NVE CORP /NEW/
Form 10-K
May 03, 2017

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

FORM 10-K

(Mark One)
[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **March 31, 2017**

[ ] 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 [X]

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 [X]

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 [X] 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 [X] 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. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or emerging growth company. See the definitions of large accelerated filer, accelerated filer, smaller reporting company, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer [ ]	Accelerated filer [X]
Non-accelerated filer [ ] (Do not check if a smaller reporting company)	Smaller reporting company [ ]
	Emerging growth company [ ]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based on the closing price on September 30, 2016, the last business day of the Registrant s most recently completed second fiscal quarter, as reported on the NASDAQ Stock Market, was approximately $144 million.

The number of shares of the registrant s Common Stock (par value $0.01) outstanding as of April 28, 2017 was 4,841,010.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of our Proxy Statement for our 2017 Annual Meeting of Shareholders 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 of 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 related to our reliance on several large customers for a significant percentage of revenue, uncertainties related to the economic environments in the industries we serve, uncertainties related to future contract research and development revenue, uncertainties related to future stock repurchases and dividend payments, and other specific risks that may be alluded to in this Report or in the documents incorporated by reference in this Report. For more 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. These contracts have helped us develop products and build our intellectual property portfolio. We have adopted a March 31 fiscal year, so 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 high-speed data between robots and central controllers. 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 antitamper 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.

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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 or Magnetic Tunnel Junctions (MTJs). 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. Our spintronic technology provides eyes, nerves, and brains for electronic systems, breathing life and intelligence into inanimate objects. Our unique products support global trends of smarter and smaller connections and an Internet of Things. We plan to monetize our technology 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, automotive electronics, and biosensors.

Our Products and Markets

We operate in a single business segment that includes research, design, and manufacture of spintronics for commercial and military markets.

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 five lines of coupler products: cost-effective IL500-Series couplers; IL600-Series passive-input couplers;

IL700/IL200-Series high-speed couplers; IL4/IL3-Series isolated network couplers; and IL800-Series top-of-the-line 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 send wafers 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 America II Electronics, Inc., Digi-Key Corporation, and Premier Farnell plc companies. Our distributor agreements generally renew annually. In addition, we distribute versions of some of our products under private-brand partnerships with large integrated device manufacturers. These private-brand partnerships broaden our distribution and enhance our sales support, technical support, and brand awareness.

New Product Status

In the past year we began marketing a number of new products, including:

- new angle sensor models for energy and resource management that use less energy or less magnetic field;
- rotation sensors for robotics and resource management;
- new sensors for medical devices; and
- new antitamper sensors.

Long-term product development programs in fiscal 2017 included:

- smart sensor interfaces for connection to the Internet of Things ;
- biosensors for food safety and medical diagnostics;
- new current sensors for energy management;
- ultra-high speed couplers;
- low-power couplers; and
- MRAM for antitamper and security applications.

Our Competition

Industrial Sensor Competition

Several other companies either make or may have the capability to make GMR or 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. 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. Prominent optical coupler suppliers include Broadcom Limited, 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 chalcogenide, 3D XPoint, or Ovonic memory), resistive RAM (ReRAM or RRAM), conductive bridge RAM (CBRAM), 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; most of our packaging services take place in Asia.

Intellectual Property

Patents

As of March 31, 2017 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 current 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. patent 6,744,086 titled Current switched magnetoresistive memory cell is particularly important. The patent has been reissued as RE 44,878 and expires May 15, 2022.

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 Senso

Seasonality

In some years we have observed weak product sales late in the calendar year, possibly due to ordering patterns or customer vacations and shutdowns. We cannot predict whether this seasonal pattern will occur in future 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.

Dependence on Major Customers

We rely on several large customers for a significant percentage of our revenue, including Abbott Laboratories (formerly St. Jude Medical, Inc.), Sonova AG (formerly known as Phonak AG), certain other medical device manufacturers, and certain distributors. The loss of one or more of these customers could have a material adverse effect on us.

Firm Backlog

As of March 31, 2017 we had $886,156 of contract research and development backlog we believed to be firm, compared to $2,117,547 as of March 31, 2016. We expect the firm backlog as of March 31, 2017 to be filled in fiscal 2018. Certain contracts have performance requirements and milestones, and there can be no assurance that backlog will result in future revenue. Our product sales are made primarily under standard purchase orders, which are generally cancellable. 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, as well as related underlying technologies. We spent $3,003,656 for fiscal 2017, $2,691,303 for fiscal 2016, and $2,472,341 for fiscal 2015 in company-sponsored research and development activities. Additionally, we spent $1,830,857 for fiscal 2017, $2,762,406 for fiscal 2016, and $1,112,813 during fiscal 2015 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 51 employees as of March 31, 2017. 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

Foreign sales accounted for approximately 52% of our revenue in fiscal 2017. More information about geographic areas is contained in Note 8 Concentrations to the Financial Statements included in this report.

Available Information

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). 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).

ITEM 1A. RISK FACTORS.

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 Abbott Laboratories (formerly St. Jude Medical, Inc.), Sonova AG (formerly known as Phonak AG), certain other medical device manufacturers, and certain distributors. 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.

Known product competitors include Analog Devices, Inc.; Broadcom Limited; Fairchild Semiconductor International; Hermetic Switch, Inc.; Linear Technology Inc.; Maxim Integrated Products, Inc.; Meder Electronic AG; Memscap 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.

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We may lose revenue if we are unable to renew customer agreements.

We have agreements with certain customers, including a Supply Agreement, as amended, with Sonova AG (formerly known as Phonak AG), which expires March 1, 2020, and a Supplier Partnering Agreement, as amended, with Abbott Laboratories (formerly St. Jude Medical, Inc.) expires January 1, 2021. We cannot predict if these agreements will be renewed, or if renewed, under what terms. Although it is possible we could continue to sell products to these customers without formal agreements, an inability to agree on mutually acceptable terms or the loss these customers could have a significant adverse impact on our revenue and our profitability.

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 could hamper future research and development activity and decrease related revenue. In addition to direct Government funding, certain of our non-Government customers and prospective 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 budgets and priorities that can change and over which we have no control, and delays in such funding can occur for a number of reasons. Interruptions in the Government funding process such as federal budget delays, debt ceiling limitations, shutdowns, or sequestration may impact Government contract funding. Furthermore, some of our Government funding has been through Small Business Innovation Research (SBIR) or Small Business Technology Transfer Research (STTR) contracts. SBIR and STTR budgets, eligibility, or funding limits may be changed by legislation or by agencies such as the Department of Defense or Department of Agriculture.

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.

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.

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

Some of our customers, including 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 products 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 products are used in medical devices, including devices that help sustain human life. We are also marketing our 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.

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Federal legislation may not protect us against liability for the use of our products 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 products in existing medical devices could lead to the need to recall devices incorporating our products from the market, which may be harmful to our reputation and cause a significant loss of revenue.

Any malfunction of our products could lead to the need to recall existing medical devices incorporating our products from the market, which may be harmful to our reputation because it is dependent on product safety and efficacy. Even if assertions that our products 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.

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 or other factors beyond our control or ability to predict could cause or exacerbate wafer supply shortages. Wafer supply interruptions for any reason, including acts of God such as floods, typhoons, cyclones, or earthquakes, 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, metals, and specialized alloys. 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 subject to shortages or 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. Because of the unique materials our products use, the complexity of some of our products, and the high isolation voltage specifications of our couplers, many of our products are more 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. Additionally, certain of our packaging vendors are in flood-susceptible areas. Flooding risks to such vendors may increase in the future due to possible higher ocean levels, extreme weather, 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.

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

Foreign sales were approximately 52% of our revenue for fiscal 2017, and we expect foreign sales to continue to represent a significant portion of our revenue. Furthermore, we rely on suppliers in China, India, Taiwan, Thailand, and other foreign countries. Risks relating to 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, cyclones and earthquakes; and other uncertainties relating to the administration of, or changes in, or new interpretation of, the laws, regulations, and policies of jurisdictions where we do business.

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. Two of our patents have been subject to *inter partes* reexamination proceedings by the U.S. Patent and Trademark Office initiated by Everspin Technologies, Inc. as a defensive action in connection with our litigation against Everspin. The claims of one of the patents were invalidated, and a final adverse decision on the other *inter partes* reexamination or any future reexamination proceedings could invalidate some or all of the patent claims. Additionally, 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 and at least several other companies have described designs that we believe may 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. A settlement agreement by and between Everspin and us limits our rights to sue Everspin for patent infringement and prevents us from asserting three specific patents against Everspin. There can be no assurance that we can successfully enforce any of our other patents, 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.

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We could incur losses on our marketable securities.

As of March 31, 2017, we held $76,402,756 in short-term and long-term marketable securities, representing approximately 81% of our total assets. A number of the securities we hold have been 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, and such downgrades or increases in default risk are possible at any time. Additionally, the assignment of a high credit rating does not preclude the risk of default on any marketable security. Defaults, default risks, or changes in market conditions could cause us to incur losses on our marketable securities, which could have a material adverse impact on our financial condition, income, or cash flows, and our ability to pay dividends.

Any decisions to reduce or discontinue paying cash dividends to our shareholders could cause the market price of our common stock to decline.

While we currently plan to pay quarterly dividends indefinitely, our payment of cash dividends will be subject to, among other things, our results of operations, cash and marketable security balances, the timing of securities maturations, estimates of future cash requirements, fixed asset requirements, and other factors our Board may deem relevant. Because they are significantly more than our current cash flow from operations, recent and declared dividend amounts may be unsustainable. Any reduction or discontinuance by us of cash dividends could cause the market price of our common stock to decline.

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;
- delays in our introduction of new products or technologies or market acceptance of these products or technologies;
- loss of customers, decreases in customers purchases, or decreases in customers purchase prices;
- 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;
- general economic conditions or market conditions specific to industries we or our customers serve or may serve;
- legal proceedings involving us, including intellectual property litigation or class action litigation; and
- our stock repurchase and dividend policies and decisions.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Our principal executive offices and manufacturing facility are located at 11409 Valley View Road, Eden Prairie, Minnesota, 55344, and leased under an agreement expiring December 31, 2020. The space consists of 21,362 square feet of offices, laboratories, and production areas, The facility is currently being utilized at less than maximum capacity to allow for growth, and we believe the facility is adequate to meet our current requirements. We hold no investments in real estate.

ITEM 3. LEGAL PROCEEDINGS.

In the ordinary course of business we may become involved in litigation. 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.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

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PART II

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

Market Information and Dividends

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, and dividends declared and paid per share of common stock:

	Quarter Ended							
	3/31/17	12/31/16	9/30/16	6/30/16	3/31/16	12/31/15	9/30/15	6/30/15
Market price range of common stock								
High	$ 88.34	$ 71.69	$ 60.48	$ 59.37	$ 57.87	$ 62.93	$ 81.55	$ 78.88
Low	$ 70.29	$ 55.00	$ 52.50	$ 52.16	$ 45.47	$ 47.37	$ 46.50	$ 65.70
Dividends per share								
Declared	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00
Paid	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00

Dividends were funded from net cash provided by operating activities and proceeds from maturities of marketable securities. Depletion of our marketable securities could limit future dividend payments. Our dividend policy is subject to change at any time, and future dividends will be subject to Board approval and subject to the company s results of operations, cash and marketable security balances, future cash requirements, and other factors our Board may deem relevant.

Shareholders

We had approximately 85 shareholders of record and 7,713 total shareholders as of April 18, 2017.

Securities Authorized for Issuance Under Equity Compensation Plans

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 2017 Annual Meeting of Shareholders, and is incorporated by reference into Item 12 of this Report.

Performance Graph

The graph and table below compares the total shareholder return on our Common Stock to the cumulative total return of the NASDAQ Industrial Index and the SmallTimes Index of Companies Involved in Micro- and Nanotech. NVE is included in both indices. The graph and table assume $100 was invested on March 31, 2012 in each of our Common Stock, the NASDAQ Industrial Index, and the SmallTimes Index, with reinvestment of dividends.

	3/31/2012	3/31/2013	3/31/2014	3/31/2015	3/31/2016	3/31/2017
NASDAQ Industrial Index	$ 100.00	$ 116.34	$ 145.82	$ 158.77	$ 195.17	$ 194.46
SmallTimes Index	$ 100.00	$ 105.28	$ 122.06	$ 128.29	$ 122.45	$ 138.45
NVE Corporation	$ 100.00	$ 106.45	$ 107.62	$ 134.24	$ 117.51	$ 181.89

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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 from time to time in open market, block, or privately negotiated transactions. The timing and extent of any repurchases depends on market conditions, the trading price of the company s stock, and other factors, and subject to the restrictions relating to volume, price, and timing under applicable law. On August 27, 2015, we announced that our Board of Directors authorized up to $5,000,000 of additional repurchases. Our repurchase program does not have an expiration date and does not obligate us to purchase any shares. The Program may be modified or discontinued at any time without notice. We intend to finance any stock repurchases with cash provided by operating activities or maturating marketable securities. We did not repurchase any Common Stock in fiscal 2017. The remaining authorization was $4,540,806 as of March 31, 2017.

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.

	Balance Sheet Data as of March 31				
	2017	**2016**	**2015**	**2014**	**2013**
Cash, cash equivalents, and marketable securities	$ 84,602,120	$ 92,927,312	$ 100,450,357	$ 95,644,701	$ 85,260,969
Total assets	$ 93,774,806	$ 100,854,056	$ 110,089,196	$ 105,242,043	$ 95,765,496
Total shareholders equity	$ 92,679,485	$ 99,264,587	$ 108,327,534	$ 103,704,641	$ 93,984,608

	Income Statement Data for Years Ended March 31				
	2017	**2016**	**2015**	**2014**	**2013**
Revenue					
Product sales	$ 26,182,453	$ 24,410,391	$ 29,894,045	$ 25,512,028	$ 24,434,823
Contract research and development	2,143,743	3,306,887	690,043	422,879	2,598,596
Total revenue	$ 28,326,196	$ 27,717,278	$ 30,584,088	$ 25,934,907	$ 27,033,419
Income from operations	$ 17,445,203	$ 16,286,280	$ 19,251,951	$ 14,393,816	$ 15,196,854
Net income	$ 12,948,869	$ 12,292,315	$ 14,368,354	$ 11,135,875	$ 11,828,838
Net income per share diluted	$ 2.68	$ 2.53	$ 2.95	$ 2.29	$ 2.43
Cash dividends declared per share	$ 4.00	$ 4.00	$ 2.06	$ -	$ -

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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.

Investment Valuation

Our investments consist primarily of corporate and municipal obligations. We have generally invested excess cash in high-quality investment grade long-term marketable securities with less than five years to maturity. We classify all of our marketable securities as available-for-sale, thus securities are recorded at fair value and any associated unrealized gain or loss, net of tax, is included as a separate component of shareholders equity, Accumulated other comprehensive income (loss). If we judged a decline in fair value for any security to be other than temporary, the cost basis of the individual security would be written down and a charge recognized to net income. The fair values for our securities are determined based on quoted market prices as of the valuation date and observable prices for similar assets. We consider a number of factors in determining whether other-than-temporary impairment exists, including: credit market conditions; the credit ratings of the securities; historical default rates for securities of comparable credit rating; the presence of insurance of the securities and, if insured, the credit rating and financial condition of the insurer; the effect of market interest rates on the value of the securities; and the duration and extent of any unrealized losses. We also consider the likelihood that we will be required to sell the securities prior to maturity based on our financial condition and anticipated cash flows. If any of these conditions and estimates change in the future, or, if different estimates are used, the fair value of the investments may change significantly and could result in other-than-temporary decline in value, which could have an adverse impact on our results of operations.

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 $225,000 as of March 31, 2017 and $250,000 as of March 31, 2016.

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. No valuation allowance was recorded as we believe it is more likely than not that all of the deferred tax assets will be realized.

We had $357,055 of net deferred tax assets as of March 31, 2017, and $51,188 of net deferred tax assets as of March 31, 2016. Net deferred tax assets included $86,335 in deferred tax assets for stock-based compensation deductions as of March 31, 2017 and $115,257 as of March 31, 2016.

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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	
	2017	**2016**	**2015**	**2016 to 2017**	**2015 to 2016**
Revenue					
Product sales	92.4%	88.1%	97.7%	7.3%	(18.3)%
Contract research and development	7.6%	11.9%	2.3%	(35.2)%	379.2%
Total revenue	100.0%	100.0%	100.0%	2.2%	(9.4)%
Cost of sales	21.5%	23.9%	19.7%	(8.1)%	9.9%
Gross profit	78.5%	76.1%	80.3%	5.4%	(14.1)%
Expenses					
Selling, general, and administrative	5.1%	6.3%	7.6%	(16.8)%	(24.2)%
Research and development	11.8%	11.0%	9.8%	9.2%	2.0%
Total expenses	16.9%	17.3%	17.4%	(0.2)%	(9.4)%
Income from operations	61.6%	58.8%	62.9%	7.1%	(15.4)%
Interest income	5.8%	6.8%	7.2%	(12.7)%	(13.6)%
Income before taxes	67.4%	65.6%	70.1%	5.1%	(15.2)%
Income tax provision	21.7%	21.3%	23.1%	4.5%	(16.8)%
Net income	45.7%	44.3%	47.0%	5.3%	(14.4)%

Total revenue for fiscal 2017 increased 2% compared to fiscal 2016, due to a 7% increase in product sales, partially offset by a 35% decrease in contract research and development revenue. The increase in product sales for fiscal 2017 was due to new customers. The decrease in contract research and development revenue for fiscal 2017 was due to the completion of certain contracts. Total revenue decreased 9% in fiscal 2016 compared to fiscal 2015, due to an 18% decrease in product sales, partially offset by a 379% increase in contract research and development revenue. The decrease in product sales for fiscal 2016 was due to decreased purchase volume by existing customers and a more aggressive pricing strategy. The increase in contract research and development revenue for fiscal 2016 was due to new contracts.

Gross profit margin increased to 79% of revenue for fiscal 2017 from 76% for fiscal 2016 due to a more profitable revenue mix. Gross profit margin for fiscal 2016 decreased from 80% due to a less profitable revenue mix because of a decrease in product sales and increase in contract research and development revenue.

Total expenses were approximately the same for fiscal 2017 compared to fiscal 2016 as a 9% increase in research and development expense was offset by a 17% decrease in selling, general, and administrative expense. The increase in research and development expense for fiscal 2017 was due to increased new product development activities. The decrease in selling, general, and administrative expense was primarily due to decreased sales commissions. Total expenses decreased 9% for fiscal 2016 compared to fiscal 2015, due to a 24% decrease in selling, general, and administrative expense and a 2% increase in research and development expense. The decrease in selling, general, and administrative expense for fiscal 2016 was primarily due to decreased sales commissions and performance-based compensation.

Interest income decreased 13% in fiscal 2017 compared to fiscal 2016 and 14% in fiscal 2016 compared to fiscal 2015. Decrease in interest income both years were due to decreases in interest-bearing marketable securities because we used a portion of the proceeds from maturating securities to help fund cash dividends in fiscal 2017 and fiscal 2016 and repurchases of our common stock in fiscal 2016.

The effective income tax rate was approximately 32% of income before taxes for fiscal 2017 and 2016, and 33% for fiscal 2015. Our effective tax rates could fluctuate, however, due to a number of factors, some of which are outside our control, including changes in Federal and state tax rates and regulations or their interpretation.

Net income increased 5% in fiscal 2017 compared to fiscal 2016 primarily due to increased total revenue and increased gross profit margin as a percentage of revenue, partially offset by decreased interest income. Net income decreased 14% in fiscal 2016 compared to fiscal 2015, primarily due to decreased product sales and interest income, partially offset by increased contract research and development revenue and decreased expenses.

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Liquidity and Capital Resources

Overview

Cash and cash equivalents were $8,199,364 as of March 31, 2017 compared to $7,534,593 as of March 31, 2016. The $664,771 increase in cash and cash equivalents was due to $12,379,160 in net cash provided by operating activities and $7,351,925 net cash provided by investing activities, less $19,066,314 net cash used in financing activities.

Operating Activities

Net cash provided by operating activities related to product sales and research and development contract revenue as our primary source of working capital for fiscal years 2015 through 2017. For fiscal 2017, net cash provided by operating activities was $12,379,160.

Accounts receivable increased $1,192,716 in fiscal 2017 primarily due to the timing of sales to and payments from certain customers.

Deferred revenue decreased $572,072 because we delivered most products associated with deferred revenue.

Investing Activities

Net cash provided by investing activities in fiscal 2017 was primarily due to marketable security maturities of $19,400,000 partially offset by marketable security purchases of $11,528,240.

As of March 31, 2017 our marketable securities had remaining maturities between 19 and 228 weeks (see Note 4 Marketable Securities to the Financial Statements, included elsewhere in this Report for additional information). Our entire portfolio of short-term and long-term marketable securities is classified as available for sale.

Purchases of fixed assets were $519,835 in fiscal 2017, $287,275 in fiscal 2016, and $185,007 in fiscal 2015. Purchases all three years were primarily for capital equipment and leasehold improvements 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 and equipment purchasing opportunities.

Financing Activities

Net cash used in financing activities in fiscal 2017 was primarily due to $19,346,040 in cash dividends to shareholders, partially offset by net proceeds from the sale of common stock of $247,110 from stock option exercises.

In addition to cash dividends to shareholders paid in fiscal 2017, on May 3, 2017 we announced that our Board had declared a cash dividend of $1.00 per share of Common Stock, or $4,841,010 based on shares outstanding as of April 28, 2017, to be paid May 31, 2017. We plan to fund dividends through cash provided by operating activities and proceeds from maturities of marketable securities. All future dividends will be subject to Board approval and subject to the company s results of operations, cash and marketable security balances, estimates of future cash requirements, and other factors the Board may deem relevant. Furthermore, dividends may be modified or discontinued at any time without notice.

We repurchased $1,695,466 of our Common Stock in fiscal 2016, and did not repurchase stock in fiscal 2017 or 2015. The repurchases were under a program announced January 21, 2009 authorizing the repurchase of up to $2,500,000 of our Common Stock and an additional $5,000,000 announced August 27, 2015. The remaining authorization was $4,540,806 as of March 31, 2017. We intend to finance any stock repurchases with cash provided by operating activities or maturating marketable securities. Additional information on our Stock Repurchase Program is contained in the section titled, Stock Repurchase Program under Part II, Item 5 of this Report.

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Contractual Obligations

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

	Payments Due by Period			
Contractual obligations	**Total**	**<1 Year**	**1-3 Years**	**3-5 Years**
Operating lease obligations	$ 1,080,903	$ 283,494	$ 577,113	$ 220,296
Purchase obligations	499,880	499,880	-	-
Total	$ 1,580,783	$ 783,374	$ 577,113	$ 220,296

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, 2017 consisted of raw materials commitments. We expect to meet these 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 plan to evaluate capital expenditures as needs and opportunities arise, and our future capital expenditures and purchase obligations could vary significantly from expenditures and obligations in the past.

We believe our working capital and cash generated from operations will be adequate for our needs at least through fiscal 2018.

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.

Changes In Accounting Standards

See Note 2 to the financial statements for information on new accounting standards.

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.

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 securities including 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, 2017 had remaining maturities between 19 and 228 weeks. Marketable securities had a market value of $76,402,756 as of March 31, 2017, representing approximately 81% 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.

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Quarterly Summary Information

Selected unaudited quarterly financial data for fiscal 2017 and 2016, presented as supplementary financial information, are as follows:

	Unaudited; Quarter Ended			
	March 31, 2017	Dec. 31, 2016	Sept. 30, 2016	June 30, 2016
Revenue				
Product sales	$ 6,399,924	$ 7,116,931	$ 6,814,384	$ 5,851,214
Contract research and development	453,282	345,748	488,155	856,558
Total revenue	6,853,206	7,462,679	7,302,539	6,707,772
Cost of sales	1,449,454	1,502,848	1,740,814	1,385,178
Gross profit	5,403,752	5,959,831	5,561,725	5,322,594
Expenses				
Selling, general, and administrative	340,673	384,322	343,688	389,915
Research and development	990,729	826,816	768,188	758,368
Total expenses	1,331,402	1,211,138	1,111,876	1,148,283
Income from operations	4,072,350	4,748,693	4,449,849	4,174,311
Income before taxes	4,459,234	5,143,900	4,880,832	4,612,045
Net income	$ 3,027,383	$ 3,483,744	$ 3,305,19	$ 3,132,545
Net income per share diluted	$ 0.62	$ 0.72	$ 0.68	$ 0.65

	Unaudited; Quarter Ended			
	March 31, 2016	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015
Revenue				
Product sales	$ 5,212,813	$ 5,025,041	$ 6,436,672	$ 7,735,865
Contract research and development	887,774	990,974	843,085	585,054
Total revenue	6,100,587	6,016,015	7,279,757	8,320,919
Cost of sales	1,470,049	1,508,361	1,644,514	1,993,928
Gross profit	4,630,538	4,507,654	5,635,243	6,326,991
Expenses				
Selling, general, and administrative	336,891	406,676	524,631	484,764
Research and development	1,012,564	738,657	628,962	681,001
Total expenses	1,349,455	1,145,333	1,153,593	1,165,765
Income from operations	3,281,083	3,362,321	4,481,650	5,161,226
Income before taxes	3,749,204	3,830,688	4,950,181	5,647,024
Net income	$ 2,600,843	$ 2,577,451	$ 3,310,795	$ 3,803,226
Net income per share diluted	$ 0.54	$ 0.53	$ 0.68	$ 0.78

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 that are defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934 (the 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, 2017, 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, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the 2013 *Internal Control Integrated Framework*.

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Based on our assessment using the criteria set forth by COSO in the 2013 *Internal Control Integrated Framework*, management concluded that our internal control over financial reporting was effective as of March 31, 2017. Our internal control over financial reporting as of March 31, 2017 has been audited by Grant Thornton LLP, an independent registered public accounting firm, as stated in their report contained in Item 8 included elsewhere herein.

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, 2017, 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.

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 2017 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 2017 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 2017 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 2017 Annual Meeting of Sharehol