

NVE CORP /NEW/  
Form 10-K  
May 01, 2019

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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, 2019**

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**

**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 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 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.  [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an 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  [X]  
 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 28, 2018, the last business day of the Registrant's most recently completed second fiscal quarter, as reported on the NASDAQ Stock Market, was approximately \$294 million.

The number of shares of the registrant's Common Stock (par value \$0.01) outstanding as of April 26, 2019 was 4,846,010.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of our Proxy Statement for our 2019 Annual Meeting of Shareholders are incorporated by reference into Items 10, 11, 12, 13, and 14 of Part III hereof.

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

<u>Title of each class</u>	<u>Trading symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.01 par value	NVEC	The NASDAQ Stock Market, LLC

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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 sales and revenues, risks related to changes in tariffs and other trade barriers, 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 smart, small, low-power end nodes for the 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 automotive electronics.

## **Our Products and 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, more reliable, and lower power than competing devices. Our major market for standard sensors is the Industrial Internet of Things (IIoT) for 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. Our major coupler market is the Industrial Internet of Things (IIoT) for factory automation.

***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., Avnet companies, and Digi-Key Corporation. 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:

- smart magnetometer sensors for Internet of Things and automotive applications;
- smart angle sensors for Internet of Things and automotive applications;
- new current sensors for motor control and automotive applications;
- lower-power sensors and couplers;
- private-label couplers; and
- new antitamper sensors.

Long-term product development programs in fiscal 2019 included:

- custom integrated circuits for smart sensors;
- biosensors for enhancing food safety; and
- power conversion integrated circuits.

### **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 or power-efficient 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, 2019 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. patents 6,538,921 titled *Circuit selection of magnetic memory cells and related cell structures*, and 6,744,086 titled *Current switched magnetoresistive memory cell* are particularly important. The 6,744,086 patent has been reissued as RE 44,878 and expires May 15, 2022. The 6,538,921 patent expires August 14, 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.

### **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, Sonova 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, 2019 we had \$354,650 of contract research and development backlog we believed to be firm, and which we expect to be filled in fiscal 2020. 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.

### **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 48 employees as of March 31, 2019. 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.

**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](http://www.nve.com)). These filings are also accessible through the SEC's Website ([www.sec.gov](http://www.sec.gov)).

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### **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, Sonova 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.***

We have a number of competitors and potential competitors, many of whom 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 may lose revenue if we are unable to maintain important certifications.***

Our quality management system is certified to the ISO 9001 standard, and we have received a letter of conformance for the International Automotive Task Force (IATF) 16949 automotive sector-specific standard. Our products are also subject to independent certification and listings including by the Automotive Electronics Council (AEC), the VDE Institute, and UL LLC. These certifications are subject to a number of rigorous conditions. The suspension or loss of any of these certifications or listings could cause us to be disqualified by one or more of our customers, and could have a material adverse impact on our business and revenue.

#### ***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, which expires March 1, 2020, and a Supplier Partnering Agreement, as amended, with Abbott Laboratories 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 of 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 two 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 (STTR) contracts. SBIR and STTR budgets, eligibility, or funding limits may be changed by legislation or by agencies such as the Department of Defense.

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### ***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. 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.

### ***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.

***The malfunction of our products in 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.***

The malfunction of our products that are incorporated in medical devices could lead to the recall of existing medical devices incorporating our products. Such a recall could be harmful to our reputation for 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 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.



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### ***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. 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, unique magnetic requirements, and high isolation voltage specifications, 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 due to insolvency or acts of God, including floods, typhoons, or earthquakes. 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. We have alternate vendors or potential alternate vendors for the majority of our products, but it could prove expensive, time-consuming, or technically challenging to convert to an alternate vendor. Furthermore, an alternate vendor may not have sufficient capacity available to meet our requirements. Additionally, we might not be able to recover work in process or finished goods at a packaging vendor in the event of a disruption. 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 are a significant portion of our revenue and 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. Additionally, rights granted under the patents or under licensing agreements may not provide a competitive advantage to us. 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.

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### ***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.***

As of March 31, 2019, we held \$67,413,454 in short-term and long-term marketable securities, representing approximately 81% of our total assets. Conditions and circumstances beyond our control or ability to anticipate can cause downgrades and increased 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.

### ***Our business could be negatively impacted by cyber security events or information technology disruptions.***

We face various cyber security threats, including threats to our information technology infrastructure and attempts to gain access to our proprietary or classified information, and denial-of-service attacks. Additionally, there is a risk of disruptions due to failures of our information technology infrastructure or service provider outages. We maintain policies and procedures for the mitigation of information technology risks, and we maintain data backups, backup hardware, and some redundant systems. We have experienced cyber security events and disruptions such as viruses, ransomware, hacker attacks, and limited server, Website, and e-mail outages. Although these events did not materially impact our business, future events could disrupt our operations, harm our reputation, expose us to liability, compromise our eligibility for research and development contracts involving sensitive or classified information, or have other effects including unpredictable effects.

### ***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 generally 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, or contracts 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 financial results, revenue, or revenue growth rates;
- 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;  
changes in Federal corporate income tax rates or changes in other tax provisions;  
changes in tariffs, customs, duties, or other trade barriers in foreign jurisdictions where we purchase raw materials or sell our products; and  
our stock repurchase and dividend policies and decisions.

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### **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.

## **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.

Dividends have been funded from net cash provided by operating activities and proceeds from maturities of marketable securities. 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 have approximately 67 shareholders of record as of April 11, 2019. A substantially greater number of holders of our common stock are street name or beneficial holders, whose shares of record are held by banks, brokers, and other financial institutions.

#### **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 2019 Annual Meeting of Shareholders, and is incorporated by reference into Item 12 of this Report.

#### **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 maturing marketable securities. We did not repurchase any Common Stock in fiscal 2019 or 2018. The remaining authorization was \$4,540,806 as of March 31, 2019.

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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 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 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 \$190,000 as of March 31, 2019 and March 31, 2018.

#### ***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 \$353,735 of net deferred tax assets as of March 31, 2019 and \$572,655 as of March 31, 2018. Net deferred tax assets included \$62,671 in deferred tax assets for stock-based compensation deductions as of March 31, 2019 and \$55,886 as of March 31, 2018.



**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 two fiscal years:

	Percentage of Revenue		Year-to-Year Change
	Year Ended March 31 2019	Year Ended March 31 2018	
<b>Revenue</b>			
Product sales	95.5%	91.5%	(7.4)%
Contract research and development	4.5%	8.5%	(53.5)%
Total revenue	100.0%	100.0%	(11.4)%
<b>Cost of sales</b>			
Cost of sales	19.7%	21.0%	(16.9)%
Gross profit	80.3%	79.0%	(9.9)%
<b>Expenses</b>			
Research and development	15.5%	12.4%	10.9%
Selling, general, and administrative	4.6%	4.8%	(14.7)%
Total expenses	20.1%	17.2%	3.8%
Income from operations	60.2%	61.8%	(13.7)%
Interest income	6.7%	5.2%	14.6%
Income before taxes	66.9%	67.0%	(11.5)%
Income tax provision	12.1%	20.4%	(47.5)%
Net income	54.8%	46.6%	4.3%

Total revenue for fiscal 2019 decreased 11% compared to fiscal 2018 due to a 7% decrease in product sales and a 54% decrease in contract research and development revenue. The decrease in product sales was primarily due to decreased purchases by existing customers. The decrease in contract research and development revenue was due to the completion of certain contracts.

Gross profit margin for fiscal 2019 increased to 80% from 79% for fiscal 2018 due to a more profitable revenue mix.

Total expenses increased 4% for fiscal 2019 compared to fiscal 2018, due to an 11% increase in research and development expense, partially offset by an 15% decrease in selling, general, and administrative expense. The increase in research and development expense was due to an increase in new product development activities. The decrease in selling, general, and administrative expense was due to staffing changes.

Interest income increased 15% in fiscal 2019 compared to fiscal 2018 due to an increase in the average interest rates on our marketable securities, partially offset by a decrease in our securities.

The effective income tax rate was 18% of income before taxes for fiscal 2019, compared to 30% for the prior year. The decrease was due to the effect of a decrease in the Federal tax rate and certain other provisions with the enactment of the Tax Reform Act. See Note 6 to the financial statements for more information on income taxes.

Net income increased 4% in fiscal 2019 compared to fiscal 2018, primarily due to a decrease in the provision for income taxes, increased gross profit margin, a decrease in selling, general, and administrative expense, and an increase in interest income, partially offset by an increase in research and development expense.

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### **Liquidity and Capital Resources**

#### ***Overview***

Cash and cash equivalents were \$6,877,304 as of March 31, 2019 compared to \$4,755,082 as of March 31, 2018. The \$2,122,222 increase in cash and cash equivalents was due to \$14,218,994 in net cash provided by operating activities and \$7,059,328 net cash provided by investing activities, less \$19,156,100 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 2019 and 2018. Net cash provided by operating activities was \$14,218,994 for fiscal 2019 and \$15,151,928 for fiscal 2018.

Inventory increased \$614,437 in fiscal 2019 primarily due to the timing of raw material purchases.

#### ***Investing Activities***

Net cash provided by investing activities in fiscal 2019 was primarily due to marketable security maturities of \$20,800,000, partially offset by fixed assets purchases of \$68,265 and marketable security purchases of \$13,672,407.

Purchases of fixed assets were \$68,265 in fiscal 2019 and \$604,800 in fiscal 2018. Purchases 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 2019 was due to \$19,374,040 in cash dividends to shareholders, partially offset by net proceeds from the sale of common stock of \$217,940 from stock option exercises.

In addition to cash dividends to shareholders paid in fiscal 2019, on May 1, 2019 we announced that our Board had declared a cash dividend of \$1.00 per share of Common Stock, or \$4,846,010 based on shares outstanding as of April 26, 2019, to be paid May 31, 2019. 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 believe our working capital and cash generated from operations will be adequate for our needs at least through fiscal 2020.

#### **Off-Balance-Sheet Arrangements**

Our off-balance sheet arrangements consist of purchase commitments and the operating lease for our facility. We believe these arrangements have no material current or anticipated future effect on our profitability, cash flows, or financial position.

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

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

### **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, 2019, 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, 2019. 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*.

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, 2019. Our internal control over financial reporting as of March 31, 2019 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, 2019, 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 2019 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 2019 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 2019 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 2019 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 5 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 2019 Annual Meeting of Shareholders is incorporated by reference into this section.

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

The information in the sections Audit Committee Disclosure Fees Billed to Us by Our Independent Registered Public Accounting Firm During Fiscal 2019 and 2018 and Audit Committee Disclosure Audit Committee Pre-Approval Policy to be included in our Proxy Statement for our 2019 Annual Meeting of Shareholders is incorporated by reference into this section.

**PART IV**

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

**(a) Financial Statements and Schedules**

Financial statements are provided pursuant to Item 8 of this Report. Certain financial statement schedules have been omitted because they are not required, not applicable, or the required information is provided in other financial statements or the notes to the financial statements.

**Table of Contents****(b) Exhibits**

The following is a list of exhibits:

<b>Exhibit #</b>	<b>Description</b>
3.1	<u>Amended and Restated Articles of Incorporation of the company as amended by the Board of Directors effective November 21, 2002 (incorporated by reference to the Form 10-QSB for the period ended December 31, 2002).</u>
3.2	<u>Bylaws of the company as amended by the Board of Directors effective December 18, 2007 (incorporated by reference to the Form 8-K filed December 19, 2007).</u>
10.1	<u>Lease dated October 1, 1998 between the company and Glenborough Properties, LP (incorporated by reference to the Form 10-QSB for the period ended September 30, 2002).</u>
10.2	<u>First amendment to lease between the company and Glenborough dated September 18, 2002 (incorporated by reference to the Form 10-QSB for the period ended September 30, 2002).</u>
10.3	<u>Second amendment to lease between the company and Glenborough dated December 1, 2003 (incorporated by reference to the Form 10-QSB for the period ended December 31, 2003).</u>
10.4	<u>Third amendment to lease between the company and Carlson Real Estate (incorporated by reference to the Form 8-K/A filed December 20, 2007).</u>
10.5	<u>Fourth amendment to lease between the company and the Barbara C. Gage Revocable Trust (incorporated by reference to our Current Report on Form 8-K/A filed August 3, 2011).</u>
10.6*	<u>Employment Agreement between the company and Daniel A. Baker dated January 29, 2001 (incorporated by reference to the Form 10-KSB for the year ended March 31, 2001).</u>
10.7*	<u>NVE Corporation 2000 Stock Option Plan as Amended July 19, 2001 by the shareholders (incorporated by reference to our Registration Statement on Form S-8 filed July 20, 2001).</u>
10.8	<u>Indemnification Agreement by and between Pacesetter, Inc., a St. Jude Medical Company, d.b.a. St. Jude Medical Cardiac Rhythm Management Division, and the company (incorporated by reference to the Form 8-K filed September 27, 2005).</u>
10.9+	<u>Supplier Partnering Agreement by and between St. Jude and the company (incorporated by reference to the Form 8-K filed January 4, 2006).</u>
10.10+	<u>Amendment No. 1 to Supplier Partnering Agreement between St. Jude and the company (incorporated by reference to the Form 8-K/A filed September 10, 2007).</u>
10.11+	<u>Amendment No. 2 to Supplier Partnering Agreement between St. Jude and the company (incorporated by reference to the Form 8-K/A filed December 18, 2009).</u>
10.12+	<u>Amendment No. 3 to Supplier Partnering Agreement between St. Jude and the company (incorporated by reference to the Form 8-K/A filed September 16, 2010).</u>
10.13	<u>Amendment No. 4 to Supplier Partnering Agreement between St. Jude and the company (incorporated by reference to the Form 8-K/A filed February 7, 2011).</u>
10.14	<u>Supplier Quality Agreement between St. Jude and the company (incorporated by reference to the Form 8-K filed February 10, 2016).</u>
10.15	<u>Amendment No. 5 to Supplier Partnering Agreement between St. Jude and the company (incorporated by reference to the Form 8-K/A filed April 21, 2016).</u>
10.16+	<u>Supply Agreement by and between the company and Sonova AG (incorporated by reference to the Form 8-K/A filed November 16, 2015).</u>
23	<u>Consent of Grant Thornton LLP.</u>
31.1	<u>Certification by Daniel A. Baker pursuant to Rule 13a-14(a)/15d-14(a).</u>

31.2 Certification by Curt A. Reynders pursuant to Rule 13a-14(a)/15d-14(a).

32 Certification by Daniel A. Baker and Curt A. Reynders pursuant to 18 U.S.C. Section 1350.

101.INS XBRL Instance Document

101.SCH XBRL Taxonomy Extension Schema Document

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

\*Indicates a management contract or compensatory plan or arrangement.

+Confidential portions deleted and filed separately with the SEC.

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**ITEM 16. FORM 10-K SUMMARY.**

We have elected not to include an optional Form 10-K Summary.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**NVE CORPORATION**

(Registrant)

/s/Daniel A. Baker

by Daniel A. Baker

President and Chief Executive Officer

Date May 1, 2019

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

<b><u>Name</u></b>	<b><u>Title</u></b>	<b><u>Date</u></b>
<u>/s/Terrence W. Glarner</u> Terrence W. Glarner	Director and Chairman of the Board	<u>May 1, 2019</u>
<u>/s/Daniel A. Baker</u> Daniel A. Baker	Director, President & Chief Executive Officer (Principal Executive Officer)	<u>May 1, 2019</u>
<u>/s/Curt A. Reynders</u> Curt A. Reynders	Treasurer and Chief Financial Officer (Principal Financial and Accounting Officer)	<u>May 1, 2019</u>
<u>/s/Patricia M. Hollister</u> Patricia M. Hollister	Director	<u>May 1, 2019</u>
<u>/s/Richard W. Kramp</u> Richard W. Kramp	Director	<u>May 1, 2019</u>

/s/Gary R. Maharaj  
Gary R. Maharaj

Director

May 1, 2019



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### **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Board of Directors and Shareholders  
NVE Corporation

#### Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of NVE Corporation (a Minnesota corporation) (the Company) as of March 31, 2019, based on criteria established in the 2013 *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of March 31, 2019, based on criteria established in the 2013 *Internal Control Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the financial statements of the Company as of and for the year ended March 31, 2019, and our report dated May 1, 2019 expressed an unqualified opinion on those financial statements.

#### Basis for opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

#### Definition and limitations of internal control over financial reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Grant Thornton LLP  
Minneapolis, Minnesota  
May 1, 2019

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Board of Directors and Shareholders  
NVE Corporation

Opinion on the financial statements

We have audited the accompanying balance sheets of NVE Corporation (a Minnesota corporation) (the Company) as of March 31, 2019 and 2018, the related statements of income, comprehensive income, shareholders' equity, and cash flows for the years then ended, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of March 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of March 31, 2019, based on criteria established in the 2013 *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated May 1, 2019 expressed an unqualified opinion.

Basis for opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Grant Thornton LLP

We have served as the Company's auditor since fiscal year 2014.

Minneapolis, Minnesota  
May 1, 2019

**Table of Contents****NVE CORPORATION  
BALANCE SHEETS**

	<b>March 31, 2019</b>	<b>March 31, 2018</b>
<b>ASSETS</b>		
Current assets		
Cash and cash equivalents	\$ 6,877,304	\$ 4,755,082
Marketable securities, short-term	12,487,821	20,765,809
Accounts receivable, net of allowance for uncollectible accounts of \$15,000	2,995,638	2,888,779
Inventories	4,264,876	3,650,439
Prepaid expenses and other assets	816,045	635,160
Total current assets	27,441,684	32,695,269
Fixed assets		
Machinery and equipment	9,365,806	9,395,987
Leasehold improvements	1,787,269	1,749,284
	11,153,075	11,145,271
Less accumulated depreciation and amortization	10,258,240	9,819,888
Net fixed assets	894,835	1,325,383
Deferred tax assets	353,735	572,655
Marketable securities, long-term	54,925,633	52,838,158
Total assets	\$ 83,615,887	\$ 87,431,465
<b>LIABILITIES AND SHAREHOLDERS EQUITY</b>		
Current liabilities		
Accounts payable	\$ 375,188	\$ 414,970
Accrued payroll and other	460,488	574,755
Total current liabilities	835,676	989,725
Shareholders equity		
Common stock, \$0.01 par value, 6,000,000 shares authorized; 4,846,010 issued and outstanding as of March 31, 2019 and 4,842,010 as of March 31, 2018	48,460	48,420
Additional paid-in capital	19,910,558	19,599,298
Accumulated other comprehensive loss	(82,725)	(915,635)
Retained earnings	62,903,918	67,709,657
Total shareholders equity	82,780,211	86,441,740
Total liabilities and shareholders equity	\$ 83,615,887	\$ 87,431,465

See accompanying notes.

**Table of Contents****NVE CORPORATION  
STATEMENTS OF INCOME**

	<b>Year Ended March 31</b>	
	<b>2019</b>	<b>2018</b>
<b>Revenue</b>		
Product sales	\$ 25,291,306	\$ 27,321,810
Contract research and development	1,181,031	2,542,071
Total revenue	26,472,337	29,863,881
Cost of sales	5,216,112	6,274,744
Gross profit	21,256,225	23,589,137
<b>Expenses</b>		
Research and development	4,107,692	3,702,918
Selling, general, and administrative	1,223,971	1,435,592
Total expenses	5,331,663	5,138,510
Income from operations	15,924,562	18,450,627
Interest income	1,785,277	1,558,197
Income before taxes	17,709,839	20,008,824
Provision for income taxes	3,201,903	6,096,152
Net income	\$ 14,507,936	\$ 13,912,672
Net income per share basic	\$ 3.00	\$ 2.87
Net income per share diluted	\$ 2.99	\$ 2.87
Cash dividends declared per common share	\$ 4.00	\$ 4.00
<b>Weighted average shares outstanding</b>		
Basic	4,844,010	4,841,347
Diluted	4,850,567	4,846,212

**STATEMENTS OF COMPREHENSIVE INCOME**

	<b>Year Ended March 31</b>	
	<b>2019</b>	<b>2018</b>
Net income	\$ 14,507,936	\$ 13,912,672
Unrealized gain (loss) from marketable securities, net of tax	893,275	(877,337)
Comprehensive income	\$ 15,401,211	\$ 13,035,335

See accompanying notes.

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**NVE CORPORATION**  
**STATEMENTS OF SHAREHOLDERS EQUITY**

	<b>Common Stock</b>		<b>Additional</b>	<b>Accumulated</b>	<b>Retained</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Paid-In</b>	<b>Other</b>	<b>Earnings</b>	
			<b>Capital</b>	<b>Compre-</b>		
				<b>sive</b>		
				<b>Income</b>		
				<b>(Loss)</b>		
Balance as of March 31, 2017	4,841,010	\$ 48,410	\$ 19,507,348	\$ (38,298)	\$ 73,162,025	\$ 92,679,485
Exercise of stock options	1,000	10	51,030			51,040
Comprehensive income:						
Unrealized loss on marketable securities, net of tax				(877,337)		(877,337)
Net income					13,912,672	13,912,672
Total comprehensive income						13,035,335
Stock-based compensation			40,920			40,920
Cash dividends declared (\$4.00 per share of common stock)					(19,365,040)	(19,365,040)
Balance as of March 31, 2018	4,842,010	48,420	19,599,298	(915,635)	67,709,657	86,441,740
Exercise of stock options	4,000	40	217,900			217,940
Comprehensive income:						
Unrealized gain on marketable securities, net of tax				893,275		893,275
Net income					14,507,936	14,507,936
Total comprehensive income						15,401,211
Stock-based compensation			93,360			93,360
Cash dividends declared (\$4.00 per share of common stock)					(19,374,040)	(19,374,040)
Cumulative effect of accounting change				(60,365)	60,365	
Balance as of March 31, 2019	4,846,010	\$ 48,460	\$ 19,910,558	\$ (82,725)	\$ 62,903,918	\$ 82,780,211

See accompanying notes.

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**NVE CORPORATION  
STATEMENTS OF CASH FLOWS**

	<b>Year Ended March 31</b>	
	<b>2019</b>	<b>2018</b>
<b>OPERATING ACTIVITIES</b>		
Net income	\$ 14,507,936	\$ 13,912,672
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	705,197	979,652
Stock-based compensation	93,360	40,920
Deferred income taxes	(31,269)	96,275
Changes in operating assets and liabilities:		
Accounts receivable	(106,859)	548,023
Inventories	(614,437)	(292,141)
Prepaid expenses and other assets	(180,885)	(27,877)
Accounts payable and accrued expenses	(154,049)	37,137
Deferred revenue	-	(142,733)
Net cash provided by operating activities	14,218,994	15,151,928
<b>INVESTING ACTIVITIES</b>		
Purchases of fixed assets	(68,265)	(604,800)
Purchases of marketable securities	(13,672,407)	(18,217,410)
Proceeds from maturities and sales of marketable securities	20,800,000	19,540,000
Net cash provided by investing activities	7,059,328	717,790
<b>FINANCING ACTIVITIES</b>		
Proceeds from sale of common stock	217,940	51,040
Payment of dividends to shareholders	(19,374,040)	(19,365,040)
Net cash used in financing activities	(19,156,100)	(19,314,000)
Increase (decrease) in cash and cash equivalents	2,122,222	(3,444,282)
Cash and cash equivalents at beginning of year	4,755,082	8,199,364
Cash and cash equivalents at end of year	\$ 6,877,304	\$ 4,755,082
<b>Supplemental disclosures of cash flow information:</b>		
Cash paid during the year for income taxes	\$ 3,426,045	\$ 5,966,425

See accompanying notes.



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**NVE CORPORATION  
NOTES TO FINANCIAL STATEMENTS**

**NOTE 1. DESCRIPTION OF BUSINESS**

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 operate in one reportable segment.

**NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Cash and Cash Equivalents**

We consider all highly liquid investments with maturities of three months or less when purchased to be cash equivalents.

**Fair Value of Financial Instruments**

The carrying amount of cash and cash equivalents, accounts receivable, and accounts payable approximates fair value because of the short maturity of these instruments. Fair values of marketable securities are based on quoted market prices.

**Concentration of Risk and Financial Instruments**

Financial instruments potentially subject to significant concentrations of credit risk consist principally of cash equivalents, marketable securities, and accounts receivable.

Cash and cash equivalents have been maintained in financial institutions we believe have high credit quality, however these accounts are generally in excess of federally insured amounts.

We have invested our excess cash in corporate-backed and municipal-backed bonds and money market instruments. Our investment policy prescribes purchases of only high-grade securities, and limits the amount of credit exposure to any one issuer.

Our customers are throughout the world. We generally do not require collateral from our customers, but we perform ongoing credit evaluations of their financial condition. More information on accounts receivable is contained in the paragraph titled **Accounts Receivable and Allowance for Doubtful Accounts** of this note.

Additionally, we are dependent on critical suppliers including our packaging vendors and suppliers of certain raw silicon and semiconductor wafers that are incorporated in our products.

**Accounts Receivable and Allowance for Doubtful Accounts**

We grant credit to customers in the normal course of business and at times may require customers to prepay for an order prior to shipment. Accounts receivable are recorded net of an allowance for doubtful accounts. We make estimates of the uncollectibility of accounts receivable. We specifically analyze accounts receivable, historical bad debts, and customer creditworthiness when evaluating the adequacy of the allowance. We had no charges or provisions to our allowance for doubtful accounts in fiscal 2019 or 2018.

**Inventories**

Inventories are stated at the lower of cost or net realizable value. Cost is determined by the first in, first out method. We record inventory reserves when we determine certain inventory is unlikely to be sold based on sales trends, turnover, competition, and other market factors.

**Product Warranty**

In general we warranty our products to be free from defects in material and workmanship for one year.

**Fixed Assets**

Fixed assets are stated at cost. Depreciation of machinery and equipment is recorded over the estimated useful lives of the assets, generally five years, using the straight-line method. Amortization of leasehold improvements is recorded using the straight-line method over the lesser of the lease term or five-year useful life. We record losses on long-lived assets used in operations when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. We have not identified any indicators of impairment during fiscal 2019 or 2018. Depreciation and amortization expense related to fixed assets was \$498,813 for fiscal 2019 and \$692,665 for fiscal 2018.

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### ***Revenue Recognition***

We recognize revenue when we satisfy performance obligations by the transfer of control of products or services to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those products or services. Revenue is disaggregated into product sales and contract research and development to depict the nature, amount, timing of revenue recognition and economic characteristics of our business, and is represented within the financial statements.

We recognize revenue from product sales to customers and distributors when we satisfy our performance obligation, at a point in time, upon product shipment or delivery to our customer or distributor as determined by agreed upon shipping terms. Shipping charges billed to customers are included in product sales and the related shipping costs are included in selling, general, and administrative expenses. Under certain limited circumstances, our distributors may earn commissions for activities unrelated to their purchases of our products, such as for facilitating the sale of custom products or research and development contracts with third parties. We recognize any such commissions as selling, general, and administrative expenses. We recognize discounts provided to our distributors as reductions in revenue.

We recognize contract research and development revenue over a period of time as the performance obligation is satisfied over a period of time rather than a point in time. Contracts have specifications unique to each customer and do not create an asset with an alternate use, and we have an enforceable right to payment for performance completed to date. We recognize revenue over a period of time using costs incurred as the measurement of progress towards completion.

Accounts receivable is recognized when we have transferred a good or service to a customer and our right to receive consideration is unconditional through the completion of our performance obligation. A contract asset is recognized when we have a right to consideration from the transfer of goods or services to a customer but have not completed our performance obligation. A contract liability is recognized when we have been paid by a customer but have not yet satisfied the performance obligation by transferring goods or services. We had no material contract assets or contract liabilities as of March 31, 2019 or March 31, 2018.

Our performance obligations related to product sales and contract research and development contracts are satisfied in one year or less. Unsatisfied performance obligations represent contracts with an original expected duration of one year or less. As permitted under Accounting Standards Codification ( ASC ) Topic 606, *Revenue from Contracts with Customers*, we are using the practical expedient not to disclose the value of these unsatisfied performance obligations. We also use the practical expedient in which we do not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the customer and the transfer of the promised goods or services to the customer will be one year or less.

### **Income Taxes**

We account for income taxes using the asset and liability method. Deferred income taxes are provided for temporary differences between the financial reporting and tax bases of assets and liabilities. We provide valuation allowances against deferred tax assets if we determine that it is less likely than not that we will be able to utilize the deferred tax assets.

### **Research and Development Expense Recognition**

Research and development costs are expensed as they are incurred. Customer-sponsored research and development costs are included in cost of sales.

### **Stock-Based Compensation**

We measure stock-based compensation cost at the grant date based on the fair value of the award and recognize the

compensation expense over the requisite service period, which is generally the vesting period. We recognize any forfeitures as they occur.

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**Table of Contents****Net Income Per Share**

Net income per basic share is computed based on the weighted-average number of common shares issued and outstanding during each year. Net income per diluted share amounts assume exercise of all stock options. The following table shows the components of diluted shares:

		<b>Year Ended March 31</b>	
		<b>2019</b>	<b>2018</b>
Weighted average common shares outstanding	basic	4,844,010	4,841,347
Dilutive effect of stock options		6,557	4,865
Shares used in computing net income per share	diluted	4,850,567	4,846,212

**Use of Estimates**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

**Recently Issued Accounting Standards*****Recently Adopted Accounting Standards***

In August 2018, the Financial Accounting Standards Board ( FASB ) issued Accounting Standards Update ( ASU ) No. 2018-13, *Fair Value Measurement*. ASU 2018-13 modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. The amendments in ASU 2018-13 will be effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, which will be fiscal 2021 for us. Early adoption is permitted for the removed disclosures and delayed adoption is permitted until fiscal 2021 for the new disclosures. We adopted ASU 2018-13 early, effective the quarter ended September 30, 2018. The removed and modified disclosures were adopted on a retrospective basis and the new disclosures on a prospective basis. The adoption did not have a significant effect on our financial statements.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement Reporting Comprehensive Income (Topic 220)*. ASU 2018-02 addresses the effect of the change in the U.S. federal corporate tax rate on items within accumulated other comprehensive income or loss due to the enactment of the Act To provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018 (the Tax Reform Act ) on December 22, 2017. The guidance will be effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, which will be fiscal 2020 for us. Early adoption is permitted, and we adopted ASU 2018-02 in the quarter ended June 30, 2018. The adoption resulted in a \$60,365 reclassification from accumulated other comprehensive loss to retained earnings due to the change in the federal corporate tax rate.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Cash Payments*, which made eight targeted changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. We adopted ASU 2016-15 retrospectively in the quarter ended June 30, 2018. The adoption did not have a significant impact on our financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments Overall: Recognition and Measurement of Financial Assets and Financial Liabilities*. The amendment changed the accounting for and financial statement presentation of equity investments, other than those accounted for under the equity method of accounting or those that result in consolidation of the investee. The amendment provides clarity on the measurement methodology to be used for the required disclosure of fair value of financial instruments measured at amortized cost on the balance sheet and clarifies that an entity should evaluate the need for a valuation allowance on deferred tax assets related to available-for-sale securities in combination with the entity's other deferred tax assets, among other changes. We

adopted ASU 2016-01 retrospectively in the quarter ended June 30, 2018. The adoption did not have a significant impact on our financial statements.

In May 2014, the FASB issued ASU No. 2014-09, which superseded the revenue recognition requirements in Accounting Standards Codification 605, *Revenue Recognition*. ASU 2014-09 is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. It also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. We adopted the guidance using the modified retrospective method to contracts that were not complete as of April 1, 2018. The adoption did not have a significant impact on our financial statements.

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### ***New Accounting Standards Not Yet Adopted***

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments Credit Losses (Topic 326), Measurement of Credit Losses on Financial Statements*. In November 2018 the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments Credit Losses*, which clarifies codification and corrects unintended application of the guidance. ASU 2016-13 requires a financial asset (or a group of financial assets) measured at amortized cost basis to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset(s) to present the net carrying value at the amount expected to be collected on the financial asset. ASU 2016-13 and ASU 2018-19 are effective for financial statements issued for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years, which will be fiscal 2021 for us. We do not expect adoption of the new guidance to have a significant impact on our financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Lease Accounting*. ASU 2016-02 requires recognition of lease assets and lease liabilities on the balance sheet of lessees. In July 2018, the FASB issued ASU 2018-10, *Codification Improvements to Topic 842 (Leases)*, which provides narrow amendments to clarify how to apply certain aspects of the new lease standard. The guidance is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, which will be fiscal 2020 for us. In July 2018, the FASB issued ASU No. 2018-11, *Leases Topic (842): Targeted Improvements*. ASU No. 2018-11 provided companies an option to apply the transition provisions of the new lease standard at its adoption date instead of at the earliest comparative period presented in its financial statements, and we expect to adopt the new lease guidance using that method. Currently our only lease is the lease for our facility. We expect to recognize a leased asset and corresponding liability on our balance sheet, which will increase total assets by less than one percent. The leased asset and corresponding liability will exclude non-lease components.

**Table of Contents****NOTE 3. FAIR VALUE OF FINANCIAL INSTRUMENTS**

Our corporate bonds and money market funds are classified as available-for-sale securities and carried at estimated fair value. Unrealized holding gains and losses are included in accumulated other comprehensive loss in the statement of shareholders' equity. Corporate bonds with remaining maturities less than one year are classified as short-term, and those with remaining maturities greater than one year are classified as long-term. We consider all highly-liquid investments with maturities of three months or less when purchased, including money market funds, to be cash equivalents. Gains and losses on marketable security transactions are reported on the specific-identification method.

The fair value of our available-for-sale securities as of March 31, 2019 by maturity were as follows:

<b>Total</b>	<b>&lt;1 Year</b>	<b>1 - 3 Years</b>	<b>3 - 5 Years</b>
\$ 74,117,263	\$ 19,191,630	\$ 26,733,361	\$ 28,192,272

Total available-for-sale securities represented approximately 89% of our total assets. Marketable securities as of March 31, 2019 had remaining maturities between five weeks and 59 months.

Generally accepted accounting principles establish a framework for measuring fair value, provide a definition of fair value, and prescribe required disclosures about fair-value measurements. Generally accepted accounting principles define fair value as the price that would be received to sell an asset or paid to transfer a liability. Fair value is a market-based measurement that should be determined using assumptions that market participants would use in pricing an asset or liability. Generally accepted accounting principles utilize a valuation hierarchy for disclosure of fair value measurements. The categorization within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement. The categories within the valuation hierarchy are described as follows:

Level 1 Financial instruments with quoted prices in active markets for identical assets or liabilities.

Level 2 Financial instruments with quoted prices in active markets for similar assets or liabilities. Level 2 fair value measurements are determined using either prices for similar instruments or inputs that are either directly or indirectly observable, such as interest rates.

Level 3 Inputs to the fair value measurement are unobservable inputs or valuation techniques.

Money market funds are included on the balance sheets in Cash and cash equivalents. Corporate bonds are included on the balance sheets in Marketable securities, short term and Marketable securities, long term.

The following table shows the estimated fair value of assets that were accounted for at fair value on a recurring basis:

	<b>As of March 31, 2019</b>			<b>As of March 31, 2018</b>		
	<b>Level 1</b>	<b>Level 2</b>	<b>Total</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Total</b>
Money market funds	\$ 6,703,809	\$ -	\$ 6,703,809	\$ 3,951,032	\$ -	\$ 3,951,032
Corporate bonds	-	67,413,454	67,413,454	54,517,969	19,085,998	73,603,967
<b>Total</b>	<b>\$ 6,703,809</b>	<b>\$ 67,413,454</b>	<b>\$ 74,117,263</b>	<b>\$ 58,469,001</b>	<b>\$ 19,085,998</b>	<b>\$ 77,554,999</b>

Our available-for-sale securities as of March 31, 2019 and 2018, aggregated into classes of securities, were as follows:

**As of March 31, 2019**

**As of March 31, 2018**



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	<b>Amortized Cost</b>	<b>Gross Unrealized Holding Gains</b>	<b>Gross Unrealized Holding Losses</b>	<b>Estimated Fair Value</b>	<b>Amortized Cost</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Estimated Fair Value</b>
Money market funds	\$ 6,703,809	\$ -	\$ -	\$ 6,703,809	\$ 3,951,032	\$ -	\$ -	\$ 3,951,032
Corporate bonds	67,519,350	315,902	(421,798)	67,413,454	74,853,327	-	(1,249,360)	73,603,967
<b>Total</b>	<b>\$ 74,223,159</b>	<b>\$ 315,902</b>	<b>\$ (421,798)</b>	<b>\$ 74,117,263</b>	<b>\$ 78,804,359</b>	<b>\$ -</b>	<b>\$ (1,249,360)</b>	<b>\$ 77,554,999</b>

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The following table shows the gross unrealized holding losses and fair value of our available-for-sale securities with unrealized holding losses, aggregated by class of securities and length of time that individual securities had been in a continuous unrealized loss position as of March 31, 2019 and 2018.

	Less Than 12 Months		12 Months or Greater		Total	
	Estimated Fair Value	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Losses
As of March 31, 2019						
Corporate bonds	\$ -	\$ -	\$ 51,413,428	\$ (421,798)	\$ 51,413,428	\$ (421,798)
Total	\$ -	\$ -	\$ 51,413,428	\$ (421,798)	\$ 51,413,428	\$ (421,798)
As of March 31, 2018						
Corporate bonds	\$ 61,731,248	\$ (1,003,849)	\$ 9,072,719	\$ (245,511)	\$ 70,803,967	\$ (1,249,360)
Total	\$ 61,731,248	\$ (1,003,849)	\$ 9,072,719	\$ (245,511)	\$ 70,803,967	\$ (1,249,360)

We did not consider any of our available-for-sale securities to be impaired as of March 31, 2019. None of the securities were impaired at acquisition, and subsequent declines in fair value are not attributed to declines in credit quality. When evaluating for impairment we assess indicators that include, but are not limited to, earnings performance, changes in underlying credit ratings, market conditions, bona fide offers to purchase or sell, and ability to hold until maturity. Because we believe it is more likely than not we will recover the cost basis of our investments, we did not consider any of our marketable securities to be impaired as of March 31, 2019.

**NOTE 4. INVENTORIES**

Inventories are shown in the following table:

	March 31	
	2019	2018
Raw materials	\$ 1,130,917	\$ 1,084,030
Work in process	2,325,238	1,828,492
Finished goods	808,721	737,917
Total inventories	\$ 4,264,876	\$ 3,650,439

**NOTE 5. STOCK-BASED COMPENSATION****Stock Option Plan**

Our 2000 Stock Option Plan, as amended, provides for issuance to employees, directors, and certain service providers of incentive stock options and nonstatutory stock options. Generally, the options may be exercised at any time prior to expiration, subject to vesting based on terms of employment. The period ranges from immediate vesting to vesting over a five-year period. The options have exercisable lives ranging from one year to ten years from the date of grant, and are generally not eligible to vest early in the event of retirement, death, disability, or change in control. Exercise prices are not less than fair market value of the underlying Common Stock at the date the options are granted. Stock-based compensation expense was \$93,360 in fiscal 2019 and \$40,920 in fiscal 2018.

**Valuation assumptions**

We use the Black-Scholes standard option-pricing model to determine the fair value of stock options. The following assumptions were used to estimate the fair value of options granted:

**Year Ended March 31**

	<b>2019</b>	<b>2018</b>
Risk-free interest rate	2.9%	1.8%
Expected volatility	33%	28%
Expected life (years)	4.5	4.4
Dividend yield	3.7%	5.3%

The determination of the fair value of the awards on the date of grant using the Black-Scholes model is affected by our stock price as well as assumptions of other variables, including projected stock option exercise behaviors, risk-free interest rate, and expected volatility of our stock price in future periods. Our estimates and assumptions affect the amounts reported in the financial statements and accompanying notes.

**Table of Contents*****Expected life***

We analyze historical exercise and termination data to estimate the expected life assumption. We believe historical data currently represents the best estimate of the expected life of a new option.

***Risk-free interest rate***

The risk-free rate is based on the yield of U.S. Treasury securities on the grant date for maturities similar to the expected lives of the options.

***Volatility***

We use historical volatility to estimate the expected volatility of our common stock.

***Dividend yield***

We assumed a dividend yield of 3.7% for fiscal 2019 and 5.3% for fiscal 2018 based on the dividend yield on the date the options were granted.

**Tax effects of stock-based compensation**

Stock-based compensation increased deferred tax assets by \$19,771 for fiscal 2019 and \$8,953 for fiscal 2018.

**General stock option information**

The following table summarizes information about options outstanding as of March 31, 2019, all of which were exercisable:

<b>Ranges of Exercise Prices</b>	<b>Number Outstanding</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Remaining Contractual Life (years)</b>
\$49.86 - \$67.69	14,000	\$ 58.83	5.5
\$76.13 - \$107.86	8,000	92.00	8.9
	22,000	\$ 70.89	6.7

A summary of our stock options is shown in the following table:

	<b>Option Shares Reserved</b>	<b>Options Outstanding</b>	<b>Weighted Average Option Exercise Price</b>
At March 31, 2017	143,230	19,000	\$ 57.51
Granted	(4,000)	4,000	\$ 76.13
Exercised	-	(1,000)	\$ 51.04
At March 31, 2018	139,230	22,000	\$ 61.19
Granted	(4,000)	4,000	\$ 107.86
Exercised	-	(4,000)	\$ 54.49
At March 31, 2019	135,230	22,000	\$ 70.89

The remaining weighted-average exercisable life was 6.7 years as of March 31, 2019 and 6.6 years as of March 31, 2018. All outstanding options were exercisable as of March 31, 2019 and 2018. The total intrinsic value of options exercised during fiscal 2019 was \$180,093 based on the difference between the exercise price and stock price at the time of exercise for in-the-money options. The total intrinsic value of options outstanding March 31, 2019, based on our closing stock price for that day, was \$633,840, all of which was exercisable. The total fair value of option grants was \$93,360 in fiscal 2019. There was no unrecognized stock-based compensation as of March 31, 2019.

**Table of Contents****NOTE 6. INCOME TAXES**

Income tax provisions for fiscal 2019 and 2018 consisted of the following:

	<b>Year Ended March 31</b>	
	<b>2019</b>	<b>2018</b>
Current taxes		
Federal	\$ 3,107,376	\$ 5,899,574
State	125,796	160,670
Deferred taxes		
Federal	(30,012)	31,800
State	(1,257)	4,108
Income tax provision	\$ 3,201,903	\$ 6,096,152

A reconciliation of income tax provisions at the U.S. statutory rate for fiscal 2019 and 2018 is as follows:

	<b>Year Ended March 31</b>	
	<b>2019</b>	<b>2018</b>
Tax expense at U.S. statutory rate	\$ 3,719,066	\$ 6,282,771
State income taxes, net of Federal benefit	95,430	103,240
Domestic manufacturing deduction	-	(495,361)
Foreign-derived intangible income deduction	(555,256)	-
Municipal interest	-	(1,378)
Tax Reform Act effect on deferred tax assets	-	206,693
Other	(57,337)	187
Income tax provision	\$ 3,201,903	\$ 6,096,152

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets and liabilities as of March 31, 2019 and 2018 were as follows:

	<b>March 31</b>	
	<b>2019</b>	<b>2018</b>
Paid time off accrual	\$ 55,900	\$ 59,171
Inventory reserve	41,572	41,572
Depreciation and amortization	112,125	81,385
Stock-based compensation deductions	62,671	55,886
Unrealized loss on marketable securities	23,170	273,360
Other	58,297	61,281
Deferred tax assets	\$ 353,735	\$ 572,655

The Act To provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018 (the Tax Reform Act) was enacted December 22, 2017. The Tax Reform Act reduced certain Federal corporate income tax rates effective January 1, 2018 and changed certain other provisions. The effective tax rate for fiscal 2018 was a blended rate reflecting the estimated benefit of Federal tax rate reductions. These benefits were partially offset by a one-time \$206,693 unfavorable impact of a revaluation of our deferred tax assets. The revaluation of our deferred tax assets increased income tax provisions for the year ended March 31, 2018, and decreased deferred tax assets as of March 31, 2018.

We had no unrecognized tax benefits as of March 31, 2019, and we do not expect any significant unrecognized tax

benefits within 12 months of the reporting date. We recognize interest and penalties related to income tax matters in income tax expense. As of March 31, 2019 we had no accrued interest related to uncertain tax positions. The tax years 2015 through 2017 remain open to examination by the major taxing jurisdictions to which we are subject.

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**Table of Contents****NOTE 7. CONCENTRATIONS**

The following table summarizes customers comprising 10% or more of revenue for the two most recent fiscal years:

	<b>% of Revenue for Year Ended March 31</b>	
	<b>2019</b>	<b>2018</b>
Customer A	21%	18%
Customer B	18%	19%

These two customers accounted for 41% of our accounts receivable as of March 31, 2019 and 51% as of March 31, 2018. We believe the receivable balances from these customers do not represent a significant credit risk based on past collection experience.

**NOTE 8. COMMITMENTS AND CONTINGENCIES**

Our lease payments were \$283,779 for fiscal 2019 and \$278,429 for fiscal 2018. Currently our only future lease obligation is the operating lease for our facility, which expires December 31, 2020. We pay operating expenses including maintenance, utilities, real estate taxes, and insurance in addition to rental payments. The following table shows our future minimum lease payments:

	<b>Year Ending March 31</b>					
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Total</b>
	\$ 295,436	\$ 223,981	\$ -	\$ -	\$ -	\$ 519,417

**NOTE 9. STOCK REPURCHASE PROGRAM**

Our authorized stock is stated as six million shares of Common Stock, \$0.01 par value, and ten million shares of all types. Our Board may designate any series and fix any relative rights and preferences to authorized but undesignated stock. We have a remaining authorization of \$4,540,806 as of March 31, 2019 under a Stock Repurchase Program originally announced on January 21, 2009. We did not repurchase any Common Stock in fiscal 2019 or 2018. The Stock Repurchase Program may be modified or discontinued at any time without notice.

**NOTE 10. INFORMATION AS TO EMPLOYEE STOCK PURCHASE, SAVINGS, AND SIMILAR PLANS**

All of our employees are eligible to participate in our 401(k) savings plan the first quarter after reaching age 21. Employees may contribute up to the Internal Revenue Code maximum. We make matching contributions of 100% of the first 3% of participants' salary deferral contributions. Our matching contributions were \$91,341 for fiscal 2019 and \$100,904 for fiscal 2018.

**NOTE 11. SUBSEQUENT EVENTS**

On May 1, 2019 we announced that our Board had declared a quarterly cash dividend of \$1.00 per share of Common Stock to be paid May 31, 2019 to shareholders of record as of the close of business May 13, 2019.

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**EXHIBIT INDEX**

<b>Exhibit #</b>	<b>Description</b>
23	<u>Consent of Grant Thornton LLP.</u>
31.1	<u>Certification by Daniel A. Baker pursuant to Rule 13a-14(a)/15d-14(a).</u>
31.2	<u>Certification by Curt A. Reynders pursuant to Rule 13a-14(a)/15d-14(a).</u>
32	<u>Certification by Daniel A. Baker and Curt A. Reynders pursuant to 18 U.S.C. Section 1350.</u>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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