SIMTEK CORP Form POS AM June 01, 2007

As filed with the Securities and Exchange Commission on June 1, 2007

Registration 333-132180

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 2 ON FORM S-3 TO FORM S-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

SIMTEK CORPORATION (Exact name of registrant as specified in its charter)

Delaware State or other jurisdiction (Primary Standard organization)

ce or other jurisdiction (Primary Standard (I.R.S. Employer of incorporation or Industrial Classification Identification No.) Code Number)

3674

84-1057605 (I.R.S. Employer

4250 Buckingham Dr. #100 Colorado Springs, Colorado 80907 (719) 531-9444

(Address, including zip code, and telephone number, including area code, of Principal Executive Offices)

Harold Blomquist

Chief Executive Officer and President Simtek Corporation 4250 Buckingham Dr. #100 Colorado Springs, CO 80907 (719) 531-9444

(Name, address, including zip code and telephone number, including area code, of agent for service)

Copies to:

Hendrik F. Jordaan, Esq. Garth B. Jensen, Esq. Holme Roberts & Owen LLP 1700 Lincoln, Suite 4100 Denver, Colorado 80203 (303) 861-7000

Approximate Date of Commencement of Proposed Sale to the Public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following

box: []

If] any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, please check the following box: [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. []

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. []

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant 9shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

This Post-Effective Amendment No. 2 on Form S-3 contains an updated prospectus relating to the offering and sale by the selling securityholders of shares of common stock currently issued and outstanding and shares that are issuable upon exercise of outstanding stock purchase warrants and debentures, all of which common stock was included in a combined prospectus that was registered on the Registration Statement on Form S-1 (File No. 333-132180) initially declared effective by the Securities and Exchange Commission on April 28, 2006. This Post-Effective Amendment No. 2 on Form S-3 is being filed to convert such Registration Statement on Form S-1 into a Registration Statement on Form S-3. All filing fees payable in connection with the registration of these securities were previously paid in connection with the filing of the original registration statements.

Pursuant to Rule 429 under the Securities Act of 1933, as amended, this registration statement contains a combined prospectus that also relates to shares of common stock registered on Form S-2 (File No. 333-126041), which have not been offered or sold as of the date of the filing of this registration statement. This registration statement constitutes a post-effective amendment to the prior related registration statement, pursuant to which the total amount of unsold previously registered securities may be offered and sold as any of the securities registered hereunder, and such post-effective amendment shall hereafter become effective concurrently with the effectiveness of this registration statement and in accordance with Section 8(c) of the Securities Act of 1933, as amended. If the previously registered securities are offered and

sold prior to the effective date of this registration statement, the amount of previously registered securities so sold will not be included in the prospectus hereunder.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS (SUBJECT TO COMPLETION) DATED JUNE 1, 2007

11,392,457 Shares

SIMTEK CORPORATION

Common stock

This prospectus is being used to register 11,392,457 shares of Simtek Corporation's common stock being offered by the selling security holders, which include certain of our current and former officers and directors. Of the shares offered by this prospectus 8,161,672 shares are currently issued and outstanding, 1,227,273 shares are issuable upon conversion of convertible debentures at \$2.20 per share and 2,003,512 shares are issuable upon exercise of outstanding stock purchase warrants with exercise prices ranging from \$2.65 to \$15.00 per share.

The selling security holders may from time to time offer and sell the shares offered under this prospectus in a number of different ways and at varying prices. We provide more information about how the selling security holders may sell the shares in the section entitled "Plan of Distribution" beginning on page 18. The selling security holders will receive all of the proceeds from the sale of the shares. The selling security holders will pay all underwriting discounts and selling commissions, if any, applicable to the sale of the shares. We will not receive any proceeds from the sale of the shares, although we will receive the exercise price payable to us upon the exercise of the stock purchase warrants.

Our common stock is listed on The NASDAQ Capital Market under the symbol "SMTK". On May 30, 2007, the closing sale price of our common stock was \$5.46 per share.

See "Risk Factors" beginning on page 4 to read about factors you should consider before buying our stock.

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

The date of this prospectus is June 1, 2007.

TABLE OF CONTENTS

Summary3
Risk Factors4
Special Note Regarding Forward-Looking Statements
Use of Proceeds
Selling Security Holders
Description of Securities16
Plan of Distribution
Legal Matters
Experts
Available Information

2

SUMMARY

This summary highlights selected information from this prospectus and the documents incorporated by reference into this prospectus. This summary does not contain all of the information that may be important to you. Please carefully read the entire prospectus and the documents incorporated by reference.

Our Company

Simtek Corporation is a fabless semiconductor company that designs and markets high-speed non-volatile semiconductor memory products for use in a variety of systems including RAID servers, storage arrays, GPS navigational systems, industrial controllers, robotics, copiers, avionics, metering, and networking and broadcast equipment. The company is headquartered in Colorado Springs, Colorado, and was founded in 1987. In addition, Simtek has design and sales offices in San Diego, California, and Dresden, Germany.

Our principal executive office is located at 4250 Buckingham Dr. #100; Colorado Springs, Colorado 80907. Our telephone number is 719-531-9444.

The Offering

This offering relates to a total of 2,351,155 shares of our common stock that may be resold by the selling security holders. Of the shares offered by this prospectus 1,153,171 shares are currently issued and outstanding and 1,197,984 shares are issuable upon exercise of outstanding stock purchase warrants with exercise prices ranging from \$3.30 to \$7.50 per share. The shares offered include 103,356 shares held by (or issuable to) various of our officers and 58,230 shares held by (or issuable to) affiliates of one of our directors. See "Selling Security Holders."

We will receive no proceeds from this offering.

3

RISK FACTORS

YOU SHOULD CONSIDER CAREFULLY THE FOLLOWING RISK FACTORS, AS WELL AS THE OTHER INFORMATION IN THIS PROSPECTUS AND THE DOCUMENTS INCORPORATED BY REFERENCE BEFORE BUYING OUR SHARES. THE SEMICONDUCTOR INDUSTRY IS CHANGING RAPIDLY. THEREFORE, THE FORWARD-LOOKING STATEMENTS AND STATEMENTS OF EXPECTATIONS, PLANS AND INTENT IN THIS PROSPECTUS AND THE DOCUMENTS INCORPORATED BY REFERENCE ARE SUBJECT TO A GREATER DEGREE OF RISK THAN SIMILAR STATEMENTS REGARDING SOME OTHER INDUSTRIES.

OUR LIMITED OPERATING CAPITAL AND OUR ABILITY TO RAISE ADDITIONAL MONEY MAY HARM OUR ABILITY TO DEVELOP AND MARKET OUR PRODUCTS AS WELL AS SUPPORT FUTURE REVENUE GROWTH

To date, we have required significant capital for product development, subcontracted production and marketing. We have funded these from the sale of products, the sale of product and technology licenses and from royalties as well as from the sale of our convertible debt and equity securities.

In recent months, we have experienced significant revenue growth. In order to support that growth, we must order more silicon wafers than we have historically. The cash required for inventory purchases, including silicon wafers, has been greater than the cash generated from sales. Therefore, our cash requirements have been difficult to maintain. We may need more capital in the future to develop new products and support higher revenue. We cannot guarantee that we will be able to raise more capital on reasonable terms, if at all. If we cannot, then we may not be able to purchase adequate amounts of inventory to support revenue growth or to develop and market new products, causing our financial position and stock price to deteriorate.

WE HAVE A HISTORY OF OPERATING LOSSES

We began business in 1987. Through March 31, 2006, we had accumulated losses of approximately \$48.7 million. Since July 1, 2000 and through September

30, 2006, we realized net losses. While we posted a net profit for the fourth quarter of 2006 and an ex-item profit for the first quarter of 2007, we may experience net operating losses in the future, which could increase our need for additional capital in the future, and hurt our stock price.

WE MIGHT NOT BE ABLE TO RE-GAIN COMPLIANCE WITH CERTAIN COVENANTS SET FORTH IN OUR LOAN AGREEMENT WITH THE RENN CAPITAL GROUP; IF WE ARE UNABLE TO DO SO, THE RENN CAPITAL GROUP COULD ACCELERATE THE \$2.1 MILLION DEBENTURE AND FORECLOSE ON THE COLLATERAL THAT WE GRANTED TO IT

Our loan agreement with Renaissance Capital Growth and Income Fund III, Inc., Renaissance US Growth Investment Trust PLC and US Special Opportunities Trust PLC, or the RENN Capital Group, formerly Renaissance Capital Group, Inc., contains various financial covenants. As of March 31, 2007, we were not in compliance with one of the covenants set forth in the loan agreement, which relates to the interest coverage ratio. On May 4, 2007, the Company received a waiver from complying with this covenant through April 1, 2008. However, significant variances in future actual operations from our current estimates could result in the reclassification of this note to a current liability. If the note becomes due and we cannot pay it, RENN Capital Group may foreclose on the assets that we pledged as security for the note. This would significantly harm our business.

IF WE CANNOT RECEIVE SILICON WAFERS WE REQUIRE TO MANUFACTURE OUR PRODUCTS FROM OUR VENDORS AT THE VOLUMES OR THE PRICES WE REQUIRE, OUR REVENUES, EARNINGS AND STOCK PRICE COULD SUFFER

We currently purchase the silicon wafers we require to build our non-volatile memory products from two vendors, Chartered Semiconductor Manufacturing Plc. of Singapore, and Dongbu in Korea. Due to the volatility of the semiconductor market, we have limited control over the pricing and availability of the wafers we require in order to build our products. The risk of not receiving the products and pricing we need to achieve our revenue objectives has escalated. If we are unable to obtain the products and pricing we need from these vendors, our business could suffer.

4

THE UNCERTAINTY INVOLVED IN MANUFACTURING SEMICONDUCTORS MAY INCREASE THE COSTS AND DECREASE THE PRODUCTION OF OUR PRODUCTS

In order for us to be profitable, we must drive our manufacturing costs down and secure the production of sufficient product. Semiconductor manufacturing depends on many factors that are complex and beyond our control and often beyond the control of our subcontractors. These factors include contaminants in the manufacturing environment, impurities in the raw materials used and equipment malfunctions. Under our arrangements with our subcontractors, our subcontractors pass on to us substantially all of their costs that are unique to the manufacture of our products. Accordingly, these factors could increase the cost of manufacturing our products and decrease our profits. These factors could also reduce the number of semiconductor memories that our subcontractors are able to make in a production run. If our subcontractors produce fewer of our products, our revenues may decline.

DELAYS IN MANUFACTURING MAY NEGATIVELY IMPACT OUR REVENUE AND NET INCOME

It takes approximately four months for our subcontractors to manufacture our semiconductor products. Any delays in receiving silicon wafers or completed

products from our subcontractors will delay our ability to deliver our products to customers. This would delay sales revenue and could cause our customers to cancel existing orders or not place future orders. These delays could occur at any time and would adversely affect our net income.

DELAYS IN OR FAILURE OF PRODUCT QUALIFICATION MAY HARM OUR BUSINESS

Prior to selling a product, we must establish that it meets expected performance and reliability standards. As part of this testing process, known as product qualification, we subject representative samples of products to a variety of tests to ensure that performance is in accordance with commercial, industrial and military specifications, as applicable. If we are unable to successfully accomplish product qualification for our future products, we will be unable to sell these future products.

OUR SUCCESS DEPENDS ON OUR ABILITY TO INTRODUCE NEW PRODUCTS

The semiconductor industry is characterized by rapid changes in technology and product obsolescence. Our success in the semiconductor industry depends in part upon our ability to expand our existing product families and to develop and market new products. The technology we currently use may be made obsolete by other competing or newly developed memory or other technologies. The development of new semiconductor designs and technologies typically requires substantial costs for research and development. Even if we are able to develop new products, the success of each new product depends on several factors including whether we selected the proper product and our ability to introduce it at the right time, whether the product is able to achieve acceptable production yields and whether the market accepts the new product. We cannot guarantee that we will be successful in developing new products or whether any products that we do develop will satisfy the above factors.

THE CYCLICALITY OF THE SEMICONDUCTOR INDUSTRY MAY PREVENT US FROM MAINTAINING A CONSISTENT REVENUE STREAM AND MAY HARM OUR STOCK PRICE

The semiconductor industry has historically experienced significant peaks and valleys in sales volumes resulting in large variations of revenues and resulting profits or losses. We do not have direct influence on the nature of the broad semiconductor market. Variations in the revenues and profits within the semiconductor industry may cause us to incur significant losses in the future. If the stock prices of many semiconductor companies decrease, our stock price may also suffer.

IF WE FAIL TO COMPLETE OUR AGREEMENT OR IF WE FAIL TO SUCCESSFULLY IMPLEMENT PRODUCTS WITH CYPRESS SEMICONDUCTOR, OUR LIQUIDITY AND REVENUES MAY SUFFER

On May 5, 2005, we closed a production and development agreement with Cypress Semiconductor Corporation to jointly develop an "S8" 0.13-micron silicon-oxide-nitride-oxide-silicon (SONOS) nonvolatile memory production process. The production and development agreement also calls for Cypress to

5

produce one or more Simtek products, as designated by Simtek, using the S8 process. We cannot assure you that we will be able to successfully develop and bring to qualified volume production products based on the S8 process or that Cypress will be able to develop embedded products contemplated to be developed

using Simtek's intellectual property. If the development of the S8 process is delayed or fails, or if Cypress is unable to meet our production requirements, we might not be able to meet potential future orders planned to be received from our customers. This could significantly harm our revenue and future growth potential. We also entered into an escrow agreement pursuant to which we deposited \$3 million into an escrow account in order to support and make certain payments for the S8 process and product developments. If we fail to complete the development and production agreement, we might forfeit our rights to the escrow amount.

CERTAIN OF OUR REGISTRATION RIGHTS AGREEMENTS PROVIDE FOR PENALTIES IF WE FAIL TO FOLLOW CERTAIN PROCEDURES OR MAINTAIN AN EFFECTIVE REGISTRATION RELATED TO THE SHARES PURCHASED BY SUCH INVESTORS

The Registration Rights Agreement entered into as part of the December 30, 2005 Securities Purchase Agreement amounting to \$11,000,000 contained a cash penalty provision if certain procedures are not followed or an effective Registration Statement is not maintained for the shares purchased by investors in such transaction. The cash penalties are 2% of the proceeds for each month that a breach occurs. We cannot assure you that we will be able to maintain such effective Registration Statement.

The Registration Rights Agreement entered into as part of the September 21, 2006 Securities Purchase Agreement amounting to \$4,555,000 contained a provision whereby the investors therein would receive certain amounts of penalty shares if certain procedures are not followed or an effective Registration Statement is not maintained for the shares purchased by the investors. The penalties are 2% of the shares purchased for each month that a breach occurs. We cannot assure you that we will be able to follow the required procedures or obtain or maintain such effective Registration Statement.

THE INTENSE COMPETITION IN THE SEMICONDUCTOR INDUSTRY MAY CAUSE US TO LOSE SALES REVENUE TO OTHER SUPPLIERS

There is intense competition in the semiconductor industry. We experience competition from a number of domestic and foreign companies, most of which have significantly greater financial, technical, manufacturing and marketing resources than we have. Our competitors include major corporations with worldwide silicon wafer fabrication facilities and circuit production facilities and diverse, established product lines. If any of our new products achieve market acceptance, other companies may sell competitive products at prices below ours. This would have an adverse effect on our revenue and operating results.

THE LOSS OF KEY EMPLOYEES COULD MATERIALLY AFFECT OUR FINANCIAL RESULTS

Our success depends in large part on our ability to attract and retain qualified technical and management personnel. There are limited personnel trained in the semiconductor industry resulting in intense competition for these personnel. If we lose any of our key personnel, this could have a material adverse affect on our ability to conduct our business and on our financial results.

OUR PATENTS MAY NOT PROVIDE US EFFECTIVE INTELLECTUAL PROPERTY PROTECTION; THIS COULD HARM OUR BUSINESS

We own 15 U.S. patents and one German patent. We have also applied inside and outside the United States for patents on our technology. We are not sure that any of the patents for which we have applied will be issued or, even if they are issued, that they will provide us with desired protection from competition. We may also not have the money required to maintain or enforce our patent rights. Notwithstanding our patents, other companies may obtain patents directed to alternate or comparable technologies.

Portions of our intellectual property are retained as trade secrets. Unlike patents, trade secrets must remain confidential in order to retain protection as proprietary intellectual property. We cannot assure you that our trade secrets will remain confidential. If we lose trade secret protection, our business could suffer.

6

IF OUR PRODUCTS AND TECHNOLOGY INFRINGE ON THIRD PARTY PATENTS, OUR PRODUCT SALES OR GROSS MARGINS MAY SUFFER

We have not determined whether our products are free from infringement of others' patents. If patent infringement claims are asserted against us and are upheld, we would try to modify our products so that they are non-infringing. If we are unable to do so, we will have to obtain a license to sell those products or stop selling the products for which the claims are asserted. We may not be able to obtain the required licenses. Any successful infringement claim against us, our failure to obtain any required license or requirement for us to stop selling any of our products, may force us to discontinue production and shipment of these products. This could result in reduced product sales and harm our revenues.

In 1998, we received notice of a claim for an unspecified amount from a foundation that owns approximately 180 patents and 70 pending applications. The foundation claimed that some of the machines and processes used in the building of our semiconductor devices infringe on the foundation's patents. In April 1999, we reached an agreement with the foundation for us to purchase a nonexclusive license of the foundation's patents, based on our product offerings and sales forecast at that time. If our products or actual sales revenue vary significantly from the time of the agreement, we may be subject to additional payments.

In late 2002, we received notice of possible patent infringement from a corporation that has acquired a portfolio of patents. We have reviewed the claim and believe there are no potential infringements. We have received no further notification from this corporation. While there can be no assurances, if there are any infringements, we believe we would be able to enter into a licensing agreement with such company without any material impact on us.

FOREIGN CURRENCY EXCHANGE RATE FLUCTUATIONS MAY INCREASE OUR COSTS, LOWER OUR REVENUES AND CAUSE LOSS OF CUSTOMERS TO OUR COMPETITORS

We purchase materials, including silicon wafers, from outside the United States. Sales to customers located outside of the United States for the years ended December 31, 2006, 2005 and 2004 were 73%, 74% and 71%, respectively. We operate using United States dollars as the functional currency. Changes in foreign currency exchange rates can reduce our revenues and increase our costs. For example, our subcontractors may increase the prices they charge us, on a per purchase order basis, for silicon wafers if the United States dollar weakens. Any large exchange rate fluctuation could affect our ability to compete with manufacturers who operate using foreign currencies. We do not try to reduce our exposure to these exchange rate risks by using hedging transactions. Although we have not had any material losses due to exchange rate fluctuations over the last three years, we cannot assure you that we will not incur significant losses in the future.

IF WE ISSUE SECURITIES AT LOW PRICES IN THE FUTURE, SOME OF OUR SECURITY HOLDERS MAY BE ENTITLED TO ACQUIRE MORE OF OUR SECURITIES, WHICH MAY DILUTE AND HARM THE HOLDERS OF OUR COMMON STOCK

We may be obligated under agreements with certain of our security holders to issue to them additional securities in exchange for little or no consideration if we sell our securities in the future at or below certain prices. The issuance of such securities could dilute and harm the holders of our common stock.

BECAUSE WE DO NOT INTEND TO PAY DIVIDENDS IN THE FORESEEABLE FUTURE, YOUR INVESTMENT RETURN MAY BE LIMITED

We have never paid cash dividends on our common stock. We do not expect to pay dividends in the foreseeable future. We intend to use any earnings to finance growth. You should not expect to receive dividends on your shares of common stock.

IF OUR BOARD OF DIRECTORS AUTHORIZES THE ISSUANCE OF PREFERRED STOCK, HOLDERS OF OUR COMMON STOCK COULD BE DILUTED AND HARMED

Our board of directors has the authority to issue up to 200,000 shares of preferred stock in one or more series and to establish the preferred stock's voting powers, preferences and other rights and qualifications without any further vote or action by the shareholders. The issuance of preferred stock by

7

our board of directors could dilute and harm the rights of the holders of our common stock. It could potentially be used to discourage attempts by others to obtain control of us through merger, tender offer, proxy contest or otherwise by making such attempts more difficult to achieve or more costly. Given our present capital requirements, it is possible that we could raise capital through the sale of preferred stock in the future.

OUR CERTIFICATE OF INCORPORATION AND DELAWARE LAW MAY OPERATE AS ANTI-TAKEOVER PROTECTIONS AND THUS MAY DISCOURAGE TAKEOVER ATTEMPTS AND/OR DEPRESS THE MARKET PRICE OF OUR COMMON STOCK

We have opted to be governed, in our Delaware certificate of incorporation, by Section 203 of the Delaware General Corporation Law, which provides for a three-year moratorium on certain business combination transactions with "interested stockholders" (generally, persons who beneficially own 15% or more of the corporation's outstanding voting stock). Although we believe that Section 203 will encourage any potential acquirer to negotiate with our board of directors, Section 203 also might have the effect of limiting the ability of a potential acquirer to make a two-tiered bid for the company in which all stockholders would not be treated equally. In addition, Section 203 gives the board the power to reject a proposed business combination in certain circumstances, even though a potential acquirer may be offering a substantial premium for our common stock over the then-current market price. Section 203 would also discourage certain potential acquirers who are unwilling to comply with its provisions.

Because a proposed amendment to our certificate of incorporation may not be submitted to a vote of shareholders without the approval of the board of directors, amending or removing any provisions in our certificate of

incorporation that have anti-takeover effects requires the consent of the board of directors, which in turn may have anti-takeover effects.

STANDARDS FOR COMPLIANCE WITH SECTION 404 OF THE SARBANES-OXLEY ACT OF 2002 ARE UNCERTAIN, AND IF WE FAIL TO COMPLY IN A TIMELY MANNER, OUR BUSINESS COULD BE HARMED AND OUR STOCK PRICE WOULD DECLINE.

Rules adopted by the Securities and Exchange Commission pursuant to Section 404 of the Sarbanes-Oxley Act require annual assessment of our internal control over financial reporting, and attestation of our assessment by our independent auditors. This requirement may apply to our Annual Report on Form 10-K for the fiscal year ending December 31, 2007. The standards that must be met for management to assess the internal control over financial reporting as effective are new and complex, and require significant documentation, testing and possible remediation to meet the detailed standards. We may encounter problems or delays in completing activities necessary to make an assessment of our internal control over financial reporting. In addition, the attestation process by our independent auditors is new and we may encounter problems or delays in completing the implementation of any requested improvements or remediation and receiving an attestation of our assessment by our independent auditors. We can provide no assurance as to our, or our independent auditors', conclusions at December 31, 2007, with respect to the effectiveness of our internal control over financial reporting. The above factors creates a risk that we, or our independent auditors, will not be able to conclude at December 31, 2007 that our internal controls over financial reporting are effective as required by the Sarbanes-Oxley Act. If we cannot assess our internal control over financial reporting as effective, or if our independent auditors are unable to provide an unqualified attestation report on such assessment, investors could lose confidence in our reported financial information and the trading price of our stock could drop.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains some "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 and information relating to us that are based on the beliefs of our management, as well as assumptions made by and the information currently available to our management. When used in this prospectus, the words "estimate," "project," "believe," "anticipate," "intend," "expect" and similar expressions are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in these forward-looking statements, including those risks discussed in this prospectus.

8

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus. Except for special circumstances in which a duty to update arises when prior disclosure becomes materially misleading in light of subsequent circumstances, we do not intend to update any of these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

This prospectus covers 11,392,457 shares. All of these shares are being offered by the selling security holders, which include some of our current and former officers and directors. We will not receive any proceeds from the sale of the shares.

9

SELLING SECURITY HOLDERS

Beneficial ownership is determined in accordance with the rules and regulations of the Securities and Exchange Commission. Under these rules, a person is deemed to beneficially own a security if that person has or shares voting power or investment power with respect to that security, or has the right

to acquire beneficial ownership of that security within 60 days, including through the exercise of any option, warrant or other right or the conversion of any other security. Percentage of beneficial ownership of common stock prior to and after the offering is based on 16,501,906 shares of common stock outstanding as of May 14, 2007. Securities that are exercisable or convertible into shares of our common stock within 60 days of the date of this prospectus are deemed outstanding for computing the percentage of the person or entity holding such securities but are not deemed outstanding for computing the percentage of any other person or entity.

The following table sets forth information about the selling security holders who are selling shares of our common stock pursuant to this prospectus. Information about the natural persons who beneficially own our securities held by the entities listed in the table below has been provided to us by these entities.

Name and Address of Selling Security Holders	Number of Shares Beneficially Owned Before Offering	Number of Shares Offered	Number Share Followin Offering
Cypress Semiconductor Corporation (2) 3901 North First Street San Jose, CA 95134-1599	3,179,644	2,179,644	1,000,
Crestview Capital Master LLC (3) 95 Revere Drive, Suite A Northbrook, IL 60062	2,687,463	2,429,644	257,
Big Bend XXVII Investments, L.P. (4) 3401 Armstrong Avenue Dallas, TX 75205-4100	1,553,956	1,437,500	116,
Toibb Investment LLC (5) 6355 Topanga Canyon Blvd., Suite 335 Los Angeles, CA 91367	1,125,000	1,125,000	0
Renaissance Capital Growth & Income Fund III, Inc. (6) c/o RENN Capital Group 8080 N. Central Expressway, Suite 210-LB59 Dallas, TX 75206	1,109,097	853 , 780	255,
Renaissance US Growth Investment Trust PLC (7) c/o RENN Capital Group 8080 N. Central Expressway, Suite 210-LB59 Dallas, TX 75206	1,107,940	853 , 780	254,
US Special Opportunities Trust PLC (8) c/o RENN Capital Group 8080 N. Central Expressway, Suite 210-LB59	1,007,176	853 , 780	153,

Dallas, TX 75206

SF Capital Partners Ltd. (9) c/o Stark Offshore Management, LLC 3600 South Lake Drive St. Francis, WI 53235	1,068,965	1,217,136	0
Harold Blomquist 3935 Serenity Place Colorado Springs, CO 80908	312,387	(10) 95,000	217,
C. E. Unterberg, Towbin (11) 275 Middlefield Rd. Menlo Park, CA 94025	106,250	106,250	0
Straus GEPT Partners, LP (12) 605 Third Avenue New York, NY 10158	102,595	31,867	70,
Straus Partners, LP (12) 605 Third Avenue New York, NY 10158	87,595	16,867	70,
Merriman Curhan Ford & Co. (13) 601 Montgomery Street, 18th Floor San Francisco, CA 94111	38,700	38,700	0
Zentrum Mikroelektronik Dresden AG (14) Grenzstrasse 28 D-01109 Dresden, Germany	29,709	29,709	0
Bluegrass Growth Fund LP (15) 122 East 42nd St., Suite 2606 New York, NY 10168	25,800	25,800	0
Bluegrass Growth Fund LTD (16) Walker House George Town Grand Cayman Cayman Islands	25,800	25,800	0
Douglas Mitchell 1725 Sunshine Circle Woodland Park, CO 80863	22,959	9,750	13 , 20

^{*} Less than 1%

⁽¹⁾ For some of the selling security holders, we have registered, under a separate registration statement, some or all of the shares included in the columns entitled, "Number of Shares Following the Offering" and "Percentage of Class Following the Offering."

⁽²⁾ Cypress Semiconductor Corporation is a publicly traded company listed on the New York Stock Exchange; no one natural person owns more than 5% of Cypress' common stock.

- (3) Crestview Capital Partners, LLC ("Crestview Partners") serves as the investment manager or general partner of Crestview Capital Master, LLC ("Crestview"), and as such has been granted investment discretion over investments including the common stock owned by Crestview. As a result of its role as investment manager to Crestview, Crestview Partners may be deemed to be the beneficial owner, as defined in Rule 13d-3 under the Securities Exchange Act of 1934, of Common Stock held by Crestview. However, Crestview Partners does not (except indirectly as the general partner of Crestview) have the right to receive any dividends from, or the proceeds from the sale of, the Common Stock held by Crestview and disclaims any ownership associated with such rights. Currently, Stewart Flink, Robert Hoyt and Daniel Warsh, in their capacity as managers of Crestview Partners, have delegated authority regarding the portfolio management decisions of Crestview Partners with respect to the Common Stock owned by Crestview. None of such persons has any legal right to maintain such delegated authority. As a result of such delegated authority, Messrs. Flink, Hoyt and Warsh may be deemed to be the beneficial owners of Common Stock held by Crestview. However, neither of Messrs. Flink, Hoyt and Warsh has any right to receive any dividends from, or the proceeds from the sale of, the Common Stock held by Crestview and disclaim beneficial ownership of such shares of Common Stock.
- (4) The limited partners of Big Bend XXVII Investments, L.P. are Mr. Morton H. Meyerson and Marti H. Meyerson EDS Trust, each of which controls 49.5% of Big Bend XXVII Investments, L.P. The general partner of Big Bend XXVII Investments, L.P. is 2M Companies, Inc., which is controlled by Mr. Morton H. Meyerson.
- (5) The natural person who beneficially owns the securities held by Toibb Investment LLC is Harris Toibb.
- (6) Renaissance Capital Growth & Income Fund III, Inc. is the beneficial owner of the shares indicated. RENN Capital Group, Inc. is the investment adviser to Renaissance Capital Growth & Income Fund III, Inc. and has shared voting power and dispositive power over the shares. Russell Cleveland is President of RENN Capital Group, Inc.
- (7) Renaissance US Growth Investment Trust PLC is the beneficial owner of the shares indicated. RENN Capital Group, Inc. is the investment adviser to Renaissance US Growth Investment Trust PLC and has shared voting power and dispositive power over the shares. Russell Cleveland is President of RENN Capital Group, Inc.
- (8) US Special Opportunities Trust PLC is the beneficial owner of the shares indicated. RENN Capital Group, Inc. is the investment adviser to US Special Opportunities Trust PLC and has shared voting power and dispositive power over the shares. Russell Cleveland is President of RENN Capital Group, Inc.
- (9) Michael A. Roth and Brian J. Stark exercise voting and investment authority over all of the shares beneficially owned by SF Capital Partners Ltd., but disclaim beneficial ownership of such shares.
- (10) Includes 2,320 shares of our common stock that Mr. Blomquist's children personally own and includes 207,196 shares issuable upon exercise of presently exercisable options.
- (11) The natural person that beneficially owns the securities held by C. E. Unterberg, Towbin is Andrew Arno, Chief Executive Officer of C. E. Unterberg, Towbin.

- (12) The Managing Principal of each of Straus Partners, LP and Straus GEPT Partners, LP is Mickey Straus.
- (13) The natural person that beneficially owns the securities held by Merriman Curhan Ford & Co. is John Hiestand, Chief Financial Officer of Merriman Curhan Ford & Co.
- (14) The shareholders of Zentrum Mikroelektronik Dresden AG ("ZMD") are Global ASIC GmbH (83.6% shareholder), State of Saxony (10% shareholder and a governmental agency) and IKB Private Equity GmbH (6.4% shareholder and a 100% subsidiary of Deutsche Industriebank AG (IKB), a German public company). The shareholders of Global ASIC GmbH are Sachsenring Automobiltechnik AG i.L. (37.4% shareholder), WGZ Initialtivkapital GmbH (30.8% shareholder and an affiliate of WGZ Bank, a German mutual savings bank), Millenium Capital Fonds EINS GmbH (24.19% shareholder) and three minority financial investment companies (who collectively own the remaining 7.61%). There are no natural persons that beneficially own ZMD shares that have a pecuniary interest in Simtek shares equal to or greater than 1% of the outstanding Simtek common stock. The business affairs of ZMD are generally controlled by its management board and supervisory board. ZMD's management board consists of Thilo von Selchow, ZMD's Chief Executive Officer and President, and Konrad Herre, ZMD's Chief Operating

12

Officer, and Thomas Hoetzel, ZMD's Chief Technical Officer. ZMD's supervisory board consists of Gerhard Fettweis, Carl-Peter Forster and Michael Fraedrich. Both the management board and the supervisory board require majority approval to act. The management board has sole voting discretion over the shares of Simtek common stock owned by ZMD. The management board also has investment discretion over the shares of Simtek common stock owned by ZMD subject to prior approval of such discretion by the supervisory board.

- (15) Bluegrass Growth Fund Partners, LLC is the general partner of Bluegrass Growth Fund LP. By virtue of such relationship, Bluegrass Growth Fund Partners, LLC may be deemed to have voting and dispositive power over the shares owned by Bluegrass Growth Fund LP. Bluegrass Growth Fund Partners, LLC disclaims beneficial ownership of such shares. Mr. Brian Shatz has delegated authority from the partners of Bluegrass Growth Fund Partners, LLC with respect to the shares of common stock owned by Bluegrass Growth Fund LP. Mr. Shatz may be deemed to have voting and dispositive power over the shares of common stock owned by Bluegrass Growth Fund LP. Mr. Shatz disclaims beneficial ownership of such shares of our common stock and has no legal right to maintain such delegated authority.
- (16) Mr. Brian Shatz is a director of Bluegrass Growth Fund LTD and has delegated authority from the shareholders of Bluegrass Growth Fund LTD with respect to the shares of common stock owned by Bluegrass Growth Fund LTD. Mr. Shatz may be deemed to have voting and dispositive power over the shares of common stock owned by Bluegrass Growth Fund LTD. Mr. Shatz disclaims beneficial ownership of such shares of our common stock and has no legal right to maintain such delegated authority.

On July 1, 2002, we received \$3,000,000 from the RENN Capital Group in return for issuing 7.5% convertible debentures with an aggregate principal amount of \$3,000,000. The convertible debentures have a maturity date of June

28, 2009 and originally had a conversion rate of \$0.312 (pre-reverse split), which would have resulted in 9,615,384 (pre-reverse split) shares being issued upon conversion. In connection with the sale of \$11,000,000 of our common stock on December 30, 2005, instead of lowering the conversion price of the 2002 convertible debentures, as required by the terms of the 2002 convertible debentures, from \$0.312 (pre-reverse split) per share to \$0.16 (pre-reverse split) per share as a result of the December 30, 2005 offering at \$0.16 (pre-reverse split) per share, we agreed with the RENN Capital Group that the conversion price would only be lowered to \$0.22 (pre-reverse split) per share as a result of the December 30, 2005 offering. Upon completion of the reverse split on October 5, 2006, the conversion price was increased from \$0.22 to \$2.20. Consequently, the number of shares issuable upon conversion of the 2002 debentures is 1,227,273 (which number takes into account the conversion into common stock, on or around July 28, 2006, of \$100,000 of the principal amount by each of Renaissance Capital Growth & Income Fund III, Inc., Renaissance US Growth Investment Trust PLC and US Special Opportunities Trust PLC). Also on December 30, 2005, we issued 937,500 shares of common stock to the RENN Capital Group in exchange for \$1,500,000. On November 7, 2003, we received \$1,500,000 from the RENN Capital Group in return for issuing 165,201 shares of our common stock and warrants to acquire 75,000 shares of our common stock. These warrants have 5-year terms and exercise prices of \$12.50 per share for 37,500 shares and \$15.00 per share for 37,500 shares. On June 28, 2005, we issued warrants (with a 5-year term) to purchase 20,000 shares of our common stock with an exercise price of \$5.00 per share to the RENN Capital Group in exchange for a waiver of certain provisions relating to the 7.5% debentures. Of the 11,392,457 shares that we are registering in this prospectus, 2,561,340 shares relate to these July 1, 2002, November 7, 2003, June 28, 2005 and December 30, 2005 transactions. Mr. Robert Pearson, holds the position of Senior Vice President of RENN Capital Group, Inc.

On October 12, 2004, we received \$2,500,000 from SF Capital Partners Ltd., Bluegrass Growth Fund LP and Bluegrass Growth Fund LTD in return for issuing 515,996 shares of our common stock and warrants (with 5-year terms) to acquire 257,999 shares of our common stock. In connection with the \$2,500,000 equity financing, we issued to Merriman Curhan Ford & Co., the investment banking firm that advised us in such transaction, warrants (with 5-year terms) to acquire 38,700 shares of our common stock. The warrants issued to Merriman Curhan Ford & Co. had an exercise price of \$0.627 per share prior to the reverse split and, as

13

a result of the reverse split, now have an exercise price of \$6.27 per share. Also, following the reverse split, the new number of warrants issued to Merriman Curhan Ford & Co. is 38,700. The warrants issued to SF Capital Partners Ltd., Bluegrass Growth Fund LP and Bluegrass Growth Fund LTD originally had an exercise price of \$0.627 (pre-reverse split) per share. In connection with the sale of \$11,000,000 of our common stock on December 30, 2005, we agreed with Bluegrass Growth Fund LP, Bluegrass Growth Fund LTD and SF Capital Partners Ltd. that in exchange for their waiver of certain participation rights held by them in connection with the December 30, 2005 offering, the exercise price of their warrants to acquire 257,999 shares of our common stock would be lowered from \$0.627 (pre-reverse split) per share to \$0.265 (pre-reverse split) per share. As a result of the reverse split on October 5, 2006, the exercise price of these warrants has increased from \$0.265 per share to \$2.65 per share. Also on December 30, 2005, we issued 625,000 shares to SF Capital Partners Ltd. in exchange for \$1,000,000. As of the date of this prospectus, SF Capital Partners Ltd. owns 1,010,737 shares as a result of the October 12, 2004 and December 30, 2005 transactions, and has a warrant to purchase 206,399 shares with an exercise

price of \$2.65 per share as a result of the October 12, 2004 transaction. By its terms, the warrant issued to SF Capital Partners Ltd. may not be exercised if the exercise would cause SF Capital Partners Ltd. to be a 5% or more holder of all of our outstanding common stock; however, SF Capital Partners Ltd. may waive such restriction on 61 days notice to us. Given the number of shares of our common stock that SF Capital Partners Ltd. holds as of the date of this prospectus, SF Capital Partners Ltd. cannot exercise such warrant unless it waives the restriction and gives us 61 days notice of the waiver; as such, the 206,399 shares issuable under the warrant are not included in any of the columns in SF Capital Partner Ltd.'s entry in the Selling Security Holder table above. 1,307,436 of the shares that we are registering relate to the October 12, 2004 and December 30, 2005 transactions with, as applicable, SF Capital Partners Ltd., Bluegrass Growth Fund LP, Bluegrass Growth Fund LTD and Merriman Curhan Ford & Co.

On May 4, 2005, we received \$4,000,000 from Cypress in return for issuing 674,082 shares of our common stock and warrants to acquire 505,562 shares of our common stock. The warrants have a 10-year term and an exercise price of \$7.772 per share. On March 24, 2006, we entered into a License and Development Agreement with Cypress pursuant to which, among other things, Cypress agreed to license certain intellectual property from us to develop and manufacture standard, custom and embedded nvSRAM products, we agreed with Cypress to co-develop certain nvSRAM products and Cypress agreed to pay us \$4\$ million in pre-paid royalties paid in certain installments. Under the License and Development Agreement, we issued on March 24, 2006 a warrant (with a 10-year term) granting Cypress the right to purchase 1 million shares of our common stock. We also issued, upon payment by Cypress of an installment of pre-paid royalties on June 30, 2006, a warrant (with a 10-year term) granting Cypress the right to purchase 500,000 shares of our common stock and we issued, upon payment by Cypress of an installment of pre-paid royalties on December 18, 2006, a warrant (with a 10-year term from the date of issuance) granting Cypress the right to purchase 500,000 shares of our common stock. The exercise price for each of these warrants is \$7.50 per share. The shares underlying the warrant that we issued to Cypress on June 30, 2006 and December 31, 2006 are not being registered in this prospectus. Of the 11,392,457 shares that we are registering in this prospectus, 2,179,644 shares relate to the May 4, 2005 transaction with Cypress and the March 24, 2006 warrant issued to Cypress.

On May 19, 2005 and pursuant to his employment agreement with us, Mr. Harold Blomquist, our President and Chief Executive Officer, purchased 20,000 shares of our common stock directly from us at a purchase price of \$5.42 per share. On November 9, 2005 and pursuant to his employment agreement with us, Mr. Blomquist purchased 27,500 shares of our common stock directly from us at a purchase price of \$2.98 per share. In each case, the purchase price was determined by calculating the average close price for the five trading days prior to the purchase date. On January 20, 2006 and also pursuant to his employment agreement with us, we issued an additional 47,500 shares of our common stock to Mr. Blomquist for no additional consideration to match his previous stock purchases.

Mr. Douglas Mitchell was our President, Chief Executive Officer and Chief Financial Officer (acting) until his resignation from Simtek effective May 9, 2005. Pursuant to the terms of Mr. Mitchell's separation agreement incident to his resignation, we issued to Mr. Mitchell 15,000 shares of our common stock on June 15, 2005 and 5,000 shares of our common stock on November 25, 2005. 115,000 of the shares that we are registering relate to these two agreements with Mr. Blomquist and Mr. Mitchell.

On December 30, 2005, we issued to ZMD 626,072 shares of Simtek common stock as partial payment for the assets we acquired from ZMD pursuant to the Asset Purchase Agreement, dated December 7, 2005, between us and ZMD. ZMD and Simtek were parties to a Product License Development and Support Agreement,

dated June 1, 1994, and various Cooperation Agreements functioning as amendments to the Product License Development and Support Agreement, which, together, provided for the joint development of certain products by Simtek and ZMD and the licensing of certain products and intellectual property from Simtek to ZMD. All of these agreements were terminated (to the extent not already terminated) on December 30, 2005. Of the 11,392,457 shares that we are registering in this prospectus, 626,072 shares relate to this transaction.

On December 30, 2005, as part of our sale of \$11,000,000 of our common stock, we issued (in addition to the shares issued to SF Capital Partners Ltd. and the RENN Capital Group on such date, as described above): Crestview Capital

14

Master LLC 2,468,750 shares in exchange for \$3,950,000; Straus Partners, LP 78,125 shares for \$125,000; Straus GEPT Partners, LP 78,125 shares for \$125,000; Big Bend XXVII Investments, L.P. 1,437,500 shares for \$2,300,000; Toibb Investment LLC 1,187,500 shares for \$1,900,000; and Michael Seedman 62,500 shares for \$100,000. In connection with such sale of \$11,000,000 of our common stock, we issued to C. E. Unterberg, Towbin, the investment banking firm that advised us in such transaction, warrants (with a five-year term) to acquire 106,250 shares of our common stock. The warrants issued to C. E. Unterberg, Towbin have an exercise price of \$2.80 per share.

On September 21, 2006, we closed a \$4,555,000 equity financing, issuing the amounts of shares of common stock and warrants to purchase shares of common stock indicated to the following investors: RENN Capital Group and Premier RENN US Emerging Growth Fund Ltd. (506,332 shares and 75,952 warrants); Crestview Capital Master LLC (215,190 shares and 32,279 warrants); Big Bend XXVII Investments, L.P. (101,266 shares and 15,190 warrants); Straus Partners, LP (50,633 shares and 7,595 warrants); Straus GEPT Partners, LP (50,633 shares and 7,595 warrants); A.J. Stein Family Trust (25,317 shares and 3,798 warrants); A.J. Stein Family Partnership (25,317 shares and 3,798 warrants); Brian Stein (25,317 shares and 3,798 warrants); Toni Stein (12,659 shares and 1,899 warrants); Steven Hayes (50,633 shares and 7,595 warrants); Brian Alleman (31,646 shares and 4,747 warrants); John C. McComb (7,595 shares and 1,140 warrants); and SF Capital Partners Ltd. (50,633 shares and 7,595 warrants). The warrants issued have a term of five years and have an exercise price of \$5.40 per share. By the terms of each of these warrants, a holder may not exercise its warrant to the extent such exercise would result in such holder being a 10% or more beneficial owner of all of our outstanding common stock. Certain of the selling securityholders may be prevented from exercising all or part of the warrants held by them as a result of this restriction; nevertheless, the shares issuable under these warrants are included for all applicable selling securityholders in the Selling Security Holder table above. With respect to the shares of common stock, and the warrants to purchase shares of common stock issued pursuant to the September 21, 2006 transaction, we are not registering in this prospectus either the shares of common stock issued or the shares of common stock issuable upon exercise of the warrants.

1.5

DESCRIPTION OF SECURITIES

Simtek is authorized to issue, pursuant to its Delaware Certificate of Incorporation, 30,000,000 shares of common stock, par value \$0.0001 per share, and 200,000 shares of preferred stock, par value \$0.0001 per share. The following is a summary of the material terms of our capital stock. You should refer to our Certificate of Incorporation and Bylaws and the agreements described below for more detailed information.

Common Stock

Each share of common stock entitles its record holder to one vote on all matters to be voted on by the stockholders of Simtek. When a quorum is present at any meeting of stockholders, a plurality of the stockholders shall decide the election of directors and a majority of the stockholders shall decide any other question, unless the question is one upon which Delaware law, the Certificate of Incorporation or the Bylaws require a different vote.

The board of directors of Simtek consists of six directors, all of whom are elected annually at the annual meeting of stockholders, and is not classified. No provision of our Certificate of Incorporation or Bylaws provides for cumulative voting in the case of the election of directors or on any other matter.

Each holder of common stock of Simtek is entitled to share pro rata in any dividends paid on the common stock in funds legally available for that purpose, when, as and if declared by the board of directors of Simtek in its discretion. The shares of common stock of Simtek have no preferred dividend rights or any conversion, redemption or other rights, or any rights to payment from any sinking or similar fund. The shares of common stock also do not have any preemptive, subscription or other similar rights. There are no restraints in the Certificate of Incorporation or Bylaws of Simtek on the right of holders of

shares of common stock to sell or otherwise alienate their shares of stock in Simtek. There are no provisions in the Certificate of Incorporation or Bylaws of Simtek providing for any calls or assessments against holders of shares of common stock or discriminating against any existing or prospective holder of shares of common stock as a result of such security holder owning a substantial amount of securities. Upon liquidation, dissolution or winding up of Simtek, each holder of shares of common stock will be entitled to receive a pro rata share of the assets of Simtek, after payment of all Simtek's debts and liabilities and subject to any applicable liquidation or other payments owed to preferred stockholders.

Preferred Stock

The shares of preferred stock of Simtek are not designated by series, and there are no currently outstanding shares of preferred stock. Simtek may issue preferred stock from time to time in one or more series. The board of directors is authorized, without the approval of existing stockholders, to authorize from time to time the issuance of one or more classes or series of preferred stock and to fix the designations, powers, preferences and relative, participating, optional or other rights, if any, and the qualifications, limitations or restrictions thereof, if any, with respect to each such class or series of preferred stock and the number of shares constituting each such class or series, and to increase or decrease the number of shares of any such class or series to the extent permitted by law. The issuance of preferred stock by our board of directors could dilute and harm the rights of the holders of our common stock. It could potentially be used to discourage attempts by others to obtain control of us through merger, tender offer, proxy contest or otherwise by making such attempts more difficult to achieve or more costly.

Anti-Takeover Provisions

Simtek, as discussed in the preceding paragraph, may issue preferred stock from time to time in one or more series, pursuant to certain authority held by the board of directors, including the authority to fix the designations, powers, preferences and relative, participating, optional or other rights, if any, and the qualifications, limitations or restrictions of such preferred stock. The issuance of preferred stock may have the effect of making removal of management more difficult and delaying, deferring or preventing a change in control of Simtek.

16

We have opted to be governed, in our Delaware certificate of incorporation, by Section 203 of the Delaware General Corporation Law, which provides for a three-year moratorium on certain business combination transactions with "interested stockholders" (generally, persons who beneficially own 15% or more of the corporation's outstanding voting stock). Although we believe that Section 203 will encourage any potential acquirer to negotiate with our board of directors, Section 203 also might have the effect of limiting the ability of a potential acquirer to make a two-tiered bid for the company in which all stockholders would not be treated equally. In addition, Section 203 gives the board the power to reject a proposed business combination in certain circumstances, even though a potential acquirer may be offering a substantial premium for our common stock over the then-current market price. Section 203 would also discourage certain potential acquirers who are unwilling to comply with its provisions.

Warrants

2,003,512 of the shares of common stock offered by the selling securityholders in this prospectus are offered pursuant to warrants issued to the selling securityholders in connection with various transactions. The exercise periods and exercise prices of the warrants are discussed in the "Selling Securityholders" section above. The number of shares issuable upon exercise and the per share exercise price of certain of the warrants are subject to adjustment in the case of certain stock dividends, stock splits, combinations, capital reorganizations, reclassifications or mergers or consolidations.

Each selling security holder of our common stock and any of their pledgees, assignees and successors—in—interest may, from time to time, sell any or all of their shares of common stock on NASDAQ, the OTC Bulletin Board or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling security holder may use any one or more of the following methods when selling shares:

- o ordinary brokerage transactions and transactions in which the broker dealer solicits purchasers;
- o block trades in which the broker dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- o purchases by a broker dealer as principal and resale by the broker dealer for its account;
- o an exchange distribution in accordance with the rules of the applicable exchange;
- o privately negotiated transactions;
- o settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- o broker dealers may agree with the selling security holders to sell a specified number of such shares at a stipulated price per share;
- o a combination of any such methods of sale;
- o through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise; or
- o any other method permitted pursuant to applicable law.

The selling security holders may also sell shares under Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

Broker dealers engaged by the selling security holders may arrange for other brokers dealers to participate in sales. Broker dealers may receive commissions or discounts from the selling security holders (or, if any broker dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with NASDR Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with NASDR IM-2440.

In connection with the sale of the common stock or interests therein, the selling security holders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling security holders may also sell shares of the common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling security holders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution may resell pursuant to this

prospectus (as supplemented or amended to reflect such transaction).

The selling security holders and any broker dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling security holder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common stock. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

18

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling security holders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling security holders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. Each selling security holder has advised us that they have not entered into any written or oral agreements, understandings or arrangements with any underwriter or broker-dealer regarding the sale of the resale shares. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling security holders.

With respect to certain selling security holders, we agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the selling security holders without registration and without regard to any volume limitations by reason of Rule 144(e) under the Securities Act or any other rule of similar effect or (ii) all of the shares have been sold pursuant to the prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act of 1934, as amended, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling security holders will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of the common stock by the selling security holders or any other person. We will make copies of this prospectus available to the selling security holders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

LEGAL MATTERS

The validity of the shares offered hereby was passed upon by Holme Roberts & Owen LLP, Colorado Springs, Colorado.

EXPERTS

The financial statements of Simtek Corporation, included in our Annual Report on Form 10-K, as amended, for the fiscal year ended December 31, 2006, filed on April 2, 2007 and amended on April 30, 2007, have been audited by Hein & Associates LLP, Independent Registered Public Accounting Firm, as set forth in their report which is incorporated by reference in this prospectus and registration statement. Such financial statements are incorporated by reference in reliance on Hein & Associates LLP's report, given on their authority as experts in accounting and auditing.

AVAILABLE INFORMATION

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission under the Securities Act of 1933. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the Securities and Exchange

19

Commission. We are subject to the information requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Accordingly, we file reports, proxy statements and other information with the Securities and Exchange Commission. You may inspect our reports, proxy statements and other information without charge at the Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the Securities and Exchange Commission at 1-800-SEC-0330. The Commission also maintains a web site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. In addition, the reports, proxy statements and other information that we file with the Securities and Exchange Commission can be obtained from our Internet website at http://www.simtek.com.

The Securities and Exchange Commission allows us to "incorporate by reference" certain of the information required by this prospectus, 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 part of this prospectus, and later information we file with the Securities and Exchange Commission that is incorporated or deemed to be incorporated by reference into this prospectus will update and supersede this information. We incorporate by reference the documents listed below and any future filings made with the Securities and Exchange Commission under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion of the offering covered by this prospectus:

* our Annual Report on Form 10-K, as amended, for the fiscal year ended December 31, 2006, filed on April 2, 2007 and amended on April 30, 2007;

- * our Current Reports on Form 8-K filed on January 9, 2007, January 12, 2007, January 24, 2007, February 13, 2007, February 23, 2007, April 12, 2007 and April 26, 2007;
- * our Quarterly Report on Form 10-Q, for the fiscal quarter ended March 31, 2007, filed on May 15, 2007;
 - * our Definitive Proxy Statement on Schedule 14A filed on May 11, 2007; and
- * the description of our common stock as set forth in our Registration Statement on Form 8-A filed on January 8, 2007.

Upon receipt of an oral or written request we will provide, free of charge, to any person (including any beneficial owner) to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. Please direct your written requests to:

Simtek Corporation
4250 Buckingham Dr. #100
Colorado Springs, CO 80907
(719) 531-9444
Attention: Investor Relations

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. We are not making an offer of our Common Stock in any state where the offer is not permitted. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front page of those documents.

20

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the expenses (other than underwriting discounts and commissions) expected to be incurred in connection with the issuance and distribution of the securities registered hereby, all of which expenses, except for the Commission registration fee are estimated:

Securities and Exchange Commission registration fee	\$ 3 , 085
Legal fees and expenses	32,000
Accounting fees	3,000
Miscellaneous	915
Total	\$ 39,000

The above expenses will be borne by us.

Item 15. Indemnification of Directors and Officers

Under our Certificate of Incorporation and Bylaws, we are required to indemnify former and current directors and officers, and may indemnify employees and agents, but only if such person seeking indemnification has satisfied the statutory standard of conduct. To satisfy the statutory standard of conduct, a person must have acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation. In addition, in any criminal action or proceeding, the person must also have had no reasonable cause to believe the person's conduct was unlawful. Regardless of standards of conduct, indemnification of expenses for directors and officers is mandatory under Section 145 of the Delaware General Corporation Law ("DGCL") to the extent they are successful on the merits in defending a proceeding. Under Section 145 of the DGCL, in derivative suits (i.e., suits by or in the right of the corporation), indemnification is only available for expenses and attorneys' fees incurred in defending or settling a suit and only in circumstances where there has been no adjudication of monetary liability to the corporation.

As permitted by Section 102(b)(7) of the DGCL, our Certificate of Incorporation provides that, to the fullest extent permitted by the DGCL, a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director except for liability for (i) any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) willful or negligent conduct in paying dividends or repurchasing or redeeming stock out of funds that are not lawfully available, in violation of Section 174 of the DGCL, or (iv) any transaction from which the director derives an improper personal benefit.

We maintain insurance policies under which our directors and officers are insured, within the limits and subject to the limitations of the policies, against expenses in connection with the defense of actions, suits or proceedings, and certain liabilities that might be imposed as a result of such actions, suits or proceedings, to which they are parties by reason of being or having been a director or officer of Simtek.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Securities Act") may be permitted to directors, officers and controlling persons of Simtek pursuant to the foregoing provisions, or otherwise, Simtek has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 16. Exhibits

Unless otherwise indicated, all exhibits listed below are incorporated herein by reference.

- 2.1 Plan of Conversion of Simtek Corporation, a Colorado corporation, into Simtek Corporation, a Delaware corporation, dated October 4, 2006.(1)
- 4.1 1987-I Employee Restricted Stock Plan.(2)
- 4.2 Form of Restricted Stock Agreement between the Company and Participating Employees. (2)
- 4.3 Form of Common Stock Certificate of Simtek Corporation, a Delaware corporation.(1)
- 4.4 Simtek Corporation 1991 Stock Option Plan.(3)
- 4.5 Form of Incentive Stock Option Agreement between the Company and Eligible Employees.(3)
- 4.6 1994 Non-Qualified Stock Option Plan.(4)
- 4.7 First Amendment and Second Amendments to the 1994 Non-Qualified Stock Option Plan.(5)
- 4.8 Third Amendment to the 1994 Non-Qualified Stock Option Plan.(6)
- 4.9 Q-DOT Group, Inc. Incentive Stock Option Plan of March 1994 adopted by Simtek (7)
- 4.10 Form of Q-DOT Group, Inc. Incentive Stock Option Agreement between the Company and Eligible Employees.(7)
- 4.11 Fourth, Fifth and Sixth Amendments to the 1994 Non-Qualified Stock Option Plan.(7)
- 4.12 Seventh and Eighth Amendments to the 1994 Non-Qualified Stock Option Plan(8).
- 4.13 Ninth, Tenth and Eleventh Amendments to the 1994 Non-Qualified Stock Option Plan(9).
- 5.1 Opinion of Holme Roberts & Owen LLP, dated September 27, 2006, with respect to 12,106,586 shares (of which 11,392,457 remaining unsold shares are still being registered)*
- 23.1 Consent of Hein & Associates LLP, Independent Registered Public Accounting Firm
- 23.2 Consent of Holme Roberts & Owen LLP is included in Exhibit 5.1
- 24.1 Power of Attorney *

* Previously filed

- (1) Incorporated by reference to the Company's Current Report on Form 8-K12G3 filed by the Company with the SEC on October 10, 2006
- (2) Incorporated by reference to the Company's Form S-1 Registration Statement (Reg. No. 33-37874) filed with the Commission on November 19, 1990.
- (3) Incorporated by reference to the Company's Form S-1 Registration Statement (Reg. No. 33-46225) filed with the Commission on March 6, 1992.
- (4) Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Commission on March 25, 1995
- (5) Incorporated by reference to the Company's Form S-8 Registration Statement (Reg. No. 33-98294) filed with the Commission on October 19, 1995.
- (6) Incorporated by reference to the Company's Form S-8 Registration Statement (Reg. No. 333-76481) filed with the Commission on April 16, 1999
- (7) Incorporated by reference to the Company's Form S-8 Registration Statement (Reg. No. 333-73794) filed with the Commission on November 20, 2001

- (8) Incorporated by reference to the Company's Form S-8 Registration Statement (Reg. No. 333-1210005) filed with the Commission on December 7. 2004
- (9) Incorporated by reference to the Company's Form S-8 Registration Statement (Reg. No. 333-142005) filed with the Commission on April 10, 2007

Item 17. Undertakings

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate

II-2

jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by section $10\,(a)\,(3)$ of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) (17 C.F.R.ss.230.424(b)) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the

offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchase in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

II-3

- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

II-4

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Colorado Springs, State of Colorado, on May 31, 2007.

Simtek Corporation, a Delaware corporation

By: /s/Brian Alleman

Brian Alleman

Secretary, Vice President and
Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE

* /s/Harold Blomquist

Harold Blomquist, Chairman, Chief Executive Officer and President May 31, 2007

/s/Brian Alleman

Brian Alleman, Secretary, Vice President and Chief

Financial Officer
May 31, 2007

* /s/Robert Keeley

Robert Keeley, Director May 31, 2007

* /s/Alfred Stein

Alfred Stein, Director May 31, 2007

* /s/Ronald Sartore

Ronald Sartore, Director May 31, 2007

/s/Kimberley Carothers

Kimberley Carothers Controller (Principal Accounting Officer) May 31, 2007

* By /s/Brian Alleman, Attorney in Fact