattern, etch, and process spintronic materials. Most of our products are fabricated in our facility using either raw silicon wafers or foundry wafers. Foundry wafers contain conventional electronics that perform housekeeping functions such as voltage regulation and signal conditioning in our products.

Each wafer may include thousands of devices. We build spintronics structures on wafers in our fabrication facility. We either saw wafers to be sold in die form, or wafers are sent to Asia for dicing and packaging. Other production operations include wafer-level inspection and testing. Packaged parts are returned to us to be tested, inventoried, and shipped.

### **Sales and Product Distribution**

We rely on distributors who stock our products and sell them in more than 75 countries. Distributors of our products include Digi-Key Corporation, Premier Farnell plc companies, and Rhopoint Components Ltd. Our distributor agreements generally renew annually. In addition, Avago Technologies, a leading supplier of solid-state couplers, distributes private-branded versions of some of our couplers under an agreement that expires in June 2013. We may add other private-brand coupler partners in the future.

### **New Product Status**

Long-term product development programs in fiscal 2012 included spintronic compasses applicable to consumer electronics, MRAM designed for tamper detection, couplers for Controller Area Networks, which are networks used in automobiles and factory automation, and spintronic biosensors for diagnostic instruments.

### **Our Competition**

#### ***Industrial Sensor Competition***

Several other companies claim to either make or have the capability to make GMR and TMR sensors. Also, several competitors make solid-state industrial magnetic sensors including silicon Hall-effect sensors and anisotropic magnetoresistive (AMR) sensors. We believe those types of sensors are not as sensitive as our GMR or TMR sensors.

#### ***Medical Sensor Competition***

Our sensors for medical devices face competition from electromechanical magnetic sensors and from other solid-state magnetic sensors. Electromechanical magnetic sensors such as reed and micro-electromechanical system (MEMS) switches have been in use for several decades. Electromechanical competitors include Hermetic Switch, Inc., Meder Electronic AG (Engen/Welschingen, Germany), and Memscap SA (Grenoble, France). Because our sensors have no moving parts, we believe they are inherently more reliable than electromechanical magnetic sensors. We also believe our sensors are smaller than the smallest electromechanical magnetic sensors, more precise in their magnetic switch points, and more sensitive. Compared to other solid-state sensors, our medical sensors may have advantages in size, sensitivity to small magnetic fields, or electrical interface simplicity.

#### ***Coupler Competition***

Competing coupler technologies include optical couplers, inductive couplers (transformers), capacitive couplers, and radio-frequency modulation couplers. In addition to being a customer, Avago is a leading producer of high-speed optical couplers. Other prominent optical coupler suppliers are Fairchild Semiconductor International, Lite-On Technology Corporation, Renesas Electronics Corporation, Toshiba Corporation, and Vishay Intertechnology.

Our strategy is to compete based on product features rather than to compete solely on price. IsoLoop couplers are smaller and therefore require less circuit board space per channel than most competing couplers. Our other advantages over competing technologies may include less signal distortion, longer product life, and lower power consumption.

***MRAM Competition***

A number of companies compete or may compete with us for MRAM research and development or service business, or may be attempting to develop MRAM intellectual property for licensing to others. Emerging technologies that could compete with MRAM include graphene and carbon nanotubes, phase-change memory (PCM; also known as PRAM, PCRAM, chalcogenide, CRAM, or Ovonic memory), resistive RAM (RRAM), memory resistors ( memristors ), and conductive metal oxide (CMOx) memory. MRAM may have advantages over these technologies in either manufacturability, speed, bit density, data retention, or endurance.

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### **Sources and Availability of Raw Materials**

Our principal sources of raw materials include suppliers of raw silicon and semiconductor foundry wafers that are incorporated into our products, and suppliers of device packaging services. Our wafers sources are based around the world; our device packaging services are primarily in Asia.

### **Intellectual Property**

#### ***Patents***

As of March 31, 2012 we had more than 50 issued U.S. patents assigned to us. We also have a number of foreign patents, a number of U.S. and foreign patents pending, and we have licensed patents from others. There are no patents we regard as critical to our business owned by us or licensed to us that expire in the next 12 months.

Much of our intellectual property has been developed with U.S. Government support. Under federal legislation, companies normally may retain the principal worldwide patent rights to any invention developed with U.S. Government support.

Certain of our patents cover inventions we believe may be necessary for successful high-density, high-performance MRAMs. We believe U.S. patents 6,275,411 and 6,349,053, both titled *Spin Dependent Tunneling Memory*, and patent 6,538,921 titled *Circuit Selection of Magnetic Memory Cells and Related Cell Structures*, are particularly important. The 6,275,411 patent expires in 2019. The 6,349,053 and 6,538,921 patents expire in 2021. We also have patents on advanced MRAM designs that we believe are important, including patents that relate to magnetothermal MRAM, spin-momentum MRAM, and synthetic antiferromagnetic storage.

#### ***Trademarks***

NVE and IsoLoop are our registered trademarks. Other trademarks we claim include GMR Switch and GT Sensor.

#### ***Licenses***

We have licensed certain of our MRAM intellectual property to several companies, including Honeywell International Inc. and Motorola, Inc.

#### ***Agreements with Honeywell***

We have agreements and amendments to agreements with Honeywell dating back approximately to our founding. Under these agreements we are not required to pay royalties to Honeywell for the use of their intellectual property, and Honeywell has intellectual property rights to certain of our earlier-developed MRAM technology.

#### ***Motorola License***

We granted Motorola a nonexclusive, nontransferable, and nonassignable license to our MRAM intellectual property and received advance payments in conjunction with the agreement. Motorola has since separated Freescale Semiconductor, Inc. Motorola and Freescale asked us to consent to Motorola's assignment of the Patent License Option Agreement to Freescale. We have declined to provide such consent without additional consideration. We believe the Motorola agreement likely terminated in 2005 because Motorola transferred manufacturing to Freescale. Freescale later announced the formation of Everspin Technologies, Inc., an independent company that would take ownership of Freescale's MRAM manufacturing assets. In January 2012 we filed a patent infringement lawsuit against Everspin.

### **Seasonality**

In some years, including fiscal 2012, we have observed product sales weakness for quarters ending December 31. This seasonality may have been due in part to distributor ordering patterns or customer vacations and shutdowns late in calendar years. We cannot predict whether this seasonal pattern will continue in future fiscal years.

**Working Capital Items**

Like other companies in the electronics industry, we have historically invested in capital equipment for manufacturing and testing our products, as well as research and development equipment. We have also deployed significant capital in inventories to have finished products available from stock, to receive more favorable pricing for raw materials, and to guard against raw material shortages.

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### **Dependence on Major Customers**

We rely on several large customers for a significant percentage of our revenue, including Avago Technologies; Phonak AG; St. Jude Medical, Inc.; certain other medical device manufacturers; certain distributors; and the U.S. Government. The loss of any one or more of these customers could have a material adverse effect on us. For the purposes of this disclosure, all agencies of the U.S. Government are considered a single customer.

### **Firm Backlog**

As of March 31, 2012 we had \$1,059,686 of contract research and development backlog we believed to be firm, compared to \$2,964,885 as of March 31, 2011. We expect the firm backlog as of March 31, 2012 to be filled in fiscal 2013. Approximately 59% of our backlog as of March 31, 2012 and 51% of our backlog as of March 31, 2011 was from agencies of the U.S. Government. U.S. Government orders that are not yet funded, or contracts awarded but not yet signed, are not included in firm backlog. We do not believe any material portion of our business is subject to renegotiation of profits or termination of contracts or subcontracts at the election of the U.S. Government. There can be no assurance of additional contracts or follow-on contracts for expired or completed U.S. Government or other contracts.

Our product sales are made primarily under standard purchase orders. Only a small portion of our product order backlog is noncancelable and that the dollar amount associated with the noncancelable portion is not significant, therefore product order backlog is not included in firm backlog, and product sales backlog as of any particular date may not be indicative of future results. We also have certain agreements that require customers to forecast purchases; however, these agreements do not generally obligate the customer to purchase any particular quantity of products. Based on semiconductor industry practice and our experience, we do not believe that such agreements are meaningful for determining backlog amounts.

### **Research and Development Activities**

Over the past three fiscal years our research and development activities have included development of new sensors, couplers, and memories. We spent \$1,887,297 for fiscal 2012, \$1,062,694 for fiscal 2011, and \$872,673 for fiscal 2010 in company-sponsored research and development activities. Additionally, we spent \$3,261,191 during fiscal 2012, \$4,371,852 during fiscal 2011, and \$4,346,200 during fiscal 2010 on customer-sponsored research and development contract activities. These research and development contracts were with various agencies of the U.S. Government as well as non-government entities.

### **Environmental Matters**

We are subject to environmental laws and regulations, particularly with respect to industrial waste and emissions. Compliance with these laws and regulations has not had a material impact on our capital expenditures, earnings, or competitive position to date. Existing and future environmental laws and regulations could result in expenses related to emission abatement or remediation, but we are currently unable to estimate such expenses.

### **Number of Employees**

We had 58 employees as of March 31, 2012. Our employment can fluctuate due to a variety of factors. None of our employees are represented by a labor union or are subject to a collective bargaining agreement, and we believe we maintain good relations with our employees.

### **Financial Information About Geographic Areas**

International sales accounted for approximately 55% of our revenue in fiscal 2012 and 2011, and 49% in fiscal 2010. More information about geographic areas is contained in Note 8 Segment Information to the Financial Statements included in this report

### **Available Information**

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All reports we file with the SEC, including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and proxy statements and additional proxy materials on Schedule 14A, as well as any amendments to those reports and schedules, are accessible at no cost through the Investors section of our Website ([www.nve.com](http://www.nve.com)). We make those filings available as soon as reasonably practicable after filing. These filings are also accessible through the SEC's Website ([www.sec.gov](http://www.sec.gov)).

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We caution readers that the following important factors, among others, could affect our financial condition, operating results, business prospects or any other aspect of NVE, and could cause our actual results to differ materially from that projected or estimated by us in the forward-looking statements made by us or on our behalf. Although we have attempted to list below the important factors that do or may affect our financial condition, operating results, business prospects, or any other aspect of NVE, other factors may in the future prove to be more important. New factors emerge from time to time and it is not possible for us to predict all of such factors. Similarly, we cannot necessarily assess or quantify the impact of each such factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in forward-looking statements.

***We may lose revenue if any of our large customers cancel, postpone, or reduce their purchases.***

We rely on several large customers for a significant percentage of our revenue. These large customers include Avago Technologies; Phonak AG; St. Jude Medical, Inc.; certain other medical device manufacturers; certain distributors; and the U.S. Government. Although we have agreements with certain large customers, these agreements do not obligate customers to purchase from us and may not prevent price reductions. Furthermore, orders from our large customers can generally be reduced, postponed, or canceled. Any decreases in purchase quantities or purchase prices, or the loss of any of our large customers, could have a significant impact on our revenue and our profitability.

***We risk losing business to our competitors.***

Our known product competitors include Avago Technologies; Analog Devices, Inc.; Fairchild Semiconductor International; Hermetic Switch, Inc.; Linear Technology Inc.; Maxim Integrated Products, Inc.; Meder Electronic AG; Memsicap SA; NEC Corporation; Sharp Corporation; Silicon Laboratories, Inc.; Texas Instruments Incorporated; Toshiba Corporation; Vishay Intertechnology; and others. Many of our competitors and potential competitors have significantly greater financial, technical, and marketing resources than us. We believe that our competition is increasing as the technology and markets mature. This has meant more competitors and more severe pricing pressure. In addition, our competitors may be narrowing or eliminating our performance advantages. We expect these trends to continue, and we may lose business to competitors or it may be necessary to significantly reduce our prices in order to acquire or retain business. These factors could cause a material adverse impact on our financial condition, revenue, gross profit margins, or income.

***We will lose revenue if government contract funding is reduced, delayed, or eliminated.***

Although our revenue from agencies of the U.S. Government was less than 10% of our total revenue in each of the past three fiscal years, a material decrease in U.S. Government funded research or disqualification as a vendor to the U.S. Government for any reason would likely hamper future research and development activity and decrease related revenue. In addition to direct Government funding, certain of our non-Government customers depend on Government support to fund their contracts with us. Our direct and indirect Government funding depends on adequate continued funding of the agencies and their programs. Such funding is affected by Government spending priorities that can change and over which we have no control, and delays in such funding can occur for a number of reasons. Deficit reduction initiatives and Department of Defense spending reductions may impact Government budgets and funding priorities. Furthermore, a significant portion of our Government funding has been through Small Business Innovation Research (SBIR) contracts. SBIR budgets, eligibility, or funding limits may be changed by legislation or by agencies such as the Department of Defense.

***If we were barred for any reason from U.S. government contracts there could be a significant adverse impact on our revenue and our ability to make research and development progress.***

If we were to be charged with violation of certain laws or if the U.S. Government were to determine that we are not a presently responsible contractor, we could be temporarily suspended or, in the event of a violation, barred for up to three years from receiving new U.S. Government contracts or government-approved subcontracts. In addition, we

could expend substantial amounts in defending against such charges and in damages, fines and penalties if such charges are proven or result in negotiated settlements. Being barred for any reason from U.S. Government contracts could have a material adverse effect on our revenue, profits, and research and development efforts.

***Failure to qualify as a small business under federal regulations could make us ineligible for some government-funded research contracts, which could have a significant adverse impact on our revenue and our ability to make research and development progress.***

We received approximately \$527,000 in Small Business Innovation Research (SBIR) contract awards in fiscal 2012. Federal regulations place a number of criteria for a business to be eligible to compete for SBIR awards. Those criteria currently include number of employees and ownership structure. While we believe we meet the eligibility criteria, changes in our ownership, including changes beyond our control, could cause us to lose our eligibility to compete for SBIR awards. Loss of eligibility to compete for SBIR awards for any reason could have a material adverse effect on our revenue, profits, and research and development efforts. In addition, SBIR eligibility requirements could be changed at any time.



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### ***Our backlog may not result in future revenue.***

While we evaluate each order to determine qualification for inclusion in our firm backlog, there can be no assurance that amounts included in our firm backlog ultimately will result in future revenue. A reduction in our firm backlog during any particular period, or the failure of our firm backlog to result in future revenue, could harm our business and revenue.

### ***We face an uncertain economic environment in the industries we serve, which could adversely affect our business.***

We sell our products into the semiconductor market, which is highly cyclical. Additionally, effects of U.S. healthcare reform legislation could have an adverse effect on the economic environment for the medical device industries we serve. We cannot predict the timing, strength, or duration of any economic slowdown or subsequent recovery, worldwide or in the industries we serve. The economic environment could have a material adverse impact on our business and revenue.

### ***Our reputation could be damaged and we could lose revenue if we fail to meet technical challenges required to produce marketable products.***

Our products use new technology and we are continually researching and developing product designs and production processes. Our production processes require control of dimensional, magnetic, and other parameters that are not required in conventional semiconductor processes. If we are unable to develop stable designs and production processes, we may not be able to produce products that meet our customers' requirements, which could cause damage to our reputation and loss of revenue.

### ***Failure to meet stringent customer requirements could result in the loss of key customers and reduce our sales.***

Some of our customers, including Avago Technologies and certain medical device manufacturers, have stringent technical and quality requirements that require our products to meet certain test and qualification criteria or to adopt and comply with specific quality standards. Certain customers also periodically audit our performance. Failure to meet technical or quality requirements or a negative customer audit could result in the loss of current sales revenue, customers, and future sales.

### ***We could be subject to claims based on warranty, product liability, or delivery failures.***

Claims based on warranty, product liability, or delivery failures that could lead to significant expenses as we defend such claims or pay damage awards. We may also incur costs if we decide to compensate the affected customer or end consumer for such claims. In addition, if our customers recall products containing our products, we may incur costs and expenses relating to the recall. Costs or payments we may make in connection with warranty, delivery claims or product recalls may adversely affect our business and financial condition.

### ***Some of our sensors are incorporated into medical devices, which could expose us to a risk of product liability claims and such claims could seriously harm our business and financial condition.***

Certain of our sensor products are used in medical devices, including devices that help sustain human life. We are also marketing our sensor technology to other manufacturers of cardiac pacemakers and ICDs. Although we have indemnification agreements with certain customers including provisions designed to limit our exposure to product liability claims, there can be no assurance that we will not be subject to losses, claims, damages, liabilities, or expenses resulting from bodily injury or property damage arising from the incorporation of our products in devices sold by our customers. Our indemnifying customers may not have the financial resources to cover all liability. Existing or future laws or unfavorable judicial decisions could limit or invalidate the provisions of our indemnification agreements, or the agreements may not be enforceable in all instances. A successful product liability claim could require us to pay, or contribute to payment of, substantial damage awards, which would have a significant negative effect on our business and financial condition.

### ***Federal legislation may not protect us against liability for the use of our sensors in medical devices and a***

***successful liability claim could seriously harm our business and financial condition.***

Although the Biomaterials Access Assurance Act of 1998 may provide us some protection against potential liability claims, that Act includes significant exceptions to supplier immunity provisions, including limitations relating to negligence or willful misconduct. A successful product liability claim could require us to pay, or contribute to payment of, substantial damage awards, which would have a significant negative effect on our business and financial condition. Any product liability claim against us, with or without merit, could result in costly litigation, divert the time, attention, and resources of our management and have a material adverse impact on our business.

***Any malfunction of our sensors in existing medical devices could lead to the need to recall devices incorporating our sensors from the market, which may be harmful to our reputation and cause a significant loss of revenue.***

Any malfunction of our sensors could lead to the need to recall existing medical devices incorporating our sensors from the market, which may be harmful to our reputation because it is dependent on product safety and efficacy. Even if assertions that our sensors caused or contributed to device failure do not lead to product liability or contract claims, such assertions could harm our reputation and our customer relationships. Any damage to our reputation and/or the reputation of our products, or the reputation of our customers or their products could limit the market for our and our customers' products and harm our results of operations.

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### ***We may lose business and revenue if we are unable to increase production capacity to meet market demand.***

Our production process relies on resources such as equipment, facilities, and personnel to meet the market demand for our products and services. If market demand increases, we may not be able to add production capacity fast enough to meet market demand. Furthermore, expansion of our production facilities carries risks of disruption. Failure to meet market demand could result in the loss of current sales revenue, customers, and future sales.

### ***We may lose business and revenue if our critical production equipment fails.***

Our production process relies on certain critical pieces of equipment for defining, depositing, and modifying the magnetic properties of thin films. Some of this equipment was designed or customized by us, and some may no longer be in production. While we have an in-house maintenance staff, maintenance agreements for certain equipment, some critical spare parts, and back-ups for some of the equipment, we cannot be sure we could repair or replace critical manufacturing equipment were it to fail.

### ***The loss of supply from any of our key single-source wafer suppliers could impact our ability to produce and deliver products and cause loss of revenue.***

Our critical suppliers include suppliers of certain raw silicon and semiconductor foundry wafers that are incorporated in our products. We maintain inventory of some critical wafers, but we have not identified or qualified alternate suppliers for many of the wafers now being obtained from single sources. Increased industry demand due to an economic recovery or other factors beyond our control or ability to predict could cause or exacerbate wafer supply shortages. Any wafer supply interruptions could seriously jeopardize our ability to provide products that are critical to our business and operations and may cause us to lose revenue.

### ***The loss of supply of any critical chemicals or supplies could impact our ability to produce and deliver products and cause loss of revenue.***

There are a number of critical chemicals and supplies that we require to make products. These include certain gases, photoresists, polymers, and metals. We maintain inventory of critical chemicals and materials, but in many cases we are dependent on single sources, and some of the materials could be discontinued by their suppliers at any time. Furthermore, current and future climate change regulations could increase our costs or cause the loss of supply of critical chemicals. We use chemicals such as sulfur hexafluoride in our manufacturing process that have been identified as greenhouse gases. If such chemicals were restricted or prohibited we would need to obtain substitutes that might be more expensive or less available. Supply interruptions or shortages for any reason could seriously jeopardize our ability to provide products that are critical to our business and operations and may cause us to lose revenue.

### ***The loss of supply from any of our packaging vendors could impact our ability to produce and deliver products and cause loss of revenue.***

We are dependent on our packaging vendors, and because of the unique materials our products use and the high isolation voltage specifications of our couplers, many of our products are more technically challenging to package than conventional integrated circuits. Some of our products use processes or tooling unique to a particular packaging vendor, and it might be expensive, time-consuming, or impractical to convert to another vendor in the event of a supply interruption. We have alternate vendors or potential alternate vendors for the substantial majority of our product sales, but it could prove expensive, time-consuming, or technically challenging to convert certain products to an alternate vendor. We might not be able to recover work in process or finished goods in their possession if one of our packaging vendors were to become insolvent or disrupted by acts of God, including floods, typhoons, or earthquakes. Furthermore, an alternate vendor may not have sufficient capacity available to meet our requirements. One of our packaging vendors, Circuit Electronic Industries Public Co., Ltd. ( CEI ) of Ayutthaya, Thailand has been operating under voluntary debt rehabilitation under Thailand law since 2005 and was shut down from October 2011 through March 2012 due to flooding of its facility. CEI and certain other packaging vendors are in flood-susceptible areas. Such flooding risks may increase in future years due to possible higher ocean levels and other potential effects

of climate change. Any supply interruptions or loss of inventory could seriously jeopardize our ability to provide products that are critical to our business and operations and may cause us to lose revenue.

***We are subject to risks inherent in doing business in foreign countries that could impair our results of operations.***

Foreign sales were approximately 55% of our revenue for fiscal 2012, and we expect foreign sales to continue to represent a significant portion of our revenue in the future. Furthermore, we rely on suppliers in China, India, the Philippines, Taiwan, Thailand, and other foreign countries. Risks relating to or arising from operating in foreign markets that could impair our results of operations include economic and political instability; difficulties in enforcement of contractual obligations and intellectual property rights; changes in regulatory requirements, tariffs, customs, duties, and other trade barriers; transportation delays; acts of God, including floods, typhoons, and earthquakes; and other uncertainties relating to the administration of, or changes in, or new interpretation of, the laws, regulations, and policies of the jurisdictions where we do business.

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### ***Our business may suffer because MRAM technology may not build into a significant market.***

Future revenue and profits may depend on our current or future licensees introducing MRAM products using our technology. Production difficulties, technical barriers, high production costs, poor market reception, or other problems, almost all of which are outside our control, could prevent the deployment of MRAM or limit its market potential. Furthermore, competing technologies could prevent or supplant MRAM from becoming an important memory technology.

### ***Our future business may suffer because we may not be able to consummate additional MRAM license agreements.***

Although there are potential licensees for our MRAM intellectual property in addition to our current licensees, we may never be able to consummate additional license agreements. Potential licensees could also use their own or a third party's MRAM intellectual property rather than ours.

### ***Our business and our reliance on intellectual property exposes us to litigation risks.***

If patent infringement claims or actions are asserted against us, we may be required to obtain a license or cross-license, modify our existing technology or design a new noninfringing technology. Such licenses or design modifications can be costly or could increase the cost of our products. In addition, we may decide to settle a claim or action against us, which settlement could be costly. We may also be liable for any past infringement, and we may be required to indemnify our customers against expenses relating to possible infringement. If there is an adverse ruling against us in an infringement lawsuit, an injunction could be issued barring production or sale of any infringing product. It could also result in a damage award equal to a reasonable royalty or lost profits or, if there is a finding of willful infringement, treble damages. Any of these results would increase our costs or harm our operating results.

### ***We may not be able to enforce our intellectual property rights.***

We protect our proprietary technology and intellectual property by seeking patents, trademarks, and copyrights, and by maintaining trade secrets through entering into confidentiality agreements with employees, suppliers, customers, and prospective customers depending on the circumstances. We hold patents or are the licensee of others owning patented technology covering certain aspects of our products and technology. These patent rights may be challenged, rendered unenforceable, invalidated, or circumvented. In addition, rights granted under the patents or under licensing agreements may not provide a competitive advantage to us. We have filed a patent infringement lawsuit against Everspin Technologies, Inc., and at least several other companies have described designs that we believe would infringe on our patents if such designs were commercialized. Efforts to enforce patent rights can involve substantial expense and may not be successful. Furthermore, others may independently develop similar, superior, or parallel technologies to any technology developed by us, or our technology may prove to infringe on patents or rights owned by others. Thus the patents held by or licensed to us may not afford us any meaningful competitive advantage. Also, our confidentiality agreements may not provide meaningful protection of our proprietary information. Our inability to maintain our proprietary rights could have a material adverse effect on our business, financial condition, and results of operations.

### ***We may not be able to enforce our patents against Motorola, Freescale, or Everspin.***

Our Patent License Option Agreement with Motorola provided for termination on December 31, 2005 or on the date Motorola ceases manufacturing MRAM Products, whichever is later. We believe such a termination is likely to have occurred as a result of Motorola apparently having eliminated its ability to manufacture MRAM Products through its spinoff of Freescale. In 2008 Freescale announced that it had transferred its MRAM technology and intellectual property to an independent company, Everspin Technologies, Inc. We believe we are free to negotiate a new agreement with Freescale or Everspin, or an assignment of the Motorola Patent License Option Agreement, but we have said we would do so only with amendments thereto. We have filed a patent infringement lawsuit against Everspin. There can be no assurance, however, that we can successfully enforce our patents against Motorola, Freescale, or Everspin or that any agreement will be reached with Freescale or Everspin, or that NVE would receive any value under the existing agreement with Motorola or any value under any such further agreement with Freescale

or Everspin.

***Our business success may be adversely affected if we are unable to attract and retain highly qualified employees.***

We have employment agreements with certain employees, including our Chief Executive Officer and Chief Financial Officer, but those agreements do not prevent employees from leaving the company. Competition for highly qualified management and technical personnel can be intense and we may not be able to attract and retain the personnel necessary for the development and operation of our business. The loss of the services of key personnel could have a material adverse effect on our business, financial condition, and results of operations.

***We could incur losses on our marketable securities.***

At March 31, 2012, we held \$71,996,927 in short-term and long-term marketable securities, representing approximately 87% of our total assets. During the past two fiscal years a number of the securities we hold were downgraded by Moody's or Standard and Poor's indicating a possible increase in default risk. Conditions and circumstances beyond our control or ability to anticipate can cause downgrades and increases in default risk. Downgrades of any of our marketable securities are possible at any time for reasons beyond our control. Additionally, the assignment of a high credit rating does not preclude the risk of default on any marketable security. We could incur losses on our marketable securities, which could have a material adverse impact on our financial condition, income, or cash flows.

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*The price of our common stock may be adversely affected by significant price fluctuations due to a number of factors, many of which are beyond our control.*

From time to time our stock price has decreased sharply, and could decline in the future. The market price of our common stock may be significantly affected by many factors, some of which are beyond our control, including:

- technological innovations by us or our competitors;
- the announcement of new products, product enhancements, contracts, or license agreements by us or our competitors;
- legal proceedings involving us;
- delays in our introduction of new products or technologies or market acceptance of these new products or technologies;
- changes in demand for our customers' products;
- quarterly variations in our operating results, revenue, or revenue growth rates;
- changes in revenue estimates, earnings estimates, or market projections by market analysts;
- speculation in the press or analyst community about our business, potential revenue, or potential earnings;
- short selling and covering of short positions in our stock; and
- general economic conditions or market conditions specific to industries served or potentially served by us or our customers.

### **ITEM 2. PROPERTIES.**

Our principal executive offices and manufacturing facility are located at 11409 Valley View Road, Eden Prairie, Minnesota, 55344. The space consists of 21,362 square feet of offices, laboratories, and production areas. The space is owned by the Barbara C. Gage Revocable Trust and leased under an agreement expiring December 31, 2020. We believe the facility is adequate to support our needed production capacity and plan to expand our production space within the facility. We hold no investments in real estate.

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

In the ordinary course of business we may become involved in litigation. Other than as set forth below, at this time we are not aware of any material pending or threatened legal proceedings or other proceedings contemplated by governmental authorities that we expect would have a material adverse impact on our future results of operation and financial condition.

On January 3, 2012, we filed a patent infringement lawsuit against Everspin Technologies, Inc. in the U.S. District Court for the Minnesota District. The lawsuit is based on Everspin's sale of magnetoresistive random access memory, commonly known as MRAM. The lawsuit seeks an injunction for Everspin to cease using NVE's patented technology and provide compensation for Everspin's past infringement.

On February 24, 2012, Everspin filed a patent infringement lawsuit against us in the same court alleging certain NVE products infringe on two patents purported to be owned by Everspin. The lawsuit seeks an injunction and compensation. We believe the lawsuit against us is wholly without merit.

### **ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable.

## **PART II**

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

#### **Market Information**

Our Common Stock trades on the Capital Market tier of the NASDAQ Stock Market under the symbol NVEC. The following table shows the high and low sales prices of our Common Stock as reported on the NASDAQ for each quarter within our two most recent fiscal years:

	Quarter Ended							
	3/31/12	12/31/11	9/30/11	6/30/11	3/31/11	12/31/10	9/30/10	6/30/10
High \$	58.46	\$ 68.93	\$ 69.46	\$ 62.55	\$ 63.49	\$ 58.65	\$ 48.10	\$ 51.59
Low \$	49.50	\$ 53.21	\$ 52.54	\$ 52.36	\$ 51.01	\$ 42.17	\$ 38.00	\$ 42.84

#### Shareholders, Dividends, and Securities Authorized for Issuance Under Equity Compensation Plans

We had approximately 109 shareholders of record and 7,479 total shareholders as of April 14, 2012. We have never paid or declared any cash dividends on our Common Stock. We do not anticipate paying dividends in the foreseeable future, as we intend to retain any earnings we may generate if needed to provide for the expansion of our business, the possible defense of our intellectual property, or for use in unforeseen circumstances. Information regarding our securities authorized for issuance under equity compensation plans will be included in the section

Equity Compensation Plan Information of our Proxy Statement for our 2012 Annual Meeting of Shareholders, and is incorporated by reference into Item 12 of this Report.



**Table of Contents****Stock Performance Graph**

The graph below compares the performance of our Common Stock to the cumulative five-year performance of the NASDAQ Industrial Index and the Cedrus Nanotechnology Index Pure. NVE is included in both indices. The NASDAQ Industrial Index includes NASDAQ domestic and international based common-type stocks. The graph and table assume \$100 was invested on March 31, 2007 in each of our Common Stock, the NASDAQ Industrial Index, and the Cedrus Nanotechnology Index Pure, with reinvestment of dividends.

	3/31/2007	3/31/2008	3/31/2009	3/31/2010	3/31/2011	3/31/2012
NVE Corporation	\$ 100.00	\$ 90.54	\$ 105.61	\$ 166.06	\$ 206.52	\$ 194.28
Cedrus Nanotechnology Index Pure	\$ 100.00	\$ 108.89	\$ 66.34	\$ 123.32	\$ 142.67	\$ 122.83
NASDAQ Industrial Index	\$ 100.00	\$ 89.27	\$ 52.90	\$ 87.84	\$ 110.33	\$ 116.33

**Stock Repurchase Program**

On January 21, 2009, we announced that our Board of Directors authorized the repurchase of up to \$2,500,000 of our Common Stock. The repurchase program may be modified or discontinued at any time without notice. We did not repurchase any of our Common Stock during the quarter ended March 31, 2012.

**ITEM 6. SELECTED FINANCIAL DATA.**

The following balance sheet and income statement selected financial data should be read in conjunction with our financial statements and notes included in Item 8 of this Report, and with Management's Discussion and Analysis of Financial Condition and Results of Operation included in Item 7 of this Report. The data are derived from our financial statements.

	<b>Balance Sheet Data as of March 31</b>				
	2012	2011	2010	2009	2008
Cash, cash equivalents, and marketable securities	\$ 73,541,463	\$ 62,179,707	\$ 49,543,766	\$ 34,321,811	\$ 24,736,874
Total assets	\$ 83,126,763	\$ 71,836,225	\$ 57,462,914	\$ 42,566,440	\$ 32,768,128
Total shareholders equity	\$ 81,458,858	\$ 69,970,549	\$ 55,953,294	\$ 41,567,571	\$ 31,513,482

	<b>Income Statement Data for Years Ended March 31</b>				
	2012	2011	2010	2009	2008
Revenue					

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Product sales	\$ 25,151,822	\$ 26,024,823	\$ 22,665,860	\$ 19,715,311	\$ 18,505,650
Contract research and development	3,427,398	5,172,240	5,481,325	3,656,958	2,023,162
Total revenue	\$ 28,579,220	\$ 31,197,063	\$ 28,147,185	\$ 23,372,269	\$ 20,528,812
Gross profit	\$ 19,253,709	\$ 21,413,365	\$ 19,834,170	\$ 16,648,027	\$ 13,695,504
Income from operations	\$ 14,273,048	\$ 17,669,770	\$ 16,298,536	\$ 13,251,590	\$ 10,048,779
Net cash provided by operating activities	\$ 12,811,910	\$ 12,808,807	\$ 12,463,616	\$ 9,998,114	\$ 6,909,226
Net income	\$ 11,381,095	\$ 13,360,945	\$ 11,999,344	\$ 9,782,895	\$ 7,187,384
Net income per share diluted	\$ 2.34	\$ 2.76	\$ 2.47	\$ 2.04	\$ 1.51

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

You should read this discussion together with our financial statements and notes included elsewhere in this Report. In addition to historical information, the following discussion contains forward-looking information that involves risks and uncertainties. Our actual future results could differ materially from those presently anticipated due to a variety of factors, including those discussed in Item 1A of this Report.

#### **General**

We develop and sell devices that use spintronics, a nanotechnology that relies on electron spin rather than electron charge to acquire, store, and transmit information. We manufacture high-performance spintronic products including sensors and couplers to revolutionize data sensing and transmission. We also receive contracts for research and development and are a licensor of spintronic magnetoresistive random access memory technology, commonly known as MRAM.

#### **Application of Critical Accounting Policies and Estimates**

In accordance with SEC guidance, those material accounting policies that we believe are the most critical to an investor's understanding of our financial results and condition and require complex management judgment are discussed below.

#### ***Research and Development Contract Percentage of Completion Estimation***

We recognize research and development contract revenues and costs pro-rata as work progresses, which requires us to make estimates of the percentage of completion. If increases in projected costs-to-complete are sufficient to create a loss contract, the entire estimated loss is charged to operations in the period the loss first becomes known. This estimate has not affected our financial statements in the past three fiscal years. Increases in projected costs to complete contracts could materially impact our future results, however.

#### ***Inventory Valuation***

Inventories are stated at the lower of cost or net realizable value. Cost is determined by the first in, first out method. Where there is evidence that inventory could be disposed of at less than carrying value, the inventory is written down to the net realizable value in the current period. Additionally, we periodically examine our inventory in the context of inventory turnover, sales trends, competition and other market factors, and we record provisions to inventory reserve when we determine certain inventory is unlikely to be sold. If reserved inventory is subsequently sold, corresponding reductions in inventory and inventory reserves are made. Our inventory reserve was \$300,000 at March 31, 2012 and 2011.

#### ***Allowance for Doubtful Accounts Estimation***

We must make estimates of the uncollectibility of our accounts receivable. The most significant risk is the risk of sudden unexpected deterioration in financial condition of a significant customer that is not considered in the allowance. We specifically analyze accounts receivable, historical bad debts, and customer creditworthiness when evaluating the adequacy of the allowance for doubtful accounts. Our results could be materially impacted if the financial condition of a significant customer deteriorated and related accounts receivable are deemed uncollectible. Our allowance for doubtful accounts was \$15,000 at March 31, 2012 and 2011. Our allowance for doubtful accounts is a relatively small percentage of our accounts receivable because our revenues are primarily from large customers, distributors, and U.S. Government agencies, all of which we consider generally creditworthy. Our allowance for doubtful accounts could increase in the future if larger portions of our sales come from small end-user customers.

#### ***Deferred Tax Assets Estimation***

In determining the carrying value of our net deferred tax assets, we must assess the likelihood of sufficient future taxable income in certain tax jurisdictions, based on estimates and assumptions to realize the benefit of these assets.

We evaluate the realizability of the deferred assets quarterly and assess the need for valuation allowances or reduction of existing allowances quarterly.

As of March 31, 2012 our net deferred tax liabilities were \$136,872 compared to \$146,693 as of March 31, 2011. Net deferred tax liabilities included \$145,418 in stock-based compensation deductions as of March 31, 2012 and \$117,800 as of March 31, 2011. Utilization of certain of our deferred tax assets is subject to limitations based on Internal Revenue Code Section 382.

**Table of Contents****Results of Operations**

The following table summarizes the percentage of revenue and year-to-year changes for various items for the last three fiscal years:

	Percentage of Revenue Year Ended March 31			Year-to-Year Change Years Ended March 31	
	2012	2011	2010	2011 to 2012	2010 to 2011
<b>Revenue</b>					
Product sales	88.0%	83.4%	80.5%	(3.4)%	14.8%
Contract research and development	12.0%	16.6%	19.5%	(33.7)%	(5.6)%
Total revenue	100.0%	100.0%	100.0%	(8.4)%	10.8%
Cost of sales	32.6%	31.4%	29.5%	(4.7)%	17.7%
Gross profit	67.4%	68.6%	70.5%	(10.1)%	8.0%
<b>Expenses</b>					
Selling, general, and administrative	8.4%	7.9%	8.6%	(3.8)%	2.5%
Research and development	9.1%	4.1%	4.0%	104.9%	13.2%
Total expenses	17.5%	12.0%	12.6%	33.0%	5.9%
Income from operations	49.9%	56.6%	57.9%	(19.2)%	8.4%
Interest income	8.3%	6.5%	5.7%	16.3%	24.9%
Income before taxes	58.2%	63.1%	63.6%	(15.6)%	9.9%
Income tax provision	18.4%	20.3%	21.0%	(17.2)%	7.0%
Net income	39.8%	42.8%	42.6%	(14.8)%	11.3%

Total revenue for fiscal 2012 decreased 8% to \$28,579,220 compared to \$31,197,063 for fiscal 2011, and increased 11% in fiscal 2011 compared to \$28,147,185 for fiscal 2010. The decrease in total revenue in fiscal 2012 was due to a 34% decrease in contract research and development revenue and a 3% decrease in product sales.

Product sales decreased 3% for fiscal 2012 to \$25,151,822 compared to \$26,024,823 in fiscal 2011. Fiscal 2011 product sales increased 15% from \$22,665,860 in fiscal 2010. The decrease in product sales for fiscal 2012 was due to decreased purchase volume by existing customers. The increase in fiscal 2011 was due to both the addition of new customers and increased purchases by existing customers. Increased product sales in fiscal 2011 were driven by strong sales into industrial control and factory automation markets.

Contract research and development revenue decreased 34% for fiscal 2012 compared to fiscal 2011 due to completion of certain contracts and contract activities, and a challenging environment for government contact funding. Contract research and development revenue decreased 6% for fiscal 2011 compared to fiscal 2010 due to completion of certain contracts and contract activities. Contract research and development activities can fluctuate for a number of reasons, some of which are beyond our control, and there can be no assurance of additional or follow-on contracts for expired or completed contracts.

Gross profit margin decreased to 67% of revenue for fiscal 2012 from 69% for fiscal 2011 due to decreased revenue and increased labor cost. Gross profit margin decreased to 69% of revenue for fiscal 2011 from 70% for fiscal 2010 due to a less favorable product sales mix.

Total expenses increased 33% for fiscal 2012 compared to fiscal 2011 and 6% for fiscal 2011 compared to fiscal 2010, due to increases in research and development expense for both fiscal years. Research and development expense increased 105% for fiscal 2012 compared to fiscal 2011 and 13% for fiscal 2011 compared to fiscal 2010 due to increased product development activities and decreases in contract research and development activities, which caused

resources to be reallocated to expensed research and development activities. Research and development expense can fluctuate significantly depending on staffing, project requirements, and contract research and development activities.

Interest income increased 16% for fiscal 2012 compared to fiscal 2011, and increased 25% compared to fiscal 2010. The increases for both fiscal years were due to increases in interest-bearing marketable securities.

The effective income tax rate in fiscal 2012 and fiscal 2011 was 32% of income before taxes compared to 33% in fiscal 2010. The decreased tax rate compared to fiscal 2010 was primarily due to a lower state effective tax rate. Our tax rate can fluctuate from year to year due to a number of factors, including Federal and state tax rates and regulations, the mix between taxable and tax-exempt securities in our marketable securities, and other factors, some of which are outside our control.

Net income decreased 15% in fiscal 2012 compared to fiscal 2011 primarily due to decreased contract research and development revenue and increased research and development expense. Net income increased 11% in fiscal 2011 compared to fiscal 2010 due to increases in product sales and interest income.

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### **Liquidity and Capital Resources**

Our primary source of working capital for fiscal years 2010 through 2012 was cash provided by operating activities related to product sales and research and development contract revenue. At March 31, 2012 we had \$73,541,463 in cash plus short-term and long-term marketable securities compared to \$62,179,707 at March 31, 2011. All of our marketable securities were classified as available for sale. The \$11,361,756 increase in cash plus marketable securities was primarily due to \$12,811,910 in net cash provided by operating activities.

The \$9,581,271 increase in short-term marketable securities in fiscal 2012 was primarily due to marketable securities previously classified as long-term approaching maturity.

Accounts receivable decreased by \$911,399 in fiscal 2012 due to the timing of payments by our customers.

Purchases of fixed assets were \$1,480,237 in fiscal 2012 compared to \$732,800 in fiscal 2011 and \$305,862 in fiscal 2010. Purchases in all three fiscal years were primarily for capital equipment to increase our production capacity and were financed with cash provided by operating activities. Our capital expenditures can vary significantly from year to year depending on our needs, equipment purchasing opportunities, and production expansion plans.

For the past three fiscal years, after purchasing fixed assets we invested excess cash provided by operating activities in long-term marketable securities. As of March 31, 2012 our marketable securities had remaining maturities between eight and 237 weeks (see Note 4 Marketable Securities to the Financial Statements, included elsewhere in this Report for additional information). As our marketable securities mature, we currently plan to either use the proceeds to meet future capital needs or reinvest the proceeds in other marketable securities.

The following table provides aggregate information about our contractual payment obligations and the periods in which payments are due:

<b>Contractual obligations</b>	<b>Total</b>	<b>Payments Due by Period</b>			
		<b>&lt;1 Year</b>	<b>1 3 Years</b>	<b>3 5 Years</b>	<b>&gt;5 Years</b>
Operating lease obligations	\$ 2,392,236	\$ 261,530	\$ 533,202	\$ 542,328	\$ 1,055,176
Purchase obligations	496,531	496,531	-	-	-
<b>Total</b>	<b>\$ 2,888,767</b>	<b>\$ 758,061</b>	<b>\$ 533,202</b>	<b>\$ 542,328</b>	<b>\$ 1,055,176</b>

Operating lease obligations are primarily for our facility lease. Note 9 Commitments and Contingencies to the Financial Statements, included elsewhere in this report, provides additional information about our lease obligations. Purchase obligations as of March 31, 2012 consisted of raw materials purchase commitments and fixed asset purchase obligations. We expect to meet these contractual payment obligations from cash provided by operating activities or proceeds from maturities of marketable securities. We plan to evaluate raw materials purchases based on a variety of factors including forecasted requirements and anticipated supply leadtimes, and our obligations could vary significantly in the future. We had approximately \$290,856 of fixed asset purchase obligations as of March 31, 2012, for production equipment. We plan to evaluate capital expenditures as needs and opportunities arise, and our future capital expenditures and purchase obligations could vary significantly from expenditures in the past.

We believe our working capital and cash generated from operations will be adequate for our needs at least through fiscal 2013.

### **Inflation**

Inflation has not had a significant impact on our operations in any of our three most recent fiscal years. Prices for our products and for the materials and labor costs for those products are governed by market conditions. It is possible that inflation in future years could impact both materials and labor used for the production of our products.

**Off-Balance-Sheet Arrangements**

Our off-balance sheet arrangements consist of purchase commitments and operating leases for our facility. We believe that our off-balance sheet arrangements do not have a material current or anticipated future effect on our profitability, cash flows, or financial position.



**Table of Contents****ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

We are exposed to financial market risks, primarily marketable securities and, to a lesser extent, changes in currency exchange rates.

**Marketable Securities**

The primary objective of our investment activities is to preserve principal while at the same time maximizing after-tax yields without significantly increasing risk. To achieve this objective, we maintain our portfolio of cash equivalents and marketable securities in a variety of securities including government agency obligations, municipal obligations, corporate obligations, and money market funds. Short-term and long-term marketable securities are generally classified as available-for-sale and consequently are recorded on the balance sheet at fair value with unrealized gains or losses reported as a separate component of accumulated other comprehensive income or loss, net of estimated tax. Our marketable securities as of March 31, 2012 had remaining maturities between eight and 237 weeks. Marketable securities had a market value of \$71,996,927 at March 31, 2012, representing approximately 87% of our total assets. We have not used derivative financial instruments in our investment portfolio.

**Foreign Currency Transactions**

We have some limited revenue risks from fluctuations in values of foreign currency due to product sales abroad. Foreign sales are generally made in U.S. currency, and currency transaction gains or losses in the past three fiscal years were not significant.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

Financial statements and accompanying notes are included in this Report beginning on page F-1.

**Quarterly Summary Information**

Selected unaudited quarterly financial data for fiscal 2012 and 2011, presented as supplementary financial information, are as follows:

	<b>Unaudited; Quarter Ended</b>			
	<b>March 31, 2012</b>	<b>Dec. 31, 2011</b>	<b>Sept. 30, 2011</b>	<b>June 30, 2011</b>
<b>Revenue</b>				
Product sales	\$ 7,176,491	\$ 5,394,758	\$ 5,557,299	\$ 7,023,274
Contract research and development	431,808	763,768	1,041,334	1,190,488
Total revenue	7,608,299	6,158,526	6,598,633	8,213,762
Cost of sales	2,277,115	2,174,878	2,277,926	2,595,592
Gross profit	5,331,184	3,983,648	4,320,707	5,618,170
<b>Expenses</b>				
Selling, general, and administrative	637,882	520,044	606,847	615,830
Research and development	774,899	718,688	611,595	494,876
Total expenses	1,412,781	1,238,732	1,218,442	1,110,706
Income from operations	3,918,403	2,744,916	3,102,265	4,507,464
Income before taxes	4,514,008	3,336,610	3,699,628	5,072,993
Net income	\$ 3,097,683	\$ 2,289,091	\$ 2,555,093	\$ 3,439,228
Net income per share diluted	\$ 0.63	\$ 0.47	\$ 0.52	\$ 0.70

	<b>Unaudited; Quarter Ended</b>			
	<b>March 31, 2011</b>	<b>Dec. 31, 2010</b>	<b>Sept. 30, 2010</b>	<b>June 30, 2010</b>
<b>Revenue</b>				
Product sales	\$ 6,733,984	\$ 6,686,451	\$ 6,410,512	\$ 6,193,876
Contract research and development	1,449,117	1,277,057	1,398,648	1,047,418

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Total revenue	8,183,101	7,963,508	7,809,160	7,241,294
Cost of sales	2,641,170	2,461,798	2,604,926	2,075,804
Gross profit	5,541,931	5,501,710	5,204,234	5,165,490
Expenses				
Selling, general, and administrative	573,312	638,223	634,547	628,386
Research and development	286,910	330,681	309,873	341,663
Total expenses	860,222	968,904	944,420	970,049
Income from operations	4,681,709	4,532,806	4,259,814	4,195,441
Income before taxes	5,217,471	5,045,009	4,757,545	4,671,171
Net income	\$ 3,669,919	\$ 3,383,919	\$ 3,206,010	\$ 3,101,097
Net income per share diluted	\$ 0.75	\$ 0.70	\$ 0.66	\$ 0.64

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

None.

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

#### **Disclosure Controls and Procedures**

Management, with the participation of the Chief Executive Officer and Chief Financial Officer, has performed an evaluation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act) as of the end of the period covered by this Report. This evaluation included consideration of the controls, processes, and procedures that are designed to ensure that information required to be disclosed by us in the reports we file under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of March 31, 2012, our disclosure controls and procedures were effective.

#### **Management's Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. Our management, including our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of March 31, 2012. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework*.

Based on our assessment using the criteria set forth by COSO in *Internal Control - Integrated Framework*, management concluded that our internal control over financial reporting was effective as of March 31, 2012. Our internal control over financial reporting as of March 31, 2012 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within NVE have been detected. Our internal controls over financial reporting, however, are designed to provide reasonable assurance that the objectives of internal control over financial reporting are met.

#### **Changes in Internal Controls**

During the quarter ended March 31, 2012, there was no change in our internal control over financial reporting that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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**PART III**

**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.**

The sections titled Proposal 1. Election of Board of Directors and Certain Relationships and Related Person Transactions Section 16(a) Beneficial Ownership Reporting Compliance to be included in our Proxy Statement for our 2012 Annual Meeting of Shareholders set forth certain information regarding our directors and executive officers required by Item 10, the section titled Executive Officers of the Company sets forth information regarding our executive officers required by Item 10, and the section titled Corporate Governance sets forth information regarding our corporate governance and code of ethics required by Item 10. The information in these sections to be included in our Proxy Statement for our 2012 Annual Meeting of Shareholders are incorporated by reference into this section.

**ITEM 11. EXECUTIVE COMPENSATION.**

The information in the sections Executive Compensation, Compensation Discussion and Analysis, Corporate Governance Board Committees Compensation Committee Interlocks and Insider Participation, Compensation Committee Report, and Director Compensation to be included in our Proxy Statement for our 2012 Annual Meeting of Shareholders is incorporated by reference into this section.

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

The information in the sections Equity Compensation Plan Information and Security Ownership to be included in our Proxy Statement for our 2012 Annual Meeting of Shareholders is incorporated by reference into this section. Information regarding the material features of our 2000 Stock Option Plan, as amended, is contained in Note 6 to the Financial Statements included elsewhere in this Report.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.**

The information in the sections Security Ownership Transactions With Related Persons, Promoters, and Certain Control Persons and Corporate Governance Board Composition and Independence to be included in our Proxy Statement for our 2012 Annual Meeting of Shareholders is incorporated by reference into this section.

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

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