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Dated October 9, 2003

PROSPECTUS

[NVE CORPORATION LOGO]

1,221,487 Shares of Common Stock

This Prospectus relates to 1,221,487 shares of common stock of NVE Corporation which may be offered from time to time by the selling shareholder named in this Prospectus. We will not receive any of the proceeds from the offer and sale of the shares. Rather, the selling shareholder will receive all of the net proceeds from any sale of the common stock.

We have been advised that the selling shareholder may from time to time sell the common stock to or through brokers or dealers in one or more transactions, in the NASDAQ SmallCap Market or other over-the-counter market or otherwise, at market prices prevailing at the time of sale, at prices relating to prevailing prices, or at negotiated prices. For additional information on the methods of sale which may be used by the selling shareholder, see the section entitled "Plan of Distribution" on page 13 of this Prospectus.

Our common stock is traded on the NASDAQ SmallCap Market under the symbol NVEC. On October 8, 2003, the closing sales price of our common stock as reported by the NASDAQ SmallCap Market was \$38.30.

Investing in our common stock involves certain risks. See "Risk Factors" beginning on page 4 of this Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this Prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus is October 9, 2003

SUMMARY

The following summary is qualified by, and should be read in conjunction with, the more detailed information included in this Prospectus and the documents incorporated by reference into this Prospectus. In this prospectus, "NVE," "we," "our," and the "Company" refer to NVE Corporation, unless the context otherwise requires.

NVE CORPORATION

NVE Corporation develops and sells devices using "sprintronics," technology we helped pioneer, which utilizes electron spin rather than electron charge to acquire, store and transmit information. Our products include

magnetic sensors to acquire ultra-precise data such as the position of a robot arm, and couplers to transmit data between electronic systems at very high speed. We are also a licensor of spintronics/magnetic random access memory technology, commonly referred to as MRAM, which we believe has the potential to revolutionize electronic memory.

We currently have two commercial product lines based on our spintronics technology:

- * Sensors to precisely and quickly determine position; and
- * Couplers which transmit digital data at high speed.

We have also developed intellectual property relating to Magnetic Random Access Memory (commonly referred to as MRAM) which uses spintronics to store data, combining the speed of semiconductor memory with the nonvolatility of magnetic disk drives. MRAM is inherently nonvolatile, meaning the data remains even if power is removed. In addition to our own MRAM intellectual property, we have a license to use Honeywell International MRAM technology and certain Cypress Semiconductor Corporation and Motorola, Inc. intellectual property. If MRAM products are produced under our license agreements, we could potentially earn significant royalty revenues.

We were founded in 1989 primarily as a government contract research company. During the past several years we began licensing our intellectual property to others, including Union Semiconductor Technology Corporation, Honeywell International, Motorola, Inc., and Cypress Semiconductor Corporation. We have also begun selling commercial products, primarily for factory automation. Our products are sold throughout the world through a network of manufacturers' representatives and distributors. We also have an agreement with Agilent Technologies, Inc. to distribute our couplers under their brand. Our commercial product revenues have been growing rapidly, allowing us to make a profit in the most recent fiscal year.

In November 2000 our shareholders approved our merger with and into Premis Corporation, a publicly-traded and reporting corporation, with Premis surviving under the new name NVE Corporation. We executed a one-for-five reverse split of our common stock to shareholders of record at the close of business on November 21, 2002, and on January 22, 2003 our common stock began trading on the NASDAQ SmallCap Market.

We are incorporated under the laws of the State of Minnesota. Our executive offices are located at 11409 Valley View Road, Eden Prairie, Minnesota 55344, telephone number (952) 829-9217. Our website address is www.nve.com.

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THE OFFERING

Securities: 1,221,487 shares of common stock offered by the selling

shareholder identified in this Prospectus.

Use of Proceeds: We will not receive any proceeds from the sale of common

stock by the selling shareholder.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements made in this Prospectus and the documents incorporated by reference in this Prospectus under the captions "NVE Corporation" and "Risk Factors" and elsewhere in this Prospectus constitute forward-looking statements within the meaning of the Private Securities

Litigation Reform Act of 1995. These statements are subject to the safe harbor provisions of the reform act. Forward-looking statements may be identified by the use of the terminology such as may, will, expect, anticipate, intend, believe, estimate, should, or continue or the negatives of these terms or other variations on these words or comparable terminology. To the extent that this Prospectus 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 adverse economic conditions, intense competition, including entry of new competitors, our ability to obtain sufficient financing to support our operations, progress in research and development activities by us and others, variations in costs that are beyond our control, adverse federal, state and local government regulations, unexpected costs, lower sales and net income, or higher net losses than forecasted, price increases for equipment, our dependence on significant suppliers, including Taiwan Semiconductor Manufacturing Corporation for foundry semiconductor wafers, our ability to meet stringent customer technical requirements, our ability to consummate additional license agreements, our ability to continue eligibility for SBIR awards, our inability to raise prices, failure to obtain new customers, the possible fluctuation and volatility of our operating results and financial condition, inability to carry out marketing and sales plans, loss of key executives, and other specific risks that may be alluded to in this Prospectus.

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RISK FACTORS

An investment in shares of our common stock involves a high degree of risk. Prospective investors should carefully consider the following risks and speculative factors set forth below prior to a purchase of shares of common stock.

RISKS RELATED TO OUR BUSINESS

ALTHOUGH WE WERE PROFITABLE IN THE MOST RECENT QUARTER AND FISCAL YEAR, WE HAVE A HISTORY OF OPERATING LOSSES AND COULD SUFFER FURTHER LOSSES IN THE FUTURE.

We had net income (loss) of \$646,850 and (\$2,100,442) for the years ended March 31, 2003 and 2002, which we refer to as Fiscal 2003 and Fiscal 2002. As of June 30, 2003 we had an accumulated deficit of \$4,473,070. We reported net income in Fiscal 2003 and in the first quarter of the Fiscal 2004. During Fiscal 2004 approximately \$250,000 per quarter of contract research and development revenue and recognition of MRAM license revenues of approximately \$98,000 per quarter have ceased. We were able to replace those revenue and profit sources with expanded commercial product sales in the quarter ended June 30, 2003, but we may not be able to do so in future periods. Furthermore, start-up costs associated with manufacturing, marketing, and selling MRAM devices could lead to operating losses.

WE RELY ON GOVERNMENT CONTRACTS FOR A LARGE PERCENTAGE OF OUR REVENUES AND WE WILL LOSE REVENUE IF WE LOSE THESE CONTRACTS.

During Fiscal 2003 United States government contracts accounted for approximately 60% of our revenues. Disqualification as a vendor to the United States government for any reason or a material decrease in government funding research would cause serious setbacks and would likely hamper both future research and development activity, as well as related revenues.

OUR POTENTIAL FUTURE INELIGIBILITY FOR GOVERNMENT FUNDED RESEARCH GRANTS COULD HAVE A SIGNIFICANT IMPACT ON OUR REVENUE AND OUR ABILITY TO MAKE RESEARCH AND DEVELOPMENT PROGRESS.

Federal regulations require a business to be at least 51% owned by one or more individuals to be eligible to compete for Small Business Innovation Research (SBIR) awards. In the three months ended June 30, 2003, we were awarded approximately \$735,000 in SBIR contracts. SBIR contracts represented 47.7% of total revenue in Fiscal 2003. While we believe we currently meet the 51% ownership rule, purchases by non-individuals in the open market or by other means could cause us to become ineligible. Such changes in ownership are beyond our control and could cause us to lose our eligibility to compete for SBIR awards, which in turn could have a material adverse effect on our revenues profits, and research and development efforts. Furthermore, if all or a substantial portion of the shares to be offered through this Prospectus are purchased by or distributed to non-individuals, we risk becoming ineligible to compete for SBIR awards.

WE MAY LOSE REVENUE IF ANY OF OUR LARGE CUSTOMERS CANCEL, POSTPONE, OR REDUCE THEIR PURCHASES.

We rely on several large customers for a large percentage of our commercial revenues; these include Agilent, St. Jude Medical, Inc., United States Government, and certain distributors. Orders from these customers can be cancelled, postponed, or reduced without cause or notice, and the loss of any of these customers could have a significant impact on our commercial revenues and our profitability.

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WE FACE A DIFFICULT AND UNCERTAIN ECONOMIC ENVIRONMENT IN OUR INDUSTRY WHICH COULD ADVERSELY AFFECT OUR BUSINESS AND OPERATIONS.

The semiconductor and electronics industries in general have experienced a significant economic downturn during the past two years. The poor economic environment may have adversely affected the sales of many of our customers' products, thus limiting our sales. Economic conditions may not improve in the near term or at all. Any failure of the economic environment to improve or a future downtown would likely have a material adverse impact on our business and revenues.

OUR REPUTATION COULD BE DAMAGED AND WE COULD LOSE REVENUE IF WE FAIL TO MEET TECHNICAL CHALLENGES REQUIRED TO PRODUCE MARKETABLE PRODUCTS.

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

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

OUR FAILURE TO MEET STRINGENT CUSTOMER TECHNICAL REQUIREMENTS COULD RESULT IN THE LOSS OF KEY CUSTOMERS AND POTENTIAL REDUCED SALES.

Some of our customers, including Agilent and St. Jude Medical, have stringent technical requirements which require our products to pass certain test and qualification criteria before they are accepted by such customers. Failure to meet those criteria could result in the loss of current sales revenue, customers and future sales.

IF WE ARE UNABLE TO DELIVER PRODUCTS WE FACE PENALTIES, INCLUDING LOSS OF CERTAIN EXCLUSIVE MANUFACTURING RIGHTS.

Our Agilent supply agreement allows Agilent to gain rights to manufacture couplers based on our technology if we are unable to deliver products on time. The imposition of this penalty could have a material impact on future sales of our products. Furthermore, on reaching certain sales goals, Agilent could gain exclusive rights to distribute certain couplers based on our technology, which could reduce our product sales and leave us partially or totally dependent on Agilent for future coupler sales.

THE LOSS OF SUPPLY FROM ANY OF OUR KEY SINGLE-SOURCE SUPPLIERS COULD IMPACT OUR ABILITY TO PRODUCE AND DELIVER PRODUCTS AND CAUSE LOSS OF REVENUE.

Critical suppliers include our suppliers of certain semiconductor wafers which are incorporated in our products. These critical suppliers include Taiwan Semiconductor Manufacturing Corporation, Advanced Semiconductor Manufacturing Corporation of Shanghai (China), Texas Instruments Inc., and AMI Semiconductor, Inc. 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. We are also dependent on our packaging vendors, including Circuit Electronics Industries (Ayutthaya, Thailand), and NS Electronics Bangkok (Thailand), Ltd. 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. Supply interruptions could seriously jeopardize our ability to provide products that are critical to our business and operations which may cause us to lose revenue.

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BECAUSE WE ARE SIGNIFICANTLY SMALLER THAN THE MAJORITY OF OUR COMPETITORS, WE MAY LACK THE FINANCIAL RESOURCES NEEDED TO INCREASE OUR MARKET SHARE AND FUTURE REVENUE.

Our known competitors and potential competitors include Royal Philips Electronics, Allegro Microsystems, Inc., Agilent Technologies, Inc., Vishay Intertechnology, NEC Corporation, Analog Devices, Inc., Advanced Micro Devices,

Inc., Intel Corporation, Ramtron International Corporation, Infineon Technologies AG, Xicor, Inc., IBM Corporation, Fujitsu Limited, and others. Most of our competitors and potential competitors are established companies that have significantly greater financial, technical, and marketing resources than us. While we believe that our products have important competitive advantages, our competitors may succeed in developing and marketing products that perform better or are less expensive than ours, or that would render our products and technology obsolete or noncompetitive.

OUR LICENSE AGREEMENTS INCLUDE REVENUE MINIMUMS AND ROYALTY LIMITS WHICH COULD LIMIT THE TOTAL AMOUNT OF REVENUE WE CAN DERIVE UNDER THESE AGREEMENTS.

Our existing license agreements do not provide for us to receive royalties until revenue minimums are met by licensees. In addition, some of these agreements place limits on future royalty and license payments. These provisions could substantially delay our potential revenues and profits from these licensing arrangements and could limit the total amount of revenue that we can derive under these license agreements. Such limits are common practice in our industry, but they could limit our potential MRAM revenues and profits even if our intellectual property is widely adopted. Therefore, we may never derive significant revenues under these licenses.

OUR BUSINESS MAY SUFFER BECAUSE WE HAVE LIMITED INFLUENCE OVER THE RATE OF ADOPTION OF OUR TECHNOLOGY, AND MRAM TECHNOLOGY MAY NOT BUILD INTO A LARGE OR SIGNIFICANT MARKET.

A significant portion of our future revenues and profits is dependent on our licensees and manufacturing partners introducing MRAM products. Production difficulties, technical barriers, high production costs, poor market reception or other problems, almost all of which are outside our control, could prevent the deployment of MRAM or limit its market potential. In addition, our licensees and manufacturing partners may have other priorities that detract attention and resources from introduction of MRAM products using our technology. Furthermore, competing technologies could prevent or supplant MRAM from becoming an important memory technology.

OUR LICENSEES MAY NOT BE ABLE TO MAKE COMMERCIALLY VIABLE MRAMS WHICH WOULD LIMIT OUR REVENUE FROM MRAM AND LIKELY CAUSE OUR STOCK PRICE TO DECLINE.

MRAM is a new technology, and we are almost completely dependent on our licensees to convert our intellectual property into commercially viable MRAM. While our licensees have made prototypes, several technical and manufacturing issues must be resolved before commercially viable devices can be produced, and these problems may never successfully be solved. In particular, Cypress has missed several targets for the production of sample devices and has significantly changed its estimate of the timetable to sample a working MRAM. Cypress executives have currently stated a timeframe of sometime in the next year. Additional delays and/or changes would likely have a material impact on our revenues from MRAM and the likelihood of its widespread adoption.

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WE ARE HIGHLY DEPENDENT ON CYPRESS FOR POTENTIAL SUPPLY OF MRAM DEVICES USING THEIR DESIGNS AND MAY LOSE REVENUE IF WE NEED TO REPLACE CYPRESS AS A SUPPLIER.

Although we have rights to Cypress' MRAM designs, mask works, and other intellectual property, it could be difficult for us to fabricate devices at a

foundry other than Cypress. This is because other potential foundries might not have the needed equipment, and Cypress' designs are tailored for their factories. If Cypress is unable to manufacture devices for us for any reason, it could be difficult for us to find another manufacturer for their designs.

CYPRESS COULD CANCEL THEIR MRAM DEVELOPMENT PROGRAM, WHICH WOULD REDUCE OUR FUTURE REVENUE BECAUSE WE COULD NO LONGER SELL DEVICES BASED ON THEIR DESIGNS.

Cypress is not obligated to continue their MRAM development program indefinitely. While we have no indication of any plans to cancel their MRAM development program, they could do so at any time because of financial or other considerations. Such a cancellation would eliminate our opportunity to sell devices based on their designs.

OUR FUTURE BUSINESS MAY SUFFER BECAUSE WE MAY NOT BE ABLE TO CONSUMMATE ADDITIONAL MRAM LICENSE AGREEMENTS.

Although there are potential licensees for our MRAM intellectual property in addition to our current licensees and partners, we may never be able to consummate additional license agreements. Potential licensees for our MRAM intellectual property might not be interested unless and until the commercial viability of the technology is demonstrated. Potential licensees could also use their own or a third party's MRAM intellectual property rather than ours. In addition, our existing agreements place restrictions on future license agreements. Specifically, one of our agreements allows one of our licensees to approve licenses with certain other potential licensees. Each of these limitations could hinder our ability to consummate additional MRAM license agreements.

WE WILL NOT RECEIVE ROYALTIES IF OUR LICENSEES DO NOT USE OUR INTELLECTUAL PROPERTY.

Our license agreements do not require our licensees to use our intellectual property. Our licensees could circumvent or find alternatives to our technology, and our license agreements apply only if our licensees use our intellectual property in their devices. It is possible that our licensees might make MRAM devices without using our intellectual property or infringing on our patents, and we would not to receive royalties on such devices.

WE MAY NOT BE ABLE TO ENFORCE OUR INTELLECTUAL PROPERTY RIGHTS OR OUR TECHNOLOGY MAY PROVE TO INFRINGE UPON PATENTS OR RIGHTS OWNED BY OTHERS WHICH MAY PREVENT THE FUTURE SALE OF OUR PRODUCTS.

We protect our proprietary technology and intellectual property by seeking patents and maintaining trade secrets, which we implement by entering into confidentiality agreements with employees and suppliers, depending on the circumstances. We hold patents or are the licensee of patented technology covering certain aspects of our sensor, coupler, and MRAM technology. These patent rights may be challenged, rendered unenforceable, invalidated or circumvented. In addition, rights granted under the patents or under licensing agreements may not provide a competitive advantage to us. Efforts to legally enforce patent rights can involve substantial expense and may not be successful. Further, others may independently develop similar or superior technologies or duplicate any technology developed by us, or our technology may prove to infringe upon 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 MANAGEMENT AND TECHNICAL EMPLOYEES.

We have no employment agreements with any of our management other than our Chief Executive Officer, Dr. Baker, and have no key-person insurance covering employees. Competition for highly-qualified management and technical personnel is generally 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. Our Chief Technology Officer, Dr. Daughton, may decide to retire at any time in the next several years, and we may not be able to replace his technical or contract development expertise.

RISKS RELATED TO BUYING OUR STOCK

OUR STOCK IS SUBJECT TO VOLATILITY BECAUSE OF LOW LIQUIDITY AND TRADING VOLUMES.

Our common stock is traded on the NASDAQ SmallCap Market, which has less daily trading volume on average than the average trading market for companies quoted on the NASDAQ National Market or any other national securities exchange. While the trading volume of our common stock has been much higher in the second half of 2003, for most of our history since we became public in November 2000 there had been a limited trading market for our common stock. A public trading market having the desired characteristics of depth, liquidity and orderliness depends on the presence in the marketplace of willing buyers and sellers of our common stock at any given time. This presence depends on the individual decisions of investors and general economic and market conditions over which we have no control.

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.

The market price of our common stock has experienced significant fluctuations and may continue to fluctuate in the future. The market price of the common stock may be significantly affected by many factors, including:

- * changes in requirements or demands for our products;
- * the announcement of new products or product enhancements by us or our competitors;
- * technological innovations by us or our competitors;
- * quarterly variations in our or our competitors' operating results;
- * changes in prices of our or our competitors' products and services;
- * changes in our revenue and revenue growth rates;
- * changes in earnings estimates by market analysts, speculation in the press or analyst community; and
- * general market conditions or market conditions specific to particular

industries.

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The stock prices for many companies in the technology sector have experienced wide fluctuations that often have been unrelated to their operating performance. Such fluctuations may adversely affect the market price of our common stock.

RISKS RELATED TO THIS OFFERING

THIS OFFERING COULD JEOPARDIZE OUR ELIGIBILITY TO COMPETE FOR SMALL BUSINESS INNOVATION RESEARCH (SBIR) GOVERNMENT CONTRACTS AND CAUSE THE LOSS OF A SUBSTANTIAL PORTION OF OUR REVENUES.

In the three months ended June 30, 2003 we were awarded approximately \$735,000 in SBIR contracts. SBIR contracts represented 47.7% of total revenue in Fiscal 2003. While we believe we currently meet the 51% ownership rule, purchases by non-individuals in the open market or by other means could cause us to become ineligible. Such changes in ownership are beyond our control and could cause us to lose our eligibility to compete for SBIR awards, which in turn could have a material adverse effect on our revenues, profits, and research and development efforts. Furthermore, if all or a substantial portion of the shares to be offered through this Prospectus are purchased by or distributed to non-individuals, we risk becoming ineligible to compete for SBIR awards.

THIS OFFERING WILL SUBSTANTIALLY INCREASE THE POTENTIAL SUPPLY OF OUR COMMON STOCK, WHICH COULD SIGNIFICANTLY DECREASE THE MARKET PRICE OF OUR SHARES.

The shares covered by this Prospectus represent approximately 28% of our total shares outstanding and such shares are not currently tradable, but will become tradable with the effectiveness of this registration. The additional shares could create substantial pressure on the price of our common stock as the supply of shares increases without a concurrent increase of demand.

OUR ARTICLES OF INCORPORATION MAY DISCOURAGE LAWSUITS AND OTHER CLAIMS AGAINST OUR DIRECTORS.

Our articles of incorporation provide, to the fullest extent permitted by Minnesota law, that our directors shall have no personal liability for breaches of their fiduciary duties to us. These provisions may reduce the likelihood of derivative litigation against directors and may discourage shareholders from bringing a lawsuit against directors for a breach of their duty.

THE MARKET PRICE OF OUR COMMON STOCK MAY BE REDUCED BY FUTURE SALES OF OUR COMMON STOCK IN THE PUBLIC MARKET.

Sales of substantial amounts of common stock in the public market that are not currently freely tradable, or even the potential for such sales, could have an adverse effect on the market price for shares of our common stock and could impair the ability of purchasers of our common stock to recoup their investment or make a profit. As of September 24, 2003 these shares consist of:

- * approximately 329,659 shares owned by our executive officers and directors of our outstanding common stock; and
- * approximately 841,239 shares issuable to option and warrant holders.

Unless the shares of our outstanding common stock owned by our executive officers and directors are further registered under the securities laws, they may not be resold except in compliance with Rule 144 promulgated by the SEC, or some other exemption from registration. Rule 144 does not prohibit the sale of these shares but does place conditions on their resale which must be complied with before they can be resold.

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PROVISIONS IN OUR ARTICLES OF INCORPORATION ALLOW US, WITHOUT OBTAINING SHAREHOLDER APPROVAL, TO ISSUE ADDITIONAL SHARES OF STOCK THAT MAY REDUCE THE VALUE OF THE COMMON STOCK OR INHIBIT A THIRD-PARTY ACQUISITION.

Our articles of incorporation authorize our Board of Directors to issue up to 6,000,000 shares of common stock and 4,000,000 shares of undesignated stock, the terms of which may be determined at the time of issuance by the Board of Directors, without further action by our shareholders. Undesignated stock authorized by the Board of Directors may include voting rights, preferences as to dividends and liquidation, conversion and redemptive rights and sinking fund provisions. If the Board of Directors authorizes the issuance of preferred stock in the future, this authorization could affect the rights of the holders of our common stock, thereby reducing the value of our common stock, and could make it more difficult for a third party to acquire us, even if a majority of the holders of our common stock approved of an acquisition.

WE ARE SUBJECT TO PROVISIONS OF THE MINNESOTA BUSINESS CORPORATION ACT, INCLUDING THE CONTROL SHARE ACQUISITION PROVISIONS, WHICH MAY INHIBIT A THIRD-PARTY ACQUISITION.

We are subject to the application control share acquisition provisions of the Minnesota Business Corporation Act. The control share acquisition provisions generally prohibits any business combination by us or our subsidiary with any shareholder that purchases ten percent or more of our voting shares within four years following such interested shareholder's share acquisition date, unless the business combination is approved by a committee of all the disinterested members of our Board of Directors before the interested shareholder's share acquisition date.

MATERIAL CHANGES

The following discussion describes the material changes to our business affairs since the filing of our annual report on Form 10-KSB for the fiscal year ended March 31, 2003.

RETENTION OF OUR ELIGIBILITY TO COMPETE FOR SMALL BUSINESS INNOVATION RESEARCH (SBIR) CONTRACTS.

On July 1, 2003 we announced that the United States Small Business Administration had found us ineligible to compete for Small Business Innovation Research (SBIR) awards because of our ownership structure. Our largest shareholder, Norwest Equity Partners IV, L.P., transferred most of its holdings to an individual (who is the selling shareholder named in this Prospectus) to facilitate NVE's recertification efforts. On July 21, 2003 we were notified that we had been recertified as eligible to compete for awards under the SBIR program. The brief period of ineligibility did not have a significant impact on our SBIR revenue or total revenue.

While we believe we currently meet the eligibility requirements for SBIR awards, we cannot control who purchases our common stock. Furthermore, if all or a substantial portion of the shares offered through this Prospectus are purchased by or distributed to non-individuals, we could once again become ineligible to compete for SBIR awards. While brief ineligibility was not material earlier this year, an extended period of ineligibility causing reduction in the amount of such awards, which historically has accounted for a significant portion of our revenue, would be materially adverse to future revenue.

SALE OF SHARES BY JAMES M. DAUGHTON.

On August 25, 2003 we announced that James M. Daughton, an officer and director of NVE, completed the sale of 213,700 shares of our common stock on the open market pursuant to Rule 144 under the Securities Act of 1933, as amended. Dr. Daughton continues to own 216,800 shares of our common stock. We were informed by Dr. Daughton that he sold the shares for estate-planning purposes and was planning to hold his remaining shares indefinitely.

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SALE OF SHARES BY CYPRESS SEMICONDUCTOR CORPORATION--CYPRESS MRAM SCHEDULE DELAYED.

On September 5, 2003 Cypress Semiconductor Corporation announced that it had sold on the open market all of the 686,849 shares of our common stock it had held pursuant to Rule 144 under the Securities Act of 1933, as amended. Cypress retains warrants to purchase 408,000 shares of our common stock at various prices and expiration dates. Cypress announced, in a press release relating to the sale, that the Cypress MRAM development is taking slightly longer than expected, and the profit from the NVE investment will be used for continuing MRAM development and other research and development. Cypress also announced that it intends to sample a working MRAM within the next year and that it would continue to honor its partnership with NVE, including sharing MRAM intellectual property and supplying NVE with MRAM foundry wafers. Cypress further stated that it intended to maintain its NVE board seat, although we are no longer obligated to nominate a Cypress designee to our Board of Directors.

We have rights to Cypress' designs, mask works, and other intellectual property, so any delays in Cypress' programs also delay the potential availability of devices that we could sell under our agreement with Cypress.

USE OF PROCEEDS

The selling shareholder is offering all of the shares to be sold under this Prospectus. We will not receive any of the proceeds from the offer and sale of the shares.

SELLING SHAREHOLDERS

John P. Whaley acquired the shares to be registered from Norwest Equity Partners IV, L.P. on July 10, 2003. Pursuant to a prior agreement between NVE and Norwest there were certain registration rights attached to the shares. The registration rights transferred from Norwest to John P. Whaley with the purchase of the securities. Norwest is a Minnesota limited partnership, of which Itasca Partners, LLP, a Minnesota limited liability partnership, is the general partner. John E. Lindahl and George J. Still, Jr. are the managing partners of Itasca Partners and John P. Whaley is the managing administrative

partner of Itasca Partners. Due to the operation of a price adjustment mechanism contained in the stock purchase agreement whereby John P. Whaley purchased the shares, Norwest retained the economic risk for the ownership of the shares and may be deemed to be the indirect beneficial owner of those shares. John P. Whaley also beneficially owns shares that are not covered by this Prospectus. Combined, the number of shares of our common stock beneficially owned by John P. Whaley represents 28.4% of our total shares. Our registration of these shares of common stock for resale does not necessarily mean that the selling shareholder will sell all or any of his shares. In this Prospectus, when we refer to the "selling shareholder" we are referring to Mr. Whaley and any pledgees, donees, transferees or other successors in interest who receive shares from Mr. Whaley in non-sale transactions, including without limitation, Norwest and Wells Fargo & Company, a limited partner in Norwest.

The following table sets forth the number of shares owned by the selling shareholder as of September 22, 2003. The information provided in the table below with respect to the selling shareholder has been obtained from such selling shareholder. The selling shareholder has not had a material relationship with us within the past three years other than as described below or as a result of the ownership of the shares or other securities of NVE Corporation. No estimate can be given as to the amount of shares that will be held by the selling shareholder after completion of this offering because the selling shareholder may offer all or only some of the shares and because there currently are no agreements, arrangements or understandings with respect to the

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sale of the shares. The shares offered by this Prospectus may be offered from time to time by the selling shareholder named below.

Name of Selling Shareholder	Shares Beneficially Owned (1)	Percentage	Number of Shares Which May be Sold Pursuant to this Prospectus (2)
John P. Whaley (3)	1,221,716	28.4%	1,221,487

PLAN OF DISTRIBUTION

The sale of the shares offered by this Prospectus may be made in the NASDAQ SmallCap Market or other over-the-counter markets at prices and at terms then prevailing or at prices related to the then current market price or in negotiated transactions. These shares may be sold by one or more of the following:

- * A block trade in which the broker or dealer will attempt to sell shares as agent but may position and resell a portion of the block as principal to facilitate the transaction.
- * Purchases by a broker or dealer as principal and resale by a broker or dealer for its account using this Prospectus.
- * Ordinary brokerage transactions and transactions in which the broker

solicits purchasers.

- * In privately negotiated transactions not involving a broker or dealer.
- * In any method permitted pursuant to applicable law.

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Each sale may be made either at market prices prevailing at the time of such sale, at negotiated prices, at fixed prices which may be changed, or at prices related to prevailing market prices.

In effecting sales, brokers or dealers engaged to sell the shares may arrange for other brokers or dealers to participate. Brokers or dealers engaged to sell the shares will receive compensation in the form of commissions or discounts in amounts to be negotiated immediately prior to each sale. These brokers or dealers and any other participating brokers or dealers may be deemed to be underwriters within the meaning of the Securities Act of 1933 in connection with these sales. We will receive no proceeds from any resales of the shares offered by this Prospectus, and we anticipate that the brokers or dealers, if any, participating in the sales of the shares will receive the usual and customary selling commissions.

In connection with distributions of the shares or otherwise, the selling shareholder may enter into hedging transactions with broker-dealers. In connection with such transactions, broker-dealers may engage in short sales of the shares registered hereunder in the course of hedging the positions they assume with the selling shareholders. The selling shareholder may also sell shares short and deliver the shares to close out such short positions. The selling shareholder may also enter into option, swaps, derivatives or other transactions with broker-dealers that require the delivery to the broker-dealer of the shares covered by this Prospectus, which the broker-dealer may resell pursuant to this Prospectus. The selling shareholder may also pledge the shares registered hereunder to a broker or dealer and upon a default, the broker or dealer may effect sales of the pledged shares pursuant to this Prospectus.

From time to time the selling shareholder may be engaged in short sales, short sales against the box, puts and calls and other hedging transactions in our securities, and may sell and deliver the shares covered by this Prospectus in connection with such transactions or in settlement of securities loans. These transactions may be entered into with broker-dealers or other financial institutions. In addition, from time to time, the selling shareholder may pledge his shares pursuant to the margin provisions of its customer agreements with its broker-dealer. Upon delivery of the shares or a default by the selling shareholder, the broker-dealer or financial institution may offer and sell the pledged shares from time to time.

To comply with the securities laws of some states, if applicable, the shares will be sold in those states only through brokers or dealers. In addition, in some states, the shares may not be sold in those states unless they have been registered or qualified for sale in those states or an exemption from registration or qualification is available and is satisfied.

If necessary, the specific shares of our common stock to be sold, the name of the selling shareholder, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this Prospectus is a part.

Under applicable rules and regulations under Regulation M under the

Securities Exchange Act of 1934, any person engaged in the distribution of the common stock generally may not simultaneously engage in market making activities with respect to the common stock for a specified period set forth in Regulation M prior to the commencement of such distribution and until its completion. In addition, the selling shareholder will be subject to the applicable provisions of the Securities Act of 1933 and Securities Exchange Act of 1934 and the rules and regulations thereunder, which may limit the timing of purchases and sales of shares of the common stock by the selling shareholder. The foregoing may affect the marketability of the common stock.

The selling shareholder will pay any applicable underwriting commissions and expenses, brokerage fees, transfer taxes, and fees and disbursements of counsel and accountants for the selling shareholder in connection with the registration of his shares. We will bear all other expenses in connection with

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the offering and sale of the shares. We have agreed to indemnify and hold harmless the selling shareholder from certain liabilities under the Securities Act of 1933. The selling shareholder also has agreed to indemnify us against certain liabilities in connection with the registration and the offering and sale of the shares.

DESCRIPTION OF SECURITIES

General

Our articles of incorporation authorize our Board of Directors to issue 10,000,000 shares of capital stock, including 6,000,000 shares of common stock, \$0.01 par value, and 4,000,000 shares of undesignated stock, with rights, preferences and privileges as are determined by our board of directors. At present, we have no plans to authorize or issue any shares of preferred stock.

Common Stock

As of September 24, 2003 we had 4,305,430 shares of common stock outstanding. All outstanding shares of our common stock are fully paid and nonassessable. The following is a summary of the material rights and privileges of our common stock.

Voting. Holders of our common stock are entitled to cast one vote for each share held at all shareholder meetings for all purposes, including the election of Directors. The holders of more than 50% of the voting power of our common stock issued and outstanding and entitled to vote and present in person or by proxy constitute a quorum at all meetings of our shareholders. The vote of the holders of a majority of our common stock present and entitled to vote at a meeting will decide any question brought before the meeting, except when Minnesota law, our articles of incorporation or our bylaws require a greater vote. Holders of our common stock do not have cumulative voting for the election of directors.

Dividends. Holders of our common stock are entitled to dividends when, as and if declared by the board of directors out of funds available for distribution. The payment of any dividends may be limited or prohibited by loan agreement provisions or priority dividends for preferred stock that may be outstanding.

Preemptive Rights. The holders of our common stock have no preemptive rights to subscribe for any additional shares of any class of our capital stock

or for any issue of bonds, notes or other securities convertible into any class of our capital stock.

Liquidation. If we liquidate or dissolve, the holders of each outstanding share of our common stock will be entitled to share equally in our assets legally available for distribution to our shareholders after payment of all liabilities and after distributions to holders of preferred stock legally entitled to be paid distributions prior to the payment of distributions to holders of our common stock.

LEGAL MATTERS

Gray, Plant, Mooty, Mooty & Bennett, P.A., Minneapolis, Minnesota, has issued an opinion about the legality of the shares registered by this Prospectus.

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EXPERTS

The consolidated financial statements of NVE Corporation appearing in NVE Corporation's Annual Report (Form 10-KSB) for the year ended March 31, 2003, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's public reference room located at 450 Fifth Street, N.W., Washington, D.C. 20549, and at the SEC's public reference rooms located at its regional offices in New York, New York and Chicago, Illinois. Please call the SEC at 1-800-SEC-0330 for further information on the operation of public reference rooms. You can also obtain copies of these materials from the SEC's Internet web site located at http://www.sec.gov. In addition, you can read and copy our SEC filings at the office of the National Association of Securities Dealers, Inc. at 1735 K Street, Washington, D.C. 20006.

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this Prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934.

- * Our Annual Report on Form 10-KSB for the year ended March 31, 2003.
- * Our definitive Proxy Statement on Schedule 14A, filed June 2, 2003.
- * Our report filed on Form 8-K, filed April 24, 2003.
- * Our report filed on Form 8-K, filed June 20, 2003.
- * Our report filed on Form 8-K, filed June 27, 2003.

- * Our Quarterly Report on Form 10-QSB for the quarter ended June 30, 2003.
- * The description of our common stock is contained in our report on Form 8-K, filed on December 6, 2000, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing, telephoning or sending an electronic message to us at the following:

NVE Corporation Investor Relations 11409 Valley View Road Eden Prairie, Minnesota 55344 (952) 829-9217 www.nve.com

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This Prospectus is part of a registration statement we filed with the SEC. You should rely only on the information or representations provided in this Prospectus. We have authorized no one to provide you with different information. The selling shareholders will not make an offer of these shares in any state where the offer is not permitted. You should not assume that the information in this Prospectus is accurate as of any date other than the date on the front page of this Prospectus.

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INDEMNIFICATION

Our articles of incorporation provide that our directors shall not be personally liable to us or our shareholders for breach of fiduciary duty, except for:

- * Any breach of the director's duty of loyalty;
- * Acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- * Liability resulting from the authorization of an improper distribution;
- * Any transaction from which the director received an improper personal benefit; or
- * Any act or omission occurring prior to November 21, 2002.

Our articles of incorporation also provide that we shall indemnify our directors to the fullest extent permitted under Minnesota law. Although indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons under these provisions, we have been advised that, in the opinion of the SEC, indemnification for liabilities arising under the Securities Act of 1933 is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

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No dealer, salesperson or any other person has been authorized to give any information or to make any representations other than those contained in this Prospectus in connection with the offer made by this Prospectus and, if given or made, the information or representations must not be relied upon as having been authorized by us. This Prospectus does not constitute an offer to sell or the solicitation of any offer to buy any security other than the securities offered by this Prospectus, nor does it constitute an offer to sell or a solicitation of any offer to buy the securities offered by this Prospectus by anyone in any jurisdiction in which the offer or solicitation is not authorized, or in which the person making the offer or solicitation is not qualified to do so, or to any person to whom it is unlawful to make an offer or solicitation. Neither the delivery of this Prospectus nor any sale made under this Prospectus shall, under any circumstances, create any implication that information contained in this Prospectus is correct as of any time subsequent to the date of this Prospectus.

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1,221,487 Shares

NVE CORPORATION

Common Stock

PROSPECTUS

October 9, 2003