

Rubicon Technology, Inc.  
Form S-1/A  
April 25, 2008  
Table of Contents

As filed with the Securities and Exchange Commission on April 25, 2008

Registration No. 333-150205

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

**Amendment No. 1**

**to**

**FORM S-1**

**REGISTRATION STATEMENT**

*UNDER*

*THE SECURITIES ACT OF 1933*

**Rubicon Technology, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation)

**3674**  
(Primary Standard Industrial  
Classification Number)  
**9931 Franklin Avenue**

**36-4419301**  
(I.R.S. Employer  
Identification Number)

**Franklin Park, Illinois 60131**

**(847) 295-7000**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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**Raja M. Parvez**

**President and Chief Executive Officer**

**9931 Franklin Avenue**

**Franklin Park, Illinois 60131**

**(847) 295-7000**

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

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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, check the following box. " \_\_\_\_\_

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 post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, 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 post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. " \_\_\_\_\_

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

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Large accelerated filer "      Accelerated filer "      Non-accelerated filer b  
 (Do not check if a  
 smaller reporting company)      Smaller reporting company "

**CALCULATION OF REGISTRATION FEE**

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Offering Price per Share(2)	Proposed Maximum Aggregate Offering Price(1)(2)	Proposed Maximum Amount of Registration Fee
			Aggregate Offering Price(1)(2)	Registration Fee
Common Stock, \$0.001 par value per share	4,025,000	\$23.03	\$92,695,750	\$3,643(3)

(1) Includes 525,000 shares that the underwriters have an option to purchase from certain of the selling stockholders to cover overallocments, if any.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) of the Securities Act of 1933, as amended (the Securities Act ). The offering price and registration fees are based on the high and low sale price on April 24, 2008 on the NASDAQ Global Market.

(3) Previously paid.

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall 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 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

**Table of Contents**

**The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.**

**PRELIMINARY PROSPECTUS**

**Subject To Completion**

**April 25, 2008**

**3,500,000 Shares**

**Common Stock**

All the shares of common stock are being sold by the selling stockholders identified in this prospectus. We will not receive any proceeds from the shares sold by the selling stockholders.

Our common stock is listed on the NASDAQ Global Market under the symbol RBCN. The last reported sale price of the common stock on April 24, 2008 was \$22.33 per share.

**Investing in our common stock involves a high degree of risk. Before buying any shares, you should carefully read the discussion of material risks of investing in our common stock in Risk factors beginning on page 9 of this prospectus.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

	Per share	Total
Public offering price	\$	\$
Underwriting discount and commissions	\$	\$
Proceeds, before expenses, to selling stockholders	\$	\$

The underwriters may also purchase up to an additional 525,000 shares of our common stock from certain of the selling stockholders at the public offering price, less the underwriting discounts and commissions payable by the selling stockholders, to cover overallocments, if any, within 30 days from the date of this prospectus. If the underwriters exercise this option in full, the total underwriting discounts and commissions will be \$ and the total proceeds to the selling stockholders, before expenses, will be \$ .

The underwriters are offering the common stock as set forth under Underwriting. Delivery of the shares will be made on or about 2008.

**UBS Investment Bank**

**Canaccord Adams**

**Needham & Company, LLC**

**William Blair & Company**

**Janney Montgomery Scott LLC**

**Table of Contents**

**Table of Contents**

You should rely only on the information contained in this prospectus. We have not, and the selling stockholders and the underwriters have not, authorized anyone to provide you with additional information or information different from that contained in this prospectus. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of shares of our common stock.

**TABLE OF CONTENTS**

<u>Prospectus summary</u>	1
<u>Risk factors</u>	9
<u>Special note regarding forward-looking statements</u>	21
<u>Use of proceeds</u>	22
<u>Price range of our common stock</u>	22
<u>Dividend policy</u>	22
<u>Capitalization</u>	23
<u>Selected financial data</u>	24
<u>Management's discussion and analysis of financial condition and results of operations</u>	26
<u>Business</u>	42
<u>Management</u>	56
<u>Executive compensation</u>	62
<u>Certain relationships and related party transactions</u>	80
<u>Principal and selling stockholders</u>	84
<u>Description of capital stock</u>	91
<u>Shares eligible for future sale</u>	97
<u>Certain material US federal tax considerations for non-US holders</u>	100
<u>Underwriting</u>	103
<u>Notice to investors</u>	107
<u>Legal matters</u>	112
<u>Experts</u>	112
<u>Where you can find additional information</u>	112
<u>Index to financial statements</u>	F-1

ES2 is a service mark of Rubicon Technology, Inc. This prospectus also includes other registered and unregistered service marks and trademarks of Rubicon Technology, Inc. and other persons.

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**Table of Contents**

## Prospectus summary

*This summary highlights selected information appearing elsewhere in this prospectus. While this summary highlights what we consider to be important information about us, you should carefully read this prospectus and the registration statement of which this prospectus is a part in their entirety before investing in our common stock, especially the risks of investing in our common stock, which we discuss under Risk factors, and our financial statements and related notes beginning on page F-1.*

*Unless the context requires otherwise, all references herein to Rubicon, we, us and our refer to Rubicon Technology, Inc.*

### **OUR BUSINESS**

We are an advanced electronic materials provider that develops, manufactures and sells monocrystalline sapphire and other innovative crystalline products for Light-Emitting Diodes ( LEDs ), radio frequency integrated circuits ( RFICs ), blue laser diodes, optoelectronics and other optical applications. The emergence of sapphire in commercial volumes at competitive prices has enabled the development of new technologies such as high brightness ( HB ) white, blue and green LEDs and highly-integrated RFICs. We apply our proprietary crystal growth technology to produce high-quality sapphire products efficiently to supply a large and growing end-market demand, and we work closely with our customers to meet their quality and delivery needs. We believe we are the leading supplier of sapphire products to the LED industry.

Advancements in solid state lighting utilizing HB white, blue and green LEDs over the past decade represent a disruptive technology in the lighting industry, providing significant performance, environmental and economic improvements compared to traditional incandescent or fluorescent lighting. These factors, along with LEDs durability, small form factor, excellent color performance and decreasing costs, have led to a rapidly growing demand for LEDs in consumer electronic and general and specialty lighting applications. Applications using LEDs have unit volumes in the billions and are expected to grow significantly. For instance, in the next four years, HB LED sales are expected to double according to Strategies Unlimited, an independent market research firm, based in Mountain View, California. The production volume of HB LEDs is expected to increase from 37.1 billion units in 2007 to 87.1 billion units in 2011. Further, the percentage of gallium nitride ( GaN )-based LEDs, which predominantly use sapphire substrates, is expected to rise from 64.0% to 66.9% of the total HB LED production volume in the same time period. Therefore, as the HB LED market grows, we believe the sapphire substrate market will grow as well.

We are a vertically-integrated manufacturer of high-quality sapphire substrates and optical windows that are used in a variety of high-growth, high-volume end-market applications. Our largest product line is two inch to four inch sapphire wafers for use in LEDs and blue laser diodes for solid state lighting and electronic applications. In addition, we have developed six inch sapphire wafers that are used for Silicon-on-Sapphire ( SOS ) RFICs, as well as products for military, aerospace, sensor and other applications. We are also extending our technology to manufacture eight inch and larger diameter products to support next-generation LED, RFIC and optical window applications.

As a leading producer of sapphire and other crystals, we believe that the following are our principal competitive advantages:

Ø **Proprietary technology for crystal growth.** Due to our understanding of sapphire crystal growth seeding and crystal growth furnace operational parameters, we have developed a full in-house



## **Table of Contents**

capability to design, build and maintain crystal growth furnaces with proprietary features. We believe that our enhanced methodology significantly outperforms other methods of sapphire production with respect to capital costs, operating costs, throughput, quality and diameter size.

Ø ***High quality sapphire products.*** Through our operational expertise in crystal growth, post-growth processing and in-process manufacturing controls of sapphire wafer production, we are able to meet or exceed our customers' key product specifications, such as crystalline quality, dimensional tolerances and crystal orientation, while maintaining high production yields.

Ø ***Vertical integration.*** We grow sapphire crystals and have extensive capabilities to process sapphire into products that meet our customers' needs from cores to wafer and window blanks to large diameter epi-polished wafers. By vertically integrating, we are able to achieve significant operating efficiencies and produce high-quality, high-precision products that offer cost and quality benefits to our customers.

Ø ***High volume and flexible manufacturing capability.*** We have developed automated manufacturing and metrology platforms at each stage of our production process that allow us to increase capacity rapidly and to switch products in manufacturing easily so that we can meet our customers' specific product demands.

Ø ***Lowest total cost for customers.*** We believe our high sustained yields, our dedication to consistent production and performance and our commitment to lasting customer relationships help assure our customers of a reliable source of high-quality sapphire products at stable prices. Our in-process quality control practices lead to predictable customer process yields, reduced inspection costs and overall high customer satisfaction.

## **OUR STRATEGY**

Our goal is to be the leading global provider of advanced monocrystalline substrate and window materials to the solid state lighting, SOS RFIC, aerospace and optical markets. Our strategy includes the following key elements:

Ø ***Extend our technology and manufacturing leadership position.*** We intend to continue to develop advanced technology platforms to further increase crystal boule size and offer market-leading product specifications, while maintaining product quality and manufacturing efficiencies.

Ø ***Capitalize on opportunities in high-growth markets.*** We intend to continue to expand our opportunities by adding new categories and sizes of products with the goal of providing our customers in multiple high-growth end markets with a robust set of sapphire solutions.

Ø ***Enhance operational excellence.*** We plan to further refine our proprietary ES2 crystal growth techniques, sapphire processing platforms and process controls to produce even higher throughput capabilities. Our objective is to continue to achieve operational excellence through lowering cycle times, raising yields and reducing overhead costs.

Ø ***Expand our sales and marketing efforts.*** We intend to increase the scale and geographical coverage of our sales efforts globally. In addition, we plan to enhance our brand recognition by increasing our marketing and communications programs and resources.

Ø ***Penetrate new market segments.*** We intend to use our proprietary manufacturing technology to produce additional single-crystal materials that can be used in optical applications as well as alternative substrates for certain electronic materials applications.



**Table of Contents**

**RISKS RELATED TO OUR BUSINESS**

Our business is subject to a number of risks that you should be aware of before making an investment decision. These risks are discussed more fully in the section entitled "Risk factors" immediately following this prospectus summary. These risks could prevent us from successfully implementing our strategy and growing our business. Some of these risks include:

- Ø We have incurred significant losses in prior periods and may incur losses in the future.
  
- Ø Our results of operations, financial condition and business will be harmed if we are unable to manage the expansion of our capacity effectively to meet customer demand.
  
- Ø If LED lighting does not achieve greater market acceptance, or if alternative technologies are developed and gain market traction, prospects for our growth and profitability would be limited.
  
- Ø If the development and acceptance of our products for the SOS RFIC market do not meet our expectations, our future operating results may be harmed.
  
- Ø The average selling prices of sapphire products have historically decreased over their life-cycles and continuing price decreases could adversely affect our results of operations.
  
- Ø We may not be able to effectively manage our growth, which could adversely affect our business, financial condition and operating results.

**Table of Contents****RECENT DEVELOPMENTS**

On April 24, 2008, we announced our preliminary unaudited financial results for the quarter ended March 31, 2008. The information below summarizes these preliminary results.

**PRELIMINARY CONDENSED STATEMENTS OF OPERATIONS**

	<b>Three Months Ended March 31,</b>	
	<b>2008</b>	<b>2007</b>
	<b>(in thousands, except per share amounts)</b>	
	<b>(Unaudited)</b>	
Revenue	\$ 10,508	\$ 7,202
Cost of goods sold	6,644	5,056
Gross profit	3,864	2,146
General and administrative expenses	1,884	850
Sales and marketing expenses	236	165
Research and development expenses	267	216
Total operating expenses	2,387	1,231
Income from operations	1,477	915
Other income (expense):		
Change in carrying value of convertible preferred stock warrants		(386)
Interest income (expense) and other, net	858	(246)
Total other income (expense)	858	(632)
Income before income taxes	2,335	283
Income taxes	63	
Net income	\$ 2,272	\$ 283
Dividends on preferred stock		(1,584)
Accretion of redeemable preferred stock		(12,916)
Net income (loss) attributable to common stockholders	\$ 2,272	\$ (14,217)
Net income (loss) per common share attributable to common stockholders:		
Basic	\$ 0.11	\$ (56.38)
Diluted	\$ 0.10	\$ (56.38)
Weighted average common shares outstanding used in computing net income (loss) attributable to common stockholders:		
Basic	20,551,642	252,183
Diluted	22,366,654	252,183

**Table of Contents****PRELIMINARY CONDENSED BALANCE SHEETS**

	March 31, 2008 (unaudited)	December 31, 2007 (audited)
	(in thousands)	
<b>Assets</b>		
Cash and cash equivalents	\$ 4,240	\$ 4,380
Restricted cash	12	10
Short-term investments	57,477	67,765
Accounts receivable, net	5,601	4,673
Inventory, net	2,478	2,522
Other current assets	3,115	2,558
<b>Total current assets</b>	<b>72,923</b>	<b>81,908</b>
Property and equipment, net	30,013	26,303
Investments	10,288	3,200
<b>Total assets</b>	<b>\$ 113,224</b>	<b>\$ 111,411</b>
<b>Liabilities and Stockholders' Equity</b>		
Accounts payable	\$ 3,268	\$ 2,572
Current maturities of capital lease obligation		43
Accrued and other current liabilities	2,135	3,114
<b>Total liabilities</b>	<b>5,403</b>	<b>5,729</b>
<b>Stockholders' equity</b>	<b>107,821</b>	<b>105,682</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 113,224</b>	<b>\$ 111,411</b>

Revenue was \$10.5 million for the three months ended March 31, 2008 compared to \$7.2 million for the three months ended March 31, 2007, an increase of \$3.3 million, or 46%. Revenue for the three months ended March 31, 2008 from larger diameter products, which we define as three inch or greater, represented 53% of revenue, compared to 24% of revenue for the three months ended March 31, 2007. Revenue increased across all product lines except for as ground wafers, which declined by \$1.2 million, as we shifted capacity to other product lines, mainly six inch polished production. Our revenue increase was primarily attributable to an increase in shipments of larger diameter substrates to the LED industry resulting in additional revenue of \$1.7 million and sales of six inch polished products to the SOS RFIC market, which increased by \$2.5 million mainly on higher volumes offset by a slight decline in sales prices totaling \$119,000. We had slightly higher contract research revenue of \$169,000 and achieved higher revenue of \$154,000 from optical products due to increased sales of sapphire and fluorides for military, aerospace, sensor and other applications.

Gross margin for the first quarter of fiscal year 2008 was 36.8% compared to 29.8% in the same period of the prior year. The increase is primarily due to the shift in product mix toward higher margin, large diameter products. Operating profit increased to \$1.5 million, or 14.1% of revenue, in the three months ended March 31, 2008 from \$0.9 million, or 12.7% of revenue, for the three months ended March 31, 2007. The increase in operating margin is the result of the significant increase in gross margin offset in part by higher operating costs consisting primarily of additional general and administrative expenses associated with being a public company. Net income attributable to common stockholders for the three months ended March 31, 2008 was \$2.3 million, or \$0.10 per diluted share, compared to a loss attributable to common stockholders of \$(14.2 million), or \$(56.38) per diluted share, for the three months ended March 31, 2007. The improvement in our net income attributable to common stockholders is primarily the result of the recognition in our quarter ended March 31, 2007 of certain



## **Table of Contents**

non-cash charges, including those related to changes in carrying value of convertible preferred stock warrants, dividends on preferred stock, and accretion of redeemable preferred stock, which were not recognized in the quarter ended March 31, 2008. As a result of our initial public offering in November 2007 (our IPO), our preferred stock was converted into common stock, and we no longer recognize these non-cash charges. The difference in earnings per share is also a function of a significant increase in share count as a result of our IPO.

Our balance sheet at March 31, 2008 included cash and short-term investments of \$62 million, with long-term investments of \$10 million and no debt outstanding. Capital expenditures in the three months ended March 31, 2008 were \$4.7 million which was spent on infrastructure and machinery for our Bensenville crystal growth manufacturing facility which opened for operations in the first quarter of 2008 and on additional equipment for the expansion of our coring, cutting, grinding and polishing operations. Cash provided from operating activities totaled \$1.7 million in the three months ended March 31, 2008.

The financial results for the quarter ended March 31, 2008 contained in this prospectus are preliminary. Final results for the quarter may be materially different from those described above when we complete and file our quarterly report on Form 10-Q for the quarter ended March 31, 2008. This information should be read in conjunction with our consolidated financial statements and the related notes and Management's Discussion and Analysis of Financial Condition and Results of Operations and the Risks Factors contained elsewhere in this prospectus.

## **OUR CORPORATE INFORMATION**

We were incorporated under the laws of the State of Delaware in 2001. Our principal executive offices are located at 9931 Franklin Avenue, Franklin Park, Illinois 60131. The telephone number at our principal executive offices is (847) 295-7000. Our website address is [www.rubicon-es2.com](http://www.rubicon-es2.com). Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to form any part of this prospectus.

**Table of Contents**

**The offering**

Common stock offered by the selling stockholders 3,500,000 shares

Common stock outstanding 20,488,608 shares

Overallotment option 525,000 shares

NASDAQ Global Market symbol RBCN

Use of proceeds We will not receive any proceeds from the sale of our common stock by the selling stockholders.

The number of shares of common stock outstanding is based on 20,488,608 shares outstanding as of December 31, 2007, and excludes:

Ø 795,845 shares of common stock issuable upon exercise of warrants outstanding as of December 31, 2007, with a weighted average exercise price of \$3.8419 per share;

Ø 1,366,381 shares of common stock subject to outstanding options under our 2001 Equity Plan as of December 31, 2007, with a weighted average exercise price of \$3.6227 per share, 319,450 shares of common stock subject to outstanding options under our 2007 Stock Incentive Plan as of December 31, 2007, with a weighted average exercise price of \$15.5447 per share, and 24,663 shares of common stock subject to outstanding options issued as compensation to former board members and board advisors as of December 31, 2007, with a weighted average exercise price of \$4.9400 per share; and

Ø 1,973,958 shares of common stock reserved for future issuance under our 2007 Stock Incentive Plan as of December 31, 2007.



**Table of Contents****Summary financial data**

The following tables summarize our financial data. The summary statements of operations data for the years ended December 31, 2005, 2006 and 2007 have been derived from our audited financial statements included elsewhere in this prospectus. You should read this data together with our financial statements and the notes to those statements included elsewhere in this prospectus and the information under Selected financial data and Management's discussion and analysis of financial condition and results of operations. Our historical results are not necessarily indicative of the results to be expected in any future period.

Statements of operations data:	Year ended December 31,		
	2005	2006	2007
	(in thousands, other than share and per share data)		
Revenue	\$ 16,315	\$ 20,752	\$ 34,110
Cost of goods sold	18,508	18,885	22,045
Gross profit (loss)	(2,193)	1,867	12,065
Operating expenses:			
General and administrative	4,688	3,298	6,157
Sales and marketing	1,266	1,062	675
Research and development	861	679	769
Asset impairment		933	
Loss on disposal of assets	383	42	139
Total operating expenses	7,198	6,014	7,740
Income (loss) from operations	(9,391)	(4,147)	4,325
Other income (expense) <sup>(1)</sup>	(2,735)	(3,272)	(7,104)
Loss before income taxes and cumulative effect of change in accounting principle	(12,126)	(7,419)	(2,779)
Income taxes			(75)
Loss before cumulative effect of change in accounting principle	(12,126)	(7,419)	(2,854)
Cumulative effect of change in accounting principle <sup>(2)</sup>		(221)	
Net loss	(12,126)	(7,640)	(2,854)
Dividends on preferred stock	(3,924)	(5,563)	(5,625)
Accretion of redeemable preferred stock	4,404	(23,416)	(59,934)
Net loss attributable to common stockholders	\$ (11,646)	\$ (36,619)	\$ (68,413)
Net loss per common share attributable to common stockholders, basic and diluted	\$ (47.52)	\$ (146.57)	\$ (27.22)
Weighted shares used in computing net loss per share attributable to common stockholders, basic and diluted	245,073	249,843	2,513,487

(1) Includes change in carrying value of convertible preferred stock warrants of \$(1,962) in 2006 and \$(6,019) in 2007.

(2) On January 1, 2006, we adopted FASB Staff Position (FSP) 150-5 Issuer's Accounting under FASB Statement No. 150 For Freestanding Warrants and Other Similar Investments in Shares that are Redeemable and recorded approximately \$221 as a cumulative effect of change in accounting principle.

As of December 31, 2007

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**Balance sheet data:**

	<b>(in thousands)</b>
Cash and cash equivalents	\$ 4,380
Working capital	76,179
Total assets	111,411
Total stockholders' equity	105,682

Table of Contents

## Risk factors

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below together with all of the other information contained in this prospectus, including the financial statements and the related notes appearing at the end of this prospectus, before making an investment decision. If any of the following risks or uncertainties actually occurs, our business, financial condition or operating results could materially suffer. In that event, the trading price of our common stock could decline and you may lose all or part of your investment.*

### **RISKS RELATED TO OUR BUSINESS**

#### **We have incurred significant losses in prior periods and may incur losses in the future.**

We have incurred significant losses in prior periods. In 2007, 2006 and 2005, we incurred net losses of \$2.9 million, \$7.6 million and \$12.1 million, respectively. As of December 31, 2007, we had an accumulated deficit of \$153.6 million. In addition, we expect our operating expenses to increase as we expand our business as a public company. There can be no assurance that we will have sufficient revenue growth to offset increased expenses or to achieve profitability in future periods.

#### **Our results of operations, financial condition and business will be harmed if we are unable to manage the expansion of our capacity effectively to meet customer demand.**

We are in the process of significantly expanding our manufacturing capacity in order to meet current and anticipated customer demand. We are expanding by adding new equipment to our facilities in Franklin Park, Illinois, and we opened a new facility in Bensenville, Illinois during January 2008. Our capacity expansion involves significant risks, including the availability of capital equipment and the timing of its installation, availability and timing of required electric power, management of expansion costs, timing of production ramp, qualification of our new equipment and demands on management's time. If our business does not grow fast enough to utilize this new capacity effectively, our business and financial results could be adversely affected. Conversely, delays in expanding our manufacturing capacity could impact our ability to meet future demand for our products. As a result, we might not be able to fulfill customer orders in a timely manner, which could adversely affect our customer relationships and operating results. Moreover, our efforts to increase our production capacity may not succeed in enabling us to manufacture the required quantities of our products in a timely manner or at the gross margins that we achieved in the past. There can be no assurance that we will be able to successfully reach our production, timing and cost goals for our expansion.

#### **If LED lighting does not achieve greater market acceptance, or if alternative technologies are developed and gain market traction, prospects for our growth and profitability would be limited.**

Our future success depends on increased market acceptance of LED lighting. Approximately 73% and 81% of our revenue during 2007 and 2006, respectively, was from sales of our products for use in the manufacture of LED products. Potential customers for LED lighting systems may be reluctant to adopt LED lighting as an alternative to traditional lighting technology because of its higher initial cost and relatively low light output per unit in comparison with the most powerful traditional lighting devices. In addition, our potential customers may have substantial investments and know-how related to their existing lighting technologies, and may perceive risks relating to the novelty, complexity, reliability, quality, usefulness and cost-effectiveness of LED products when compared to other lighting sources

## Table of Contents

### Risk factors

available in the market. If acceptance of LED lighting does not increase significantly, then opportunities to increase our revenues and operate profitably would be limited.

Moreover, if effective new sources of light other than LED devices are developed, our current products and technologies could become less competitive or obsolete. Any of these factors could have a material and adverse impact on our growth and profitability.

### **The technology used in the LED industry continues to change rapidly and if we are unable to modify our products to adapt to future changes in the LED industry, we will be unable to attract or retain customers.**

We do not design or manufacture LEDs. Our ability to expand into new applications in the LED market depends on continued advancement in the design and manufacture of LEDs by others. The LED industry has been characterized by a rapid rate of development of new technologies and manufacturing processes, rapid changes in customer requirements, frequent product introductions and ongoing demands for greater functionality. Our future success will likely depend on our ability to develop new products for use in LED applications and to adjust our product specifications, such as our previous development of larger diameter wafers, in response to these developments in a timely manner. If our development efforts are not successful or are delayed, or if our newly developed products do not achieve market acceptance, we may be unable to attract or retain customers and our operating results could be harmed. In addition, although sapphire is currently the preferred substrate material for HB white, blue and green LED applications, we cannot assure you that the LED market will continue to demand the performance attributes of sapphire. Silicon carbide is another substrate material currently used for certain LED applications, including some that also use sapphire substrates. Other substrates being investigated and used in research and development for certain LED applications are aluminum nitride, zinc oxide and bulk gallium nitride. Research is also ongoing for the use of silicon substrates in LED applications. If sapphire is displaced as the substrate of choice for certain LED applications, our financial condition and results of operations would be materially and adversely affected unless we were able to successfully offer the competing substrate material.

Our continuing efforts to enhance our current products and to develop new products involve several risks, including:

- Ø our ability to anticipate and respond in a timely manner to changes in customer requirements;
- Ø the possibility that sapphire may in the future be replaced as a preferred substrate in certain LED applications;
- Ø the significant research and development investment that we may be required to make before market acceptance of a particular new or enhanced product;
- Ø the possibility that the LED industry may not accept our new or enhanced products after we have invested a significant amount of resources in development; and
- Ø competition from new technologies, processes and products introduced by our current or future competitors.

## Table of Contents

### Risk factors

#### **If the development and acceptance of our products for the SOS RFIC market do not meet our expectations, our future operating results may be harmed.**

The level of market acceptance of our SOS RFIC products will impact our future operating results. Our success in the SOS RFIC market depends on a number of factors, including:

Ø the success of our customers' products in current applications;

Ø the acceptance of SOS RFIC products for newly targeted applications; and

Ø our timely completion of larger diameter sapphire product development and introduction of volume production for such products.

In addition, it is possible that other solutions, such as silicon-on-insulator, may become preferred over SOS. We cannot assure you that the RFIC market will continue to require the performance attributes of SOS solutions. If our products are not accepted more broadly in the RFIC market, our results of operations and business may be harmed.

#### **The average selling prices of sapphire products have historically decreased over their life-cycles and continuing price decreases could adversely affect our results of operations.**

Historically, our industry has experienced price decreases for a particular product over the life of that product. We anticipate that the average selling prices of our products may decrease in the future in response to competitive pricing pressures, increased sales discounts and new product introductions by our competitors. To lessen the effect of price decreases, we attempt to introduce new products as well as reduce manufacturing costs in order to maintain or improve our margins. However, if we are not able to successfully introduce new products or achieve these cost reductions in a timely manner, there could be a material adverse effect on our operating results and loss of market share.

#### **We depend on a few customers for a major portion of our sales and our results of operations would be adversely impacted if they reduced their order volumes.**

Historically, we have earned, and believe that in the future we will continue to earn, a substantial portion of our revenue from a small number of customers. In 2007, each of three customers accounted for 10% or more of our revenues and in 2006, each of three customers accounted for 10% or more of our revenues. In 2007, sales to Crystalwise Technology, Inc. ( Crystalwise ), Shinkosha Co., Ltd. ( Shinkosha ) and Peregrine Semiconductor Corp. represented approximately 26%, 21% and 15% of our revenues, respectively, and in the year ended December 31, 2006, sales to Crystalwise, Shinkosha and Tera Xtal Technology Corporation represented approximately 27%, 17% and 14% of our revenues, respectively. If we were to lose one of our major customers or have a major customer significantly reduce its volume of business with us, our revenues and profitability would be materially reduced unless we are able to replace such demand with other orders promptly. We expect to continue to be dependent on our significant customers, the number and identity of which may change from period to period.

We generally sell our products on the basis of purchase orders. We have agreements for longer-term purchase commitments from a few of our major customers; these commitments range from 12 months to 18 months. Those customers with whom we do not have longer-term purchase commitments could cease purchasing our products with little or no notice and without significant penalties. A number of factors could cause our customers to cancel or defer orders, including interruptions to their operations due to a downturn in their industries, natural disasters, delays in manufacturing their own product offerings into which our products are incorporated, securing other sources for the products that we manufacture or developing such products internally.



## **Table of Contents**

### **Risk factors**

#### **Our manufacturing processes may be interrupted or our production may be delayed if we cannot maintain sufficient electrical supply, which could adversely affect our business, financial condition and operating results.**

Our manufacturing process requires a stable source of electricity. From time to time, we have experienced limited disruptions in our supply of electricity. Such disruptions, depending upon their duration, could result in a significant drop in throughput and yield of in-process crystal boules and create delays in our production. Although we use generators and other back-up sources of electricity, these replacement sources of electricity are only capable of providing effective back-up for limited periods of time. We cannot assure you that we will be successful in avoiding future disruptions in power or in mitigating the effects of such disruptions. Any material disruption in electrical supply could delay our production and could adversely affect our business, financial condition and operating results.

#### **Our gross margins and profitability may be adversely affected by rising energy costs.**

The average cost of electricity increased significantly at the end of 2006 largely due to the deregulation of energy in the State of Illinois. Electricity prices could also increase due to overall changes to the price of energy due to conditions in the Middle East, natural gas shortages in the United States and other economic conditions and uncertainties regarding the outcome and implications of such events. If electricity prices continue to increase significantly, we may not be able to pass these price increases through to our customers on a timely basis, if at all, which could adversely affect our gross margins and results of operations.

#### **We may not be able to effectively manage our growth, which could adversely affect our business, financial condition and operating results.**

We have been experiencing a period of significant growth that has challenged, and will continue to challenge, our management and other resources. Our recent and anticipated growth has placed, and is expected to continue to place, significant strain on our research and development, sales and marketing, and operational and administrative resources. To manage our growth effectively, we must continue to:

- ∅ implement new, and improve our existing, manufacturing systems, such as inventory control management and process control systems;
- ∅ enhance and maintain internal controls and accounting systems;
- ∅ maintain adequate manufacturing facilities and equipment to meet customer demand; and
- ∅ attract, retain and train qualified technical, managerial, manufacturing, sales and marketing, and administrative employees.

We plan to spend substantial amounts of money to support our growth and may have additional unexpected costs. If we cannot attract a sufficient number of qualified people or manage growth effectively, our actual growth may be slower and could adversely affect our business, financial condition and operating results.

#### **As a public company, we are now subject to Section 404 of the Sarbanes-Oxley Act of 2002. Investor confidence and our stock price could decline if we or our independent registered public accountants conclude that our internal control over financial reporting is ineffective.**

As a public company, we are required to comply with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002. In this regard, beginning with our annual report on Form 10-K for the year ending





## Table of Contents

### **Risk factors**

December 31, 2008, we will be required on an annual basis to assess the effectiveness of our internal control over financial reporting and include a statement as to whether or not our internal control over financial reporting is effective and we will be required to have our independent registered public accounting firm issue an attestation report on our internal control over financial reporting. In conducting our assessment, we will not be able to conclude that our internal control over financial reporting is effective if we have one or more material weaknesses. If we or our independent registered public accountants conclude that our internal control is not effective, our investors could lose confidence in our financial reports and our stock price could decline. An ineffective internal control environment could also adversely affect our ability to report our financial results in a timely manner and could materially adversely affect our business.

### **Our future operating results may fluctuate significantly, which makes our future results difficult to predict and could cause our operating results for particular periods to fall below expectations.**

Our revenues and operating results have fluctuated in the past and are likely to fluctuate in the future. These fluctuations are due to a number of factors, many of which are beyond our control. These factors include, among others:

- Ø timing of orders from and shipments to major customers;
- Ø the gain or loss of significant customers;
- Ø fluctuations in gross margins as a result of changes in product mix or other factors;
- Ø market acceptance of our products and our customers' products;
- Ø our ability to develop, introduce and market new products and technologies on a timely basis;
- Ø the need to pay higher labor costs as we continue to grow;
- Ø announcements of technological innovations, new products or upgrades to existing products by us or our competitors;
- Ø competitive market conditions, including pricing actions by our competitors and our customers' competitors;
- Ø developments in trade secrets, patent or other proprietary rights by us or our competitors;
- Ø announcements by us or our competitors of significant acquisitions, strategic partnerships or divestitures;

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- Ø interruption of operations at our manufacturing facilities or the facilities of our suppliers;
  
- Ø the level and timing of capital spending of our customers;
  
- Ø additions or departures of key personnel;
  
- Ø potential seasonal fluctuations in our customers' business activities; and
  
- Ø natural disasters, such as floods, hurricanes and earthquakes, as well as interruptions in power supply resulting from such events or due to other causes.

The foregoing factors are difficult to forecast, and these, as well as other factors, could materially adversely affect our quarterly or annual operating results. If our revenues or operating results fall below the expectations of investors or any securities analysts that may publish research on our company, the price of our common stock would likely decline.

## Table of Contents

### Risk factors

#### **Our gross margins could decline as a result of changes in our product mix and other factors, which may adversely impact our operating results.**

We anticipate that our gross margins will fluctuate from period to period as a result of the mix of products that we sell in any given period, with our larger diameter sapphire products generally yielding higher gross margins than our smaller diameter products. If our sales mix shifts to lower margin products in future periods, our overall gross margin levels and operating results would be adversely impacted. Increased competition and the adoption of alternatives to our products, more complex engineering requirements, lower demand and other factors may lead to a further downward shift in our product margins, leading to price erosion and lower revenues for us in the future.

#### **Our proprietary intellectual property rights may not adequately protect our products and technologies, and the failure to protect such rights could harm our competitive position and adversely affect our operating results.**

To protect our technology, we have chosen to rely primarily on trade secrets rather than seeking protection through publicly filed patents. Trade secrets are inherently difficult to protect. While we believe we use reasonable efforts to protect our trade secrets, our directors, employees, consultants or contractors may unintentionally or willfully disclose our information to competitors, whether during or after the termination of their services to our company. If we were to seek to enforce a claim that a third-party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets than US courts. Moreover, if our competitors independently develop equivalent knowledge, methods and know-how, it will be more difficult for us to protect our intellectual property and our business could be harmed.

We have no issued patents covering our products and technologies. Although we have filed applications for three patents, there can be no assurance that these patents will be issued or that any patents issued will be of significant value to our business. Our commercial success will depend on obtaining and maintaining trade secret, patent and other intellectual property protection of our products and technologies. We will only be able to protect products and technologies from unauthorized use by third parties to the extent that valid, protectable and enforceable trade secrets, patents or other intellectual property rights cover them.

If we are not able to defend the trade secret or patent protection positions of our products and technologies, then we may not be able to successfully compete with competitors developing or marketing competing products, and we may not generate enough revenue from product sales to justify the cost of development of our products and to achieve or maintain profitability.

#### **The protection of our intellectual property rights and the defense of claims of infringement against us by third parties may subject us to costly litigation.**

Other companies might allege that we are infringing certain of their patents or other rights. If we are unable to resolve these matters satisfactorily, or to obtain licenses on acceptable terms, we may face litigation. Any litigation to enforce patents issued to us, to protect trade secrets or know-how possessed by us or to defend us or indemnify others against claimed infringement of the rights of others could have a material adverse effect on our financial condition and operating results. Regardless of the validity or successful outcome of any such intellectual property claims, we may need to expend significant time and expense to protect our intellectual property rights or to defend against claims of infringement by third parties, which could have a material adverse effect on us. If we lose any such litigation where we are alleged to infringe the rights of others, we may be required to: pay substantial damages; seek licenses

## **Table of Contents**

### **Risk factors**

from others; or change, or stop manufacturing or selling, some or all of our products. Any of these outcomes could have an adverse effect on our business, results of operations or financial condition.

#### **The markets in which we operate are very competitive, and many of our competitors and potential competitors are larger, more established and better capitalized than we are.**

The markets for selling high-quality sapphire products are very competitive and have been characterized by rapid technological change. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses, and failure to increase, or the loss of, market share or expected market share, any of which would likely seriously harm our business, operating results and financial condition.

Some of our competitors and potential competitors are substantially larger and have greater financial, technical, marketing and other resources than we do. Given their capital resources, the large companies with whom we compete or may compete in the future, are in a better position to substantially increase their manufacturing capacity, research and development efforts or to withstand any significant reduction in orders by customers in our markets. Such larger companies typically have broader product lines and market focus and thus are not as susceptible to downturns in a particular market. In addition, some of our competitors have been in operation much longer than we have and therefore may have more long-standing and established relationships with our current and potential domestic and foreign customers.

We would be at a competitive disadvantage if our competitors bring their products to market earlier, if their products are more technologically capable than ours, or if any of our competitors' products or technologies were to become preferred in the industry. Moreover, we cannot assure you that existing or potential customers will not develop their own products, or acquire companies with products, that are competitive with our products. Any of these competitive threats could have a material adverse effect on our business, operating results or financial condition.

#### **We are subject to risks from international sales that may harm our operating results.**

In 2007 and 2006, revenue from international sales was approximately 75% and 89%, respectively, of our total revenue. We expect that revenue from international sales will continue to constitute a significant portion of our total revenue for the foreseeable future. Our international sales are subject to a variety of risks, including risks arising from:

- Ø trading restrictions, tariffs, trade barriers and taxes;
- Ø economic and political risks, wars, acts of terrorism, political unrest, pandemics, such as a recurrence of the SARS outbreak or avian flu, boycotts, curtailments of trade and other business restrictions;
- Ø the difficulty of enforcing contracts and collecting receivables through some foreign legal systems;
- Ø unexpected changes in regulatory requirements and other governmental approvals, permits and licenses;
- Ø sales variability as a result of transacting our foreign sales in US dollars as prices for our products become less competitive in countries with currencies that are low or are declining in value against the US dollar and more competitive in countries with currencies that are high or increasing in value against the US dollar; and

Ø periodic foreign economic downturns.

## **Table of Contents**

### **Risk factors**

Our future success will depend on our ability to anticipate and effectively manage these and other risks associated with our international sales. Our failure to manage any of these risks could harm our operating results.

#### **We are dependent on the continued services and performance of our senior management, the loss of any of whom could adversely affect our business, operating results and financial condition.**

Our future success is dependent on the continued services and continuing contributions of our senior management who must work together effectively in order to design our products, expand our business, increase our revenues and improve our operating results. The loss of services of senior management, particularly Raja M Parvez, our president and chief executive officer, William F Weissman, our chief financial officer, and Happy R Hewes, our senior vice president sales and marketing, could significantly delay or prevent the achievement of our development and strategic objectives. In addition, key personnel may be distracted by activities unrelated to our business. The loss of the services, or distraction, of our senior management for any reason could adversely affect our business, operating results and financial condition.

#### **If we are unable to attract or retain qualified personnel, our business and product development efforts could be harmed.**

Our success depends on our continued ability to identify, attract, hire, train, retain and motivate highly skilled technical, managerial, manufacturing, administrative and sales and marketing personnel. Competition for these individuals is intense, and we may not be able to successfully recruit, assimilate or retain sufficiently qualified personnel. In particular, we may encounter difficulties in recruiting and retaining a sufficient number of qualified technical personnel, which could harm our ability to develop new products and adversely impact our relationships with existing and future customers. The inability to attract and retain necessary technical, managerial, manufacturing, administrative and sales and marketing personnel could harm our ability to obtain new customers and develop new products and could adversely affect our business and operating results.

#### **We rely on a limited number of suppliers for raw materials and key components.**

We depend on a small number of suppliers for certain raw materials, components, services and equipment used in manufacturing our products, including key materials such as aluminum oxide and certain furnace components. We generally purchase these items with purchase orders, and we have no guaranteed supply arrangements with such suppliers. We are subject to variations in the cost of raw materials and consumables from period to period. We do not control the time and resources that these suppliers devote to our business, and we cannot be sure that these suppliers will perform their obligations to us or do so on a timely basis. In addition, some of these suppliers are located in regions of the world that may experience periods of political or economic instability.

Any significant delay in product delivery or other interruption or variation in supply from our key suppliers could prevent us from meeting demand for our products and from obtaining future business. If we were to lose key suppliers or our key suppliers were unable to support our demand, our manufacturing operations could be interrupted and we could be required to attempt to establish supply arrangements with other suppliers. In addition, the inability of our suppliers to support our demand could be indicative of a marketwide scarcity of the materials, which could result in even longer interruptions. Any such delay or interruption would impair our ability to meet our customers' needs and, therefore, could damage our customer relationships, and have a material adverse effect on our business and operating results.

## Table of Contents

### Risk factors

#### **Our products must meet exacting specifications, and undetected defects may occur, which may cause customers to return or stop buying our products.**

Our customers establish demanding specifications for quality, performance, and reliability that our products must meet. While we inspect our products before shipment, they still may contain undetected defects. If defects occur in our products, we could experience lost revenue, increased costs, delays in, cancellations or rescheduling of orders or shipments, product returns or discounts or damage to our reputation, any of which would harm our operating results and our business. We have from time to time in the past experienced product quality, performance or reliability problems. For example, in 2005, before establishing our current manufacturing and quality control processes, we experienced a higher than expected rate of defects in our since discontinued two inch polished wafer product line, which led to an increase in the number and frequency of returns.

#### **We are subject to numerous environmental laws and regulations, which could expose us to environmental liabilities, increase our manufacturing and related compliance costs or otherwise adversely affect our business and operating results.**

In our manufacturing process, we use water, oils, slurries, acids, adhesives and other industrial chemicals. We are subject to a variety of foreign, federal, state and local laws and regulations governing the protection of the environment. These environmental laws and regulations include those relating to the use, storage, handling, discharge, emission, disposal and reporting of toxic, volatile or otherwise hazardous materials used in our manufacturing processes. These materials may have been or could be released into the environment at properties currently or previously operated by us, at other locations during the transport of the materials, or at properties to which we send substances for treatment or disposal. If we were to violate or become liable under environmental laws and regulations or become non-compliant with permits required at some of our facilities, we could be held financially responsible and incur substantial costs, including investigation and cleanup costs, fines and civil or criminal sanctions, third-party property damage or personal injury claims. In addition, new laws and regulations or stricter enforcement of existing laws and regulations could give rise to additional compliance costs and liabilities.

#### **Our operations are concentrated in a small number of nearby facilities, and the unavailability of one or more of these facilities could harm our business.**

Our manufacturing, research and development, sales and marketing, and administrative activities are concentrated in our facilities in the Chicago metropolitan area. If, for any reason, including as a result of natural disaster, act of terrorism, war, outbreak of disease or other similar event, any of these facilities should be damaged or destroyed or become inaccessible or inoperable, our ability to conduct our business could be adversely affected or interrupted entirely.

#### **We may acquire other businesses, products or technologies; if we do, we may be unable to integrate them with our business effectively or at all, which may adversely affect our business, financial condition and operating results.**

If we find appropriate opportunities, we may acquire complementary businesses, product lines or technologies. However, if we acquire a business, product line or technology, the process of integration may produce unforeseen operating difficulties and expenditures and may absorb significant attention of our management that would otherwise be available for the ongoing development of our business. Further, the acquisition of a business may result in the assumption of unknown liabilities or create risks with respect to our existing relationships with suppliers and customers. If we make acquisitions, we may issue shares of stock that dilute other stockholders, expend cash, incur debt, assume contingent liabilities

## **Table of Contents**

### **Risk factors**

or create additional expenses related to amortizing intangible assets, any of which may adversely affect our business, financial condition or operating results.

### **Changes in accounting standards issued by the Financial Accounting Standards Board or other standard setting bodies may adversely affect our financial condition and operating results.**

Our financial statements are subject to the application of GAAP. From time to time, new accounting standards are issued or existing ones are revised by recognized authorities, including the Financial Accounting Standards Board. We may be required to adopt these new or revised accounting standards. It is possible that future accounting standards could change the current accounting treatment that we apply to our financial statements and such changes may adversely affect our reported financial condition and operating results.

### **RISKS RELATED TO OWNERSHIP OF OUR COMMON STOCK AND THIS OFFERING**

#### **The price of our common stock has fluctuated substantially and may continue to do so.**

Our common stock has only been publicly traded since November 16, 2007, and the trading price of our common stock has fluctuated substantially. From our initial public offering through April 24, 2008, the trading price of our common stock has ranged from a low of \$14.00 to a high of \$34.94.

Factors related to our company and our business, as well as broad market and industry factors, may adversely affect the market price of our common stock, regardless of our actual operating performance. Factors that could cause fluctuations in our stock price include, among other things:

Ø changes in market valuations of other companies in our industry;

Ø changes in financial guidance or estimates by us, by investors or by any financial analysts who might cover our stock or our industry;

Ø our ability to meet the performance expectations of financial analysts or investors;

Ø announcements by us or our competitors of significant products, contracts, acquisitions or strategic partnerships;

Ø general market and economic conditions; and

Ø the size of the public float of our stock.

Fluctuations caused by factors such as these may negatively affect the market price of our common stock. In addition, the other risks described elsewhere in this prospectus could adversely affect our stock price.

#### **Future sales of substantial amounts of our common stock could adversely affect the price of our common stock.**



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If our stockholders sell substantial amounts of our common stock following this offering, the prevailing market price for our common stock could be adversely affected. Such sales by our stockholders might make it more difficult for us to issue new equity or equity-related securities in the future at a time and place we deem appropriate.

As of April 22, 2008, there were 20,662,684 shares of our common stock outstanding. The stockholders selling in this offering will hold in the aggregate approximately 8,233,261 shares of our outstanding

## Table of Contents

### **Risk factors**

common stock after giving effect to the offering and have agreed with the underwriters that they will not for a period of approximately six months from the closing of this offering, offer, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any of our securities without the prior written consent of the underwriters. In addition, approximately 948,721 shares of our common stock remain subject to lock-up agreements entered into in connection with our initial public offering in November 2007 and are scheduled to expire as early as May 14, 2008. When these lock up agreements expire or are terminated, the shares of our common stock subject to those agreements will be eligible for sale under Rule 144, Rule 144(d) or Rule 701 under the Securities Act.

There are no agreements between the underwriters and any of our stockholders or affiliates releasing them from these lock-up agreements as of the date hereof. After the completion of this offering, the holders of an aggregate of approximately 7,695,989 shares of common stock will have registration rights. For a more detailed description of additional shares that may be sold in the future, see the sections of this prospectus captioned "Shares eligible for future sale" and "Underwriting."

#### **Our board of directors does not intend to declare or pay any dividends to our stockholders in the foreseeable future.**

The declaration, payment and amount of any future dividends will be made at the discretion of our board of directors, and will depend upon, among other things, the results of our operations, cash flows and financial condition, operating and capital requirements, and other factors the board of directors considers relevant. There is no plan to pay dividends in the foreseeable future, and if dividends are paid, there can be no assurance with respect to the amount of any such dividend.

#### **We will continue to incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could adversely affect our operating results.**

As a public company we have incurred, and will continue to incur, significant costs associated with public company reporting and corporate governance requirements. We also have incurred and will incur costs associated with these requirements, including the Sarbanes-Oxley Act, as well as rules implemented by the SEC and the NASDAQ Global Market. In addition, our management team is adapting to the requirements of being a public company. The expenses incurred by public companies generally for reporting and corporate governance purposes have been significant. These rules and regulations have substantially increased our legal and financial compliance costs and have made some activities more time-consuming and costly. We also expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage than used to be available. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as our executive officers.

#### **The concentration of our capital stock ownership with our directors and executive officers and their affiliates will limit your ability to influence corporate matters.**

We anticipate that after the completion of this offering, our executive officers and directors and their affiliates will together own more than 37.19% of our outstanding capital stock and voting power. For the foreseeable future, they will have influence over our management and affairs and over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets. Their ownership may limit your ability to influence corporate matters and, as a result, the market price of our common stock could be adversely affected.

## Table of Contents

### Risk factors

#### **We could be the subject of securities class action litigation due to future stock price volatility.**

The stock market in general, and market prices for the securities of companies like ours, recently have experienced extreme volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. When the market price of a stock declines significantly, holders of that stock have sometimes instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, our defense of the lawsuit could be costly and divert the time and attention of our management.

#### **Our certificate of incorporation, bylaws and Delaware law may discourage takeovers and business combinations that our stockholders might consider in their best interests.**

A number of provisions in our certificate of incorporation and bylaws, as well as anti-takeover provisions of Delaware law, may have the effect of delaying, deterring, preventing or rendering more difficult a change in control of Rubicon that our stockholders might consider in their best interests. These provisions include:

- Ø establishment of a classified board of directors;
- Ø granting to the board of directors sole power to set the number of directors and to fill any vacancy on the board of directors, whether such vacancy occurs as a result of an increase in the number of directors or otherwise;
- Ø limitations on the ability of stockholders to remove directors;
- Ø the ability of our board of directors to designate and issue one or more series of preferred stock without stockholder approval, the terms of which may be determined at the sole discretion of the board of directors;
- Ø prohibition on stockholders from calling special meetings of stockholders;
- Ø prohibition on stockholders from acting by written consent; and
- Ø establishment of advance notice requirements for stockholder proposals and nominations for election to the board of directors at stockholder meetings.

These provisions may prevent our stockholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

The foregoing provisions of our certificate of incorporation and bylaws may also make it difficult for stockholders to replace or remove our management. These provisions may facilitate management entrenchment that may delay, deter, render more difficult or prevent a change in our control, which may not be in the best interests of our stockholders.



**Table of Contents**

## Special note regarding forward-looking statements

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus regarding our future strategy, results of operations, financial position, net sales, projected costs, projected expenses, prospects and plans and objectives of management for future operations are forward-looking statements, as defined in the Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives and financial needs. These forward looking statements can be identified by the use of terms and phrases such as believe , plan , intend , anticipate , target , estimate , expect , and the like, and/or future-tense or conditional constructions (may , could , should , etc.). Items contemplating or making assumptions about actual or potential future sales, market size and trends or operating results also constitute forward-looking statements.

Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Before investing in our common stock, investors should be aware that the occurrence of the risks, uncertainties and events described in the section entitled Risk factors and elsewhere in this prospectus could have a material adverse effect on our business, results of operations and financial condition.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, forward-looking statements are inherently subject to known and unknown risks, business, economic and other risks and uncertainties that may cause actual results to be materially different from those discussed in these forward-looking statements. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus. We assume no obligation to update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this prospectus, other than as may be required by applicable law or regulation. If one or more of these risks or uncertainties materialize, or if the underlying assumptions prove incorrect, our actual results may vary materially from those expected or projected.

This prospectus also contains statistical data and estimates, including those relating to market size and growth rates of the markets in which we participate, that we obtained from industry publications and reports generated by market research firms. These publications typically indicate that they have obtained their information from sources they believe to be reliable, but do not guarantee the accuracy and completeness of their information. Although we have assessed the information in the publications and found it to be reasonable and believe the publications are reliable, we have not independently verified their data.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement, of which this prospectus is a part, with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

**Table of Contents**

## Use of proceeds

All of the shares of our common stock offered by this prospectus will be sold by the selling stockholders. We will not receive any proceeds from the sale of our common stock by the selling stockholders.

## Price range of our common stock

Our common stock is traded on the NASDAQ Global Market under the trading symbol RBCN. The following table sets forth the high and low sales price of our common stock for each quarterly period since our common stock began trading on the NASDAQ Global Market on November 16, 2007:

	<b>High</b>	<b>Low</b>
<b>2007</b>		
Fourth Quarter (from November 16, 2007)	\$ 25.75	\$ 14.00
<b>2008</b>		
First Quarter	34.94	19.76
Second Quarter (through April 24, 2008)	30.50	22.00

On April 24, 2008, the closing price of our common stock as reported on the NASDAQ Global Market was \$22.33 per share. As of April 22, 2008, we had approximately 82 stockholders of record.

## Dividend policy

We have never declared or paid cash dividends on our common stock. We currently intend to retain future earnings to finance the growth and development of our business, and we do not anticipate declaring or paying any cash dividends in the foreseeable future.

**Table of Contents****Capitalization**

The following table sets forth our capitalization as of December 31, 2007.

You should read this table together with our financial statements and related notes, Selected financial data and Management's discussion and analysis of financial condition and results of operations appearing elsewhere in this prospectus.

	<b>As of December 31, 2007</b> <b>(in thousands, other</b> <b>than share and</b>  <b>per share data)</b>
<b>Stockholders' equity</b>	
Preferred stock: \$0.001 par value per share, 5,000,000 undesignated shares authorized, no shares issued or outstanding	\$
Common stock: \$0.001 par value per share; 85,000,000 shares authorized and 20,488,608 shares issued and outstanding	24
Additional paid-in capital	259,243
Accumulated other comprehensive income	24
Accumulated deficit	(153,609)
<b>Total stockholders' equity</b>	<b>105,682</b>
<b>Total capitalization</b>	<b>\$ 105,682</b>

The above table excludes the following:

- Ø 795,845 shares of common stock issuable upon exercise of warrants outstanding as of December 31, 2007, with a weighted average exercise price of \$3.8419 per share;
- Ø 1,366,381 shares of common stock subject to outstanding options under our 2001 Equity Plan as of December 31, 2007, with a weighted average exercise price of \$3.6227 per share, 319,450 shares of common stock subject to outstanding options under our 2007 Stock Incentive Plan as of December 31, 2007, with a weighted average exercise price of \$15.5447 per share, and 24,663 shares of common stock subject to outstanding options issued as compensation to former board members and board advisors as of December 31, 2007, with a weighted average exercise price of \$4.9400 per share; and
- Ø 1,973,958 shares of common stock reserved for future issuance under our 2007 Stock Incentive Plan as of December 31, 2007.





**Table of Contents****Selected financial data**

The following statements of operations data for the years ended December 31, 2005, 2006 and 2007 and the balance sheet data as of December 31, 2006 and 2007 have been derived from our audited financial statements and related notes, which are included elsewhere in this prospectus. The statement of operations data for the years ended December 31, 2003 and 2004 and the balance sheet data as of December 31, 2003, 2004 and 2005 have been derived from audited financial statements not included in this prospectus. The following selected financial data should be read in conjunction with our Management's discussion and analysis of financial condition and results of operations and our financial statements and related notes, included elsewhere in this prospectus.

Our historical results are not necessarily indicative of the results that should be expected in the future.

**SELECTED FINANCIAL DATA**

Statements of operations data:	Year ended December 31,				
	2003	2004	2005	2006	2007
	(in thousands other than share and per share data)				
Revenue	\$ 8,560	\$ 16,043	\$ 16,315	\$ 20,752	\$ 34,110
Cost of goods sold	5,834	14,815	18,508	18,885	22,045
Gross profit (loss)	2,726	1,228	(2,193)	1,867	12,065
Operating expenses:					
General and administrative	2,981	3,029	4,688	3,298	6,157
Sales and marketing	975	1,586	1,266	1,062	675
Research and development	1,797	922	861	679	769
Asset impairment				933	
Loss on disposal of assets			383	42	139
Total operating expenses	5,753	5,537	7,198	6,014	7,740
Income (loss) from operations	(3,027)	(4,309)	(9,391)	(4,147)	4,325
Other income (expense) <sup>(1)</sup>	(700)	(1,052)	(2,735)	(3,272)	(7,104)
Loss before income taxes and cumulative effect of change in accounting principle	(3,727)	(5,361)	(12,126)	(7,419)	(2,779)
Income taxes					(75)
Loss before cumulative effect of change in accounting principle	(3,727)	(5,361)	(12,126)	(7,419)	(2,854)
Cumulative effect of change in accounting principle <sup>(2)</sup>				(221)	
Net loss	(3,727)	(5,361)	(12,126)	(7,640)	(2,854)
Dividends on preferred stock	(1,781)	(2,631)	(3,924)	(5,563)	(5,625)
Accretion of redeemable preferred stock	(2,580)	(2,681)	4,404	(23,416)	(59,934)

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Net loss attributable to common stockholders	\$ (8,088)	\$ (10,673)	\$ (11,646)	\$ (36,619)	\$ (68,413)
Net loss per common share attributable to common stockholders, basic and diluted	\$ (35.46)	\$ (46.79)	\$ (47.52)	\$ (146.57)	\$ (27.22)
Weighted shares used in computing net loss per share attributable to common stockholders, basic and diluted	228,077	228,124	245,073	249,843	2,513,487

- (1) Includes change in carrying value of convertible preferred stock warrants of \$(1,962) in 2006 and \$(6,019) in 2007.
- (2) On January 1, 2006, we adopted FSP150-5 Issuer's Accounting under FASB Statement No. 150 For Freestanding Warrants and Other Similar Investments in Shares that are Redeemable and recorded \$221 as a cumulative effect of change in accounting principle.

**Table of Contents****Selected financial data**

<b>Balance sheet data:</b>	<b>2003</b>	<b>2004</b>	<b>As of December 31,</b>			<b>2007</b>
			<b>2005</b>	<b>2006</b>	<b>(in thousands)</b>	
Cash and cash equivalents	\$ 2,208	\$ 3,948	\$ 1,466	\$ 3,638	\$ 4,380	
Working capital	2,048	1,969	3,600	(388)	76,179	
Total assets	19,952	29,082	28,885	29,020	111,411	
Convertible preferred stock warrant liability				3,773		
Long-term debt and capital lease obligations, less current maturities	3,115	2,241	4,741	2,628		
Redeemable convertible preferred stock	29,973	47,427	59,365	93,897		
Total stockholders' equity (deficit)	(19,204)	(29,877)	(39,573)	(77,593)	105,682	

**Table of Contents**

## Management's discussion and analysis of financial condition and results of operations

*The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and related notes appearing elsewhere in this prospectus. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. You should review the "Risk factors" section of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements described in the following discussion and analysis.*

### **OVERVIEW**

We are an advanced electronic materials provider that develops, manufactures and sells monocrystalline sapphire and other innovative crystalline products for LEDs, RFICs, blue laser diodes, optoelectronics and other optical applications.

We are a vertically integrated manufacturer of high-quality sapphire substrates and optical windows that are used in a variety of high-growth, high-volume end-market applications. We provide our products to the solid state lighting, semiconductor, consumer electronics, aerospace, sensor and other end markets. We sell sapphire products as cores and wafers in two inch to six inch diameters, and we sell sapphire and optical windows in sizes from one inch to nine inch diameters. We derive the majority of our revenue from sales of two inch to four inch sapphire cores and wafers for use in LEDs for solid state lighting applications and LEDs and blue laser diodes for consumer electronic applications. In addition, we have developed six inch sapphire wafers that are used for SOS RFICs, and we supply large diameter sapphire and optical windows for military, aerospace, sensor and other applications.

Since our inception, our revenue has increased each year. Our revenue was \$34.1 million in 2007, \$20.8 million in 2006 and \$16.3 million in 2005. Our net loss was \$2.9 million in 2007, \$7.6 million in 2006 and \$12.1 million in 2005. Our results in 2005 were adversely impacted by significant decreases in two inch polished sapphire substrate prices and in 2006 we made the strategic decision to exit the two inch polished sapphire substrate market. By exiting this market and not competing with our polishing customers, we were able to expand our product offerings to these customers to include higher margin products, which improved our overall gross margins. Moreover, in 2006, we introduced cost control and engineering improvements, which further contributed to our improved gross margins.

We sell our products on a global basis. The Asian, North American and European markets accounted for 72%, 26% and 2%, respectively, of our revenue for the year ended December 31, 2007 and 87%, 11% and 2%, respectively, for the year ended December 31, 2006. The increase in revenue from North America in 2007 is the result of a strong demand for six inch wafers sold into the silicon-on-sapphire market. Our primary customer in that market is located in the United States.

We provide direct sales from our Franklin Park, Illinois offices. Additionally, we use independent sales representatives, working on commission, in South Korea and China to assist in supporting our customers in these countries. Customers in South Korea and China place orders directly with us. Substantially all of our revenue is generated by our direct sales force and we expect this to continue as we expand our sales organization in the future.

## Table of Contents

### **Management s discussion and analysis of financial condition and results of operations**

We manufacture and ship our products from our facilities in the Chicago metropolitan area. We have approximately 102,600 square feet of manufacturing and office space, which includes 30,000 square feet in our Bensenville, Illinois facility, which we opened in January 2008.

#### **Financial operations**

*Revenue.* Revenue consists of sales of sapphire materials sold in core, as-cut, as-ground and polished forms in two, four and six inch diameters as well as optical materials sold as blanks or polished windows. Products are made to varying specifications, such as crystal planar orientations and thicknesses. The variation in the mix of sales of product types and diameters can impact revenue. For instance, a mix shift to larger diameter products and higher value-added wafers may increase our revenue. Revenue is subject to both quarterly and annual fluctuations as a result of product mix considerations.

Historically, a significant portion of our revenue has been derived from sales to relatively few customers. For the year ended December 31, 2007, we had three customers that accounted for 26%, 21% and 15% of our revenue and for the year ended December 31, 2006, we had three customers that accounted for approximately 27%, 17%, and 14% of our revenue. Other than as discussed above, none of our customers accounted for more than 10% of our revenue for such periods. Although we are attempting to diversify and expand our customer base, we expect our revenue to continue to be concentrated among a small number of customers. We expect that our significant customers may change from period to period.

We sell to all customers pursuant to purchase orders and have longer-term (6-12 month) supply agreements with several key customers. We recognize revenue upon shipment to our customers. Delays in product orders or changes to the timing of shipments under our supply agreements could cause our quarterly revenue to vary significantly. We derive a significant portion of our revenue from customers outside of the United States. The majority of our sales are to the Asian market and we expect that region to continue to be a major source of revenue for us. All of our revenue is denominated in US dollars.

*Cost of goods sold.* Cost of goods sold consists primarily of manufacturing materials, labor, manufacturing-related overhead such as utilities, depreciation and rent, provisions for excess and obsolete inventory reserves, freight and warranties. We manufacture our products based on customer orders. We purchase materials and supplies to support such demand. We are subject to variations in the cost of raw materials and consumables from period to period because we do not have long-term fixed-price agreements with our suppliers. Since the usage of electricity in our manufacturing processes is significant, any fluctuations in the cost of electricity will have an impact on our cost of manufacturing. Our one year contract for electric power is expiring on May 8, 2008. We could experience a material increase in utility costs if the contract renewal results in significantly higher rates.

*Gross profit.* Our gross profit has increased significantly over the past twelve months due to improved manufacturing and purchasing efficiencies, economies of scale related to higher unit volumes, product mix shift to larger diameters and our decision in 2006 to discontinue sales of two inch polished wafers. Our gross profit has been and will continue to be affected by a variety of factors, including average sales prices of our products, product mix, our ability to reduce manufacturing costs and fluctuations in the cost of electricity, raw materials and other supplies.

*General and administrative expenses.* General and administrative expenses ( G&A ) consist primarily of salaries and associated costs for employees in finance, human resources, information technology and administrative activities, charges for accounting, legal, and insurance fees, and, beginning in 2006, stock-based compensation under Statement of Financial Accounting Standards No. 123(R), Share-Based

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**Table of Contents**

**Management s discussion and analysis of financial condition and results of operations**

Payment , ( SFAS 123R ). In 2007, we began incurring significant additional accounting, legal, insurance, investor relations and other costs associated with being a public company.

*Sales and marketing expenses.* Sales and marketing expenses consist primarily of salaries and associated costs for employees engaged in sales activities, commissions paid to third party representatives, product samples, charges for trade shows and travel. We expect these expenses to increase in future periods based on planned increases in personnel to meet expected growth, although they may decrease as a percentage of revenue.

*Research and development expenses.* Research and development ( R&D ) expenses include costs related to engineering personnel, materials and other product development related costs. R&D is expensed as incurred. We believe our R&D expenses will generally increase as we continue to develop new products, although they may decrease as a percentage of revenue.

*Other income (expense).* Other income (expense) consists of interest expense and change in carrying value of preferred stock warrants, which is offset in part by interest income. Interest expense consists of interest on debt and amortization of the fair value of our preferred stock warrants issued as part of debt financing transactions. For the years ended December 31, 2007 and December 31, 2006, interest expense was \$1.5 million and \$1.3 million, respectively. We repaid our outstanding indebtedness with a portion of the proceeds from our initial public offering in November 2007. The remaining unamortized debt discount associated with the preferred stock warrants issued as part of debt financing transactions was expensed on the repayment of the debt. Consequently, we do not expect to incur interest expense. Proceeds from our initial public offering were invested in available-for-sale securities.

The change in carrying value of preferred stock warrants is associated with the value of warrants classified as liabilities. These warrants converted into common stock warrants in connection with our initial public offering. We will no longer incur this non-cash gain or loss following the conversion of these warrants to common stock warrants. Additional information on our accounting for change in carrying value of preferred stock warrants is provided in Critical accounting policies and estimates.

*Provision for income tax.* We account for income taxes under the asset and liability method whereby the expected future tax consequences of temporary differences between the book value and the tax basis of assets and liabilities are recognized as deferred tax assets and liabilities, using enacted tax rates in effect for the year in which the differences are expected to be recognized. A full valuation allowance is provided as management cannot conclude that it is more likely than not that our deferred tax assets will be realized. At December 31, 2007, we had \$34.5 million in net operating loss carryforwards ( NOLs ). We believe that we are not restricted in our ability to use the full amount of the NOLs, nor is there a limit to the amount of NOLs that may be used in any given year.

*Stock-based compensation.* The majority of our stock-based compensation relates to administrative personnel and is accounted for as a general and administrative expense. For the years ended December 31, 2007, December 31, 2006 and December 31, 2005, our stock-based compensation expense was \$754,000, \$62,000 and \$0, respectively.

**Table of Contents****Management's discussion and analysis of financial condition and results of operations****RESULTS OF OPERATIONS**

The following table sets forth our statements of operations for the periods indicated:

	Year ended December 31,		
	2007	2006	2005
	(in millions)		
Revenue	\$ 34.1	\$ 20.8	\$ 16.3
Cost of goods sold	22.0	18.9	18.5
Gross profit (loss)	12.1	1.9	(2.2)
Operating expenses:			
General and administrative	6.2	3.3	4.7
Sales and marketing	0.7	1.1	1.2
Research and development	0.8	0.7	0.9
Asset impairment		0.9	
Loss on disposal of assets	0.1		0.4
Total operating expenses	7.8	6.0	7.2
Income (loss) from operations	4.3	(4.1)	(9.4)
Other income (expense)	(7.1)	(3.3)	(2.7)
Loss before income taxes and cumulative effect of change in accounting principle	(2.8)	(7.4)	(12.1)
Income taxes	(0.1)		
Loss before cumulative effect of change in accounting principle	(2.9)	(7.4)	(12.1)
Cumulative effect of change in accounting principle		(0.2)	
Net loss	\$ (2.9)	\$ (7.6)	\$ (12.1)

The following table sets forth our statements of operations as a percentage of revenues for the periods indicated:

	Year ended December 31,		
	2007	2006	2005
	(percentage of total)		
Revenue	100%	100%	100%
Cost of goods sold	65	91	113
Gross profit (loss)	35	9	(13)
Operating expenses:			
General and administrative	18	16	29
Sales and marketing	2	5	7

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Research and development	2	4	6
Asset impairment		4	
Loss on disposal of assets	1		2
Total operating expenses	23	29	44
Income (loss) from operations	12	(20)	(57)
Other income (expense)	(21)	(16)	(17)
Loss before income taxes and cumulative effect of change in accounting principle	(9)	(36)	(74)
Income taxes			
Loss before cumulative effect of change in accounting principle	(9)	(36)	(74)
Cumulative effect of change in accounting principle		(1)	
Net loss	(9)%	(37)%	(74)%



**Table of Contents**

**Management s discussion and analysis of financial condition and results of operations**

**Comparison of years ended December 31, 2007 and 2006**

*Revenue.* Revenue was \$34.1 million for the year ended December 31, 2007 and \$20.8 million for the year ended December 31, 2006, an increase of \$13.3 million, or 64%. Revenue increased across all product lines except for six inch as ground wafers, which declined by \$626,000 as we shifted six inch capacity to six inch polished production. Our revenue increase was primarily attributable to an increase in shipments of substrates to the LED industry resulting in additional revenue of \$6.5 million, including initial volume deliveries of four inch sapphire substrates of \$3.4 million, the effect of price increases beginning in the first quarter of 2007 totaling \$1.3 million and an increase in sales of six inch polished products to the SOS RFIC market of \$4.8 million. We also achieved higher revenue of \$913,000 from optical products due to increased sales of sapphire and fluorides for military, aerospace, sensor and other applications.

*Gross profit.* Gross profit was \$12.1 million for the year ended December 31, 2007 and \$1.9 million for the year ended December 31, 2006, an increase of \$10.2 million. This increase in gross profit represented an improvement of gross margins from 9% to 35%. The increase in gross profit in 2007 compared to 2006 was primarily due to a shift to higher margin products including sapphire cores and larger diameter sapphire products, our exit from the two inch polished wafer business on which we realized a negative gross margin, improved operating leverage from higher throughput, increased production yields and lower scrap costs.

*General and administrative expenses.* G&A expenses were \$6.2 million for the year ended December 31, 2007 and \$3.3 million for the year ended December 31, 2006, an increase of \$2.9 million. The increase was primarily due to \$919,000 from higher bonus costs, \$692,000 of additional stock-based compensation, \$282,000 from lawsuit settlements, \$262,000 from higher financing fees associated with debt refinancing and extinguishment, \$224,000 from tax and Sarbanes-Oxley Act Section 404 consulting services, \$187,000 in higher legal costs, \$101,000 in higher franchise taxes, \$93,000 from higher expenses associated with fees paid to non-employee members of our board of directors and \$76,000 from higher bad debt expense on higher receivable balances.

*Sales and marketing expenses.* Sales and marketing expenses were \$675,000 for the year ended December 31, 2007 and \$1.1 million for the year ended December 31, 2006, a decrease of \$387,000. The decrease in sales and marketing expenses, even as revenue increased, is attributable to the elimination of our Japan sales office and tighter control of other selling expenses.

*Research and development expenses.* R&D expenses were \$769,000 for the year ended December 31, 2007 and \$679,000 for the year ended December 31, 2006, an increase of \$90,000. The increase was primarily attributable to an increase in materials purchased for research projects.

*Other income (expense).* Other income (expense) was \$(7.1) million for the year ended December 31, 2007 and \$(3.3) million for the year ended December 31, 2006, an increase in net expense of \$3.8 million. The increase was primarily due to an increase in the change in carrying value of preferred stock warrants of \$4.1 million. Interest expense was slightly higher by \$143,000 from higher warrant interest expense of \$417,000 as a result of refinancing and extinguishing our debt facility partially offset by lower interest of \$274,000 on lower average debt and capital lease balances. Interest income increased by \$368,000 as interest was earned on investing proceeds from our initial public offering.

**Table of Contents****Management's discussion and analysis of financial condition and results of operations****Comparison of years ended December 31, 2006 and 2005**

*Revenue.* Revenue was \$20.8 million for the year ended December 31, 2006 and \$16.3 million for the year ended December 31, 2005, an increase of \$4.5 million, or 28%. Revenue increased across all product lines except for polished wafers. Our revenue increase was primarily attributable to increased sales volumes of two and three inch sapphire products resulting in additional revenue of \$9.7 million, which was partially offset by the effect of \$4.2 million in price decreases that began in 2005 and continued through the third quarter of 2006 due to increased market competition. In 2006, our polished product revenue declined by \$3.4 million due to our strategic decision to exit the two inch polished wafer business in the second quarter of 2006. As we exited this business, we realized much higher sales volumes of non-polished products in the second half of 2006 as we stopped competing with our LED polishing customers. Revenue also increased by \$1.5 million in 2006 compared to 2005 as we began to provide large diameter (six inch) as-ground wafers to the SOS RFIC market and by \$530,000 as we started deliveries of four inch sapphire products in 2006. We also achieved higher revenue from optical products due to continuing acceptance of sapphire and fluorides for military, aerospace, sensor and other applications.

*Gross profit (loss).* Gross profit (loss) was \$1.9 million for the year ended December 31, 2006 and \$(2.2) million for the year ended December 31, 2005, an increase of \$4.1 million. This increase in gross profit represented an improvement of gross margins from (13%) to 9%. The increase in gross profit in 2006 compared to 2005 was primarily due to an increase in units sold and a shift to higher margin products including sapphire cores and larger diameter sapphire products, our exit from the two inch polished wafer business on which we realized a negative gross margin, improved operating leverage from higher throughput, increased production yields and lower scrap costs.

*General and administrative expenses.* G&A expenses were \$3.3 million for the year ended December 31, 2006 and \$4.7 million for the year ended December 31, 2005, a decrease of \$1.4 million. The decrease was primarily due to cost savings of \$293,000 from lower information technology and human resource headcount, \$235,000 from lower bad debt expense and \$160,000 from lower business insurance and legal costs, as well as the absence of restructuring costs of \$627,000, information technology and executive consulting costs of \$322,000 and recruiting expenses of \$222,000 incurred in 2005 but not in 2006. These factors were partially offset by higher bonus expenses of \$602,000.

*Sales and marketing expenses.* Sales and marketing expenses were \$1.1 million for the year ended December 31, 2006 and \$1.3 million for the year ended December 31, 2005, a decrease of \$204,000. The decrease in sales and marketing expenses, even as revenue increased, is attributable to the elimination of our Japan sales office and tighter control of other selling expenses.

*Research and development expenses.* R&D expenses were \$679,000 for the year ended December 31, 2006 and \$861,000 for the year ended December 31, 2005, a decrease of \$182,000. The decrease was primarily attributable to a decrease in materials used for product development and for qualification of polished products for the LED market.

*Asset impairment.* We recorded an asset impairment charge of \$933,000 in 2006 associated with our exit from the two inch polished wafer business during the second quarter of 2006.

*Other income (expense).* Other income (expense) was \$(3.3) million for the year ended December 31, 2006 and \$(2.7) million for the year ended December 31, 2005, an increase of \$537,000. The increase was primarily due to a change in carrying value of preferred stock warrants of \$(2.0) million, offset in part by lower interest expense of \$1.3 million in 2006, compared to \$2.7 million in 2005, on lower average debt and capital lease balances.

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**Table of Contents**

**Management s discussion and analysis of financial condition and results of operations**

**LIQUIDITY AND CAPITAL RESOURCES**

We historically funded our operations using a combination of issuances of common stock and preferred stock, a working capital line of credit and term loans and cash generated from our operations. Since our inception, we have raised approximately \$136 million of equity from the issuance of common and preferred stock.

As of December 31, 2007, we had cash and short term investments totaling \$72.1 million, including cash of \$1.3 million held in deposits at a major bank, \$3.1 million invested in money market funds and had short term investments in commercial paper, state and local bonds, and US treasury securities of \$67.8 million. A portion of our investments are in municipal auction rate securities. In February 2008, we experienced failed auctions for our entire auction rate securities portfolio, resulting in our inability to sell these securities in the short term. A failed auction results in a lack of liquidity in the securities but does not signify a default by the issuer. We may need to hold these investments for a longer period than was originally anticipated. More information on our auction rate security position can be found in Note 12 to our financial statements for the year ended December 31, 2007, included elsewhere in this prospectus.

**Cash flows from operating activities**

Cash provided by operating activities was \$7.1 million for the year ended December 31, 2007. During such period, we generated a net loss of \$2.9 million and we incurred non-cash charges of \$11.1 million, including depreciation expense of \$3.4 million, change in carrying value of preferred stock warrant expense of \$6.0 million, stock-based compensation expense of \$754,000, net loss on disposal of equipment of \$139,000 and interest expense related to debt accretion of \$769,000. We experienced an increase during such period in accounts receivable of \$1.7 million on increased sales, an increase in accounts payable of \$1.1 million and an increase in inventory and spare parts of \$1.3 million due primarily to an increase in safety stock of raw material inventory. We also experienced an increase in corporate income and franchise taxes of \$310,000 due to an increase in assets from our initial public offering and an increase in deferred revenue of \$518,000 due to revenue deferral on a research and development project. The \$6.4 million increase in cash provided by operating activities for the year ended December 31, 2007, compared to the year ended December 31, 2006, is primarily attributable to a net loss of \$2.9 million for the year ended December 31, 2007, compared to a net loss of \$7.6 million for the year ended December 31, 2006, as sales volume and pricing increased and our production costs declined. Further, the non-cash change in carrying value of preferred stock for the year ended December 31, 2007 was \$6.0 million compared to \$2.2 million for the year ended December 31, 2006. As sales increased in 2007, we experienced increases in accounts receivable and inventory partially offset by increases in accounts payable in order to meet the rising customer demands.

Cash provided by operating activities was \$659,000 for the year ended December 31, 2006. During such period, we generated a net loss of \$7.6 million, offset primarily by non-cash charges of \$6.7 million, including depreciation expense of \$3.1 million, change in carrying value of preferred stock warrant of \$2.2 million, interest expense related to debt accretion of \$352,000 and asset impairment of \$933,000. With our exit from the two inch polished wafer business during the second quarter of 2006, we recorded an asset impairment charge to write-down to estimated fair market value certain polishing fixed assets that will no longer be used. Inventory decreased by \$1.4 million as inventory added in 2005 was used to meet demand. We experienced an increase in accounts receivable of \$829,000 as revenue increased in 2006 compared to 2005. Further, accounts payable increased by \$661,000 as additional purchases of consumables were made to support increased production.

Cash used in operating activities was \$9.4 million for the year ended December 31, 2005. During such period, we generated a net loss of \$12.1 million and had non-cash charges of \$5.2 million, including depreciation expense of \$3.1 million, loss on disposal of assets of \$383,000, amortization of financing

## **Table of Contents**

### **Management s discussion and analysis of financial condition and results of operations**

costs of \$225,000 and non-cash interest expense related to warrants issued with debt of \$1.5 million. Inventory levels increased by \$1.6 million and accounts receivable decreased by \$466,000 as fourth quarter sales slowed. In addition, accounts payable decreased by \$1.2 million as capital expenditures projects slowed and production consumables purchases slowed. The \$10.1 million increase in cash provided by operating activities for the year ended December 31, 2006 compared to the year ended December 31, 2005 is primarily due to a decrease in net loss as we exited the two inch polished wafer business in 2006. Further, 2006 sales included inventory that was added in 2005, and our accounts payable decreased in 2005 as production slowed and capital expenditures were significantly reduced.

### **Cash flows used in investing activities**

Net cash used in investing activities was \$81.5 million, \$2.3 million and \$4.1 million for the years ended December 31, 2007, 2006 and 2005, respectively. In 2007, we used approximately \$7.1 million to purchase components used to construct additional crystal growth furnaces, approximately \$1.7 million for infrastructure changes needed to commence operations in our new facility in Bensenville, Illinois and approximately \$1.7 million to purchase various equipment used to expand our production capacity in support of our sales growth. Also in 2007, we used the proceeds of our initial public offering to purchase short term investment securities. In 2006, we used approximately \$1.2 million to add crystal growth furnaces and approximately \$1.1 million to upgrade existing capacity in other areas. In 2005, we used approximately \$1.7 million to construct crystal growth furnaces and approximately \$2.4 million to increase polishing and slicing capacity. We expect to spend between \$12.0 million to \$20.0 million per year for each of the next two years on capital expenditures to support our expected sales growth.

### **Cash flows from financing activities**

Net cash provided from financing activities was \$75.1 million, \$3.8 million, and \$11.1 million for the years ended December 31, 2007, 2006 and 2005, respectively. Net cash provided from financing activities for 2007 reflects net proceeds received from our initial public offering of \$81.1 million, offset by the net repayment of borrowings of \$6.0 million. Net cash provided from financing activities for 2006 reflects proceeds received from the sale of our Series E preferred stock of \$5.6 million, offset by the net repayment of borrowings of \$1.6 million. Net cash provided from financing activities for 2005 reflects proceeds of \$4.9 million received from the sale of shares of our Series D preferred stock and Series E preferred stock, as well as short-term borrowings from investors of \$7.5 million, which were converted into additional shares of our Series D preferred stock and Series E preferred stock. These amounts were partially offset by the net repayment of borrowings of \$1.4 million.

### **Future liquidity requirements**

We believe that our existing cash, cash equivalents, investments, and anticipated cash flows from operating activities will be sufficient to meet our anticipated cash needs for at least the next 12 months. These cash needs include cash required to fund our operations, taking into account anticipated increases in operating expenses and our planned capital expenditures to support our continued growth. If the assumptions underlying our business plan regarding future revenues and expenses change, or if unexpected opportunities or needs arise, we may seek to raise additional cash by selling equity or convertible debt securities. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly-issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we obtain debt financing, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, and the terms of the debt securities issued could impose significant restrictions on our operations. If we are unable to obtain financing on terms favorable to us, we may be unable to successfully execute our business plan.

**Table of Contents****Management's discussion and analysis of financial condition and results of operations****Credit facilities**

In April 2007, we entered into a three-year, \$12.0 million term loan and a one-year, \$4.0 million accounts receivable and inventory revolving line of credit financing agreement with Hercules Technology Growth Capital, Inc. These loans were collateralized by all of our assets. The term loan was available for draw through December 31, 2007, subject to extension based on agreed financial metrics. The term loan interest rate was equal to the prime rate plus 3.375% and the line of credit rate was equal to the prime rate plus 0.25%. We repaid these facilities in full with a portion of the proceeds of our initial public offering, and the agreement was terminated.

**Contractual obligations**

The contractual obligations presented in the table below represent our estimates of future payments under fixed contractual obligations and commitments at December 31, 2007. Changes in our business needs as well as actions by third parties and other factors, may cause these estimates to change. Because these estimates are complex and necessarily subjective, our actual payments in future periods are likely to vary from those presented in the table. The following table sets forth information relating to our contractual obligations at December 31, 2007:

	Less than 1 year	Payments due in			Total
		1-3 years	3-5 years (in millions)	More than 5 years	
Operating lease obligations	\$ 1.3	\$ 2.5	\$ 2.2	\$ 2.3	\$ 8.3
Capital lease obligations	0.1				0.1
Purchase order obligations	3.3				3.3
Total contractual obligations	\$ 4.7	\$ 2.5	\$ 2.2	\$ 2.3	\$ 11.7

**OFF-BALANCE SHEET ARRANGEMENTS**

During 2007, 2006 and 2005, we did not engage in any off-balance sheet arrangements. We do not have any interest in entities referred to as variable interest entities, which includes special purpose entities and other structured finance entities.

**QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK**

Market risk is the risk of loss related to changes in market prices, including interest rates, of financial instruments that may adversely impact our financial position, results of operations or cash flows.

*Foreign currency exchange risk.* To date, substantially all of our international sales have been transacted in US dollars. Accordingly, we have limited exposure to foreign currency exchange rates and do not enter into foreign currency hedging transactions.

*Interest rate risk.* We do not have any long-term borrowings. Our investments consist of cash, cash equivalents, commercial paper, state and local bonds, and US treasury securities. The primary objective of our investment activities is to preserve principal while maximizing income without significantly increasing risk. We do not enter into investments for trading or speculative purposes. Our investments are exposed to market risk due to a fluctuation in interest rates, which may affect our interest income and the fair market value of our investments. Due to the short-term nature of our investment portfolio, we do not believe an immediate 10% increase or decrease in interest rates would have a material effect



## **Table of Contents**

### **Management's discussion and analysis of financial condition and results of operations**

on the fair market value of our portfolio, and therefore we do not expect our operating results or cash flows to be materially affected by a sudden change in market interest rates.

*Inflation.* Our operations have not been, and we do not expect them to be, materially affected by inflation. However, historically, the prices we charge our customers are market driven, and therefore we may not be able to increase our prices to offset any increase in our material or labor costs. Our inability or failure to do so could harm our business, financial condition and results of operations.

### **INTERNAL CONTROL OVER FINANCIAL REPORTING**

#### **Management's evaluation of disclosure controls and procedures**

An evaluation was performed under the supervision and with the participation of our management, including our chief executive officer and chief financial officer (together, our certifying officers), of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of December 31, 2007. Disclosure controls and procedures are controls and other procedures designed to ensure that information required to be disclosed by us in our periodic reports filed with the SEC is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and instructions for Form 10-K, and that the information is accumulated and communicated to our management, including the chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure. Based on their evaluation, our certifying officers concluded that these disclosure controls and procedures were effective as of December 31, 2007.

#### **Changes in internal control over financial reporting**

Our management, including our chief executive officer and chief financial officer, believes that a controls system, no matter how well designed and operated, is based in part upon certain assumptions about the likelihood of future events, and therefore can only provide reasonable, not absolute assurance that the objectives of the control system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

We have identified, documented and formalized key controls over financial reporting. We have also hired additional staff and re-assigned responsibilities to further segregate duties within financial reporting processes. We have formally documented our accounting policies and procedures and hired a chief financial officer in July 2007 to increase our level of experience with financial reporting and complex accounting issues. We have also enhanced internal controls around information technology that support the financial reporting processes and controls. Other than as described above, our certifying officers have concluded that there were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended) during the year ended December 31, 2007, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Our Annual Report on Form 10-K for the year ended December 31, 2007 does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm due to a transition period established by rules of the Securities and Exchange Commission for newly public companies. At the end of the fiscal year 2008, Section 404 of the Sarbanes-Oxley Act will require our management to provide an assessment of the effectiveness of our internal control over financial reporting, and our independent registered public accounting firm will be required to report on the effectiveness of our internal control over financial reporting.

## **Table of Contents**

### **Management's discussion and analysis of financial condition and results of operations**

### **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

The preparation of financial statements in accordance with accounting principles generally accepted in the United States requires us to make estimates, assumptions and judgments that affect the amounts reported in our financial statements and the accompanying notes. We base our estimates on historical experience and various other assumptions that we believe to be reasonable. Although these estimates are based on our present best knowledge of the future impact on the company of current events and actions, actual results may differ from these estimates, assumptions and judgments.

We consider to be critical those accounting policies that require our most subjective or complex judgments, which often result from a need to make estimates about the effect of matters that are inherently uncertain, and that are among the most important of our accounting policies in the portrayal of our financial condition and results of operations. We believe the following to be our critical accounting policies, including the more significant estimates and assumptions used in preparation of our financial statements.

#### **Revenue recognition**

We recognize revenue from sales of products when:

- ∅ *Persuasive evidence of an arrangement exists.* We require evidence of a purchase order with the customer specifying the terms and specifications of the product to be delivered, typically in the form of a signed quotation or purchase order from the customer.
- ∅ *Title has passed and the product has been delivered.* Title passage and product delivery generally occurs when the product is delivered to a common carrier.
- ∅ *The price is fixed or determinable.* All terms are fixed in the signed quotation or purchase order received from the customer. The purchase orders do not contain rights of cancellation, return, exchanges or refunds.
- ∅ *Collection of the resulting receivable is reasonably assured.* Our standard arrangement with customers includes 30 day payment terms. Customers are subject to a credit review process that evaluates each customer's financial position and its ability to pay. We determine collectibility by considering the length of time the customer has been in business and our history of collections with that customer. If it is determined that collection is not probable, no product is shipped and no revenue is recognized unless cash is received in advance. R&D revenue is recognized as services are performed. We execute agreements with our customers that clearly describe the scope of the project, the services we will provide, ownership of any tangible or intangible assets generated as part of the project, and the amount of consideration we will receive.

There are no significant judgments or estimates associated with our revenue recognition policies or processes. All of our revenue is denominated in United States dollars.

#### **Inventory valuation**

We value our inventory at the lower of cost or market. Market is determined based on net realizable value. Cost is determined for raw materials on a first-in, first-out basis and work in process and finished goods are based on actual costs. We establish inventory reserves when conditions exist that suggest inventory may be in excess of anticipated demand or is obsolete based on customer required specifications. We evaluate the ability to realize the value of our inventory based on a combination of factors, including forecasted sales, estimated current and future market



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value and changes in customer s product specifications. Recoveries of previously written-down inventory are recognized only when the

36

## **Table of Contents**

### **Management's discussion and analysis of financial condition and results of operations**

related inventory is sold and revenue has been recognized. Based on current demand and pricing of our products, we believe that it is unlikely that significant adjustments for inventory obsolescence will occur. Our method of estimating excess and obsolete inventory has remained consistent for all periods presented. However, if our recognition of excess or obsolete inventory is, or if our estimates of our inventory's potential utility become, less favorable than currently expected, additional inventory reserves may be required.

### **Allowance for doubtful accounts**

We estimate the allowance for doubtful accounts based on an assessment of the collectibility of specific customer accounts. The determination of risk for collection is assessed on a customer-by-customer basis considering our historical experience and future orders with the customer, changes in payment patterns, and recent information we have about the current status of our accounts receivable balances. If we determine that a specific customer is a risk for collection, we provide a specific allowance for credit losses to reduce the net recognized receivable to the amount we reasonably believe will be collected. We believe that based on the customers to whom we sell and the nature of our agreements with them, our estimates are reasonable. Our method of estimating collectibility has remained consistent for all periods presented and with past collections experience. We believe that it is unlikely that significant adjustments to allowances for doubtful accounts will be necessary.

### **Stock-based compensation**

Effective January 1, 2006 we adopted SFAS 123R which amends SFAS 123 Accounting for Stock-Based Compensation (SFAS 123), and requires us to expense stock options based upon the fair market value on the date of grant. We adopted SFAS 123R using the prospective method. Under this transition method, the provisions of SFAS 123R are applied to new awards and to awards modified, repurchased, or cancelled after January 1, 2006. We selected the Black-Scholes option pricing model to determine the fair value of stock options. The determination of the fair value of stock-based payment awards on the date of grant using an option-pricing model will be affected by assumptions regarding a number of complex and subjective variables. These variables include our expected stock volatility over the term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rates, forfeitures and expected dividends.

The expected term represents the weighted-average period that our stock options are expected to be outstanding and is based upon the vesting term of our options, a review of a peer group of companies, and expected exercise behavior. Until November 2007, we were operating as a private company, and as a result, we were unable to use our actual price volatility data. Therefore, we estimate the volatility of our common stock based on volatility of similar entities over the expected term of our stock options. We base the risk-free interest rate that we use in the option pricing model on US Treasury zero-coupon issues with remaining terms similar to the expected term on the options. We do not anticipate paying any cash dividends in the foreseeable future and, therefore, use an expected dividend yield of zero in the option pricing model. We are required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. The current forfeiture rate of 25% was based on our past history of pre-vesting forfeitures.

We had a choice of two attribution methods for allocating compensation costs under SFAS 123R, the straight-line method, which allocates expense on a straight-line basis over the requisite service period of the last separately vesting portion of an award, or the graded vesting attribution method, which allocates expense on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards. We chose the former method and amortized the fair value of each option on a straight-line basis over the service period.

**Table of Contents****Management's discussion and analysis of financial condition and results of operations**

Based on the variables affecting the valuation of our common stock and the method used for allocating compensation costs, we recognized \$754,000 in stock compensation expense during the year ended December 31, 2007.

With respect to each option grant date for the years ended December 31, 2005 and 2006, and through November 15, 2007, we determined the deemed fair value of our common stock. As there was no public market for our common stock during these periods, this determination was necessarily subjective. In making this determination, we considered a number of factors, including:

- ∅ the issuance price of our series of preferred shares to third parties;
- ∅ the liquidation preference and other rights of the preferred shares; and
- ∅ the fact that the option grants involved illiquid securities of a private company.

For options granted through November 15, 2007, the board of directors set the exercise price for options granted based upon estimates of fair value. In preparing for our initial public offering, the board of directors determined that the original methodology applied did not fully comply with the requirements in the AICPA's Practice Aid Valuation of Privately-Held-Company Equity Securities Issued as Compensation, which we refer to as the practice aid. Revised valuations were prepared which yielded lower fair values for our common stock. See Valuation methodologies employed below for further disclosure of the valuation methodology used in determining fair value per share for financial reporting purposes. Therefore, for financial reporting purposes, we determined that it was appropriate to use \$5.25 for options granted in June and August 2007 as the fair value of our common stock within the Black-Scholes option pricing model consistent with the revised valuation. For stock option grants after our initial public offering, the board of directors set the exercise price at the fair market value per share on the date of grant.

The following table sets forth option grants made during 2007, with the intrinsic value calculated based on grant date fair value.

Date of Grant	Number of options granted	Exercise price	Fair value estimate per share	Intrinsic value per share <sup>(1)</sup>
June 2007	251,635	\$ 8.45	\$ 5.20	\$
August 2007	198,040	8.45	5.20	
November 2007	207,692	14.00	14.00	
December 2007	111,758	17.60-18.50	17.60-18.50	

(1) The intrinsic value per share is the difference between the subsequently reassessed fair value per share for financial statement reporting purposes and the exercise price per share as established on each applicable stock option grant date by our compensation committee and board of directors as described above. There is no intrinsic value because the exercise price per share of each option exceeded the fair value of the common stock on the date of grant.

**Valuation methodologies employed**

The valuation methodologies we employed in connection with these option grants were based on various generally accepted valuation methods. Specifically, at each reporting date we analyzed the value of the company, or the business enterprise value, using market and income approaches, and then allocated the business enterprise value using contingent claims analysis, an application of option pricing theory. The allocation of the business enterprise value to convertible preferred stock, common stock, warrants and stock options at September 30, 2007,

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June 30, 2007 and March 31, 2007 used option pricing theory and considered the probability of an initial public offering.

**38**

## **Table of Contents**

### **Management s discussion and analysis of financial condition and results of operations**

In determining the business enterprise value at September 30, 2007, June 30, 2007 and March 31, 2007, we used both market and income value approaches. The market approach used both comparable company and transaction valuation methods. The comparable company market approach used revenue multiples observed in active securities markets and the transaction method used both revenue and EBITDA (earnings before interest, taxes, depreciation and amortization) multiples observed in the mergers and acquisitions market. The income approach determines a business enterprise value using the discounted present value of projected cash flow streams.

The final business enterprise value determined using the market and income approaches was then adjusted for appropriate marketability discounts. These marketability discounts were reduced at each reporting date, beginning with the December 31, 2006 reporting date, to reflect the increased probability of the initial public offering.

The allocation of the business enterprise value to each class of preferred stock and common stock was determined using contingent claims analysis, which is based on the principles of option pricing theory. Specifically, each class of security is modeled as a call option with a unique claim on our assets. The resulting claims allocate the anticipated proceeds between the different securities upon a liquidity event, which in our case was our initial public offering. In modeling each security as a call option, we used the Black-Scholes option pricing model.

Determining the fair value of our convertible preferred stock, common stock, warrants and stock options involves complex and subjective judgments involving estimates of revenue, earnings, assumed market growth rates and estimated costs, as well as appropriate discount rates. At the time of each valuation, the significant estimates used in the income approach (discounted cash flow model) included estimates of our revenue and revenue growth rates for several years into the future. Although each time we prepared such forecasts in the preparation of a valuation report, we did so based on assumptions that we believed to be reasonable and appropriate, there can be no assurance that any such estimates for earlier periods have come to pass or that any such estimates for future periods will prove to be accurate.

The most significant factors contributing to the difference between the fair value of the shares of our common stock subject to our 2007 stock option grants and the initial public offering price are the increase in probability of the completion of an initial public offering of our common stock and positive changes in market conditions. Due to our history of operating losses prior to 2007, including negative gross profit in 2005, our ability to achieve our initial public offering price was highly contingent on achieving current strong operating results. Achieving strong operating results in the quarter ended September 30, 2007 and through completion of our initial public offering validated our financial projections for subsequent periods and resulted in our ability to obtain the estimated initial public offering price.

The aggregate intrinsic value of all stock options outstanding at December 31, 2007 is \$30,583,633, based on the fair market value of the common stock at December 31, 2007.

### **Convertible preferred stock warrant liability**

Beginning January 1, 2006, we began accounting for warrants to purchase our preferred stock issued in connection with financing agreements in accordance with FASB Staff Position (FSP) 150-5, Accounting Under SFAS 150 for Freestanding Warrants and Other Similar Instruments on Redeemable Shares ( FSP 150-5 ). Pursuant to FSP 150-5, we evaluate certain specifically identified conditions to determine whether the fair value of these warrants is required to be classified as a liability. The fair value of the warrants that are classified as liabilities are adjusted for changes in fair value at each reporting period,

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**Table of Contents**

**Management's discussion and analysis of financial condition and results of operations**

and the corresponding non-cash gain or loss is recorded in current period earnings. We estimated the fair market value of these warrants at the respective balance sheet dates using a Black-Scholes option-pricing model, based on the estimated market value of the underlying preferred stock at the measurement date, the remaining contractual term of the warrant, risk-free interest rates and expected dividends on and expected volatility of the price of the underlying preferred stock. These estimates, especially the market value of the underlying preferred stock and the expected volatility, are highly judgmental. The assumptions used in our Black-Scholes option pricing model for Series E, C, B, B-2 and A warrants at January 1, 2006 upon the adoption of FSP 150-5 were: (i) remaining contractual terms of 2.1 to 9.9 years; (ii) risk-free interest rate of 4.82% to 4.86%; (iii) expected volatility of 50% to 79%, and (iv) no expected dividend yield. The assumptions used in our Black-Scholes option pricing model for Series E, C, B, B-2 and A warrants at December 31, 2006 were: (i) remaining contractual terms of 1.3 to 9.1 years; (ii) risk-free interest rates of 4.70% to 5%; (iii) expected volatility of 47% to 76% and (iv) no expected dividend yield. In each case, the fair value of the underlying preferred stock was assessed primarily by a valuation prepared by management using the practice aid.

Upon the closing of our initial public offering in November 2007, outstanding warrants to purchase our preferred stock became warrants to purchase shares of our common stock and certain of these warrants to purchase our preferred stock were net exercised. As a result, upon the conversion of the preferred stock warrants to common stock warrants, the warrants were no longer subject to FSP 150-5. The then-current aggregate fair value of these warrants was reclassified from liabilities to additional paid-in-capital, a component of stockholders' equity, and we will cease to record any related periodic fair value adjustments.

**Redeemable convertible preferred stock**

Prior to our initial public offering, we issued various classes of preferred stock. The holders of Series A, B, B-2, C, C-2, D, D-2 and E preferred stock had the option to sell their shares back to us at the greater of the original purchase price plus accrued and unpaid dividends or the current fair market value of the shares plus accrued and unpaid dividends. As a result, the carrying value of the preferred stock was increased by an accretion amount each period so that the carrying amounts will equal the greater of fair value plus accrued and unpaid dividends or original purchase price plus accrued and unpaid dividends. The accreted amounts are recorded to accumulated deficit. The option to sell and the related accretion of the preferred shares terminated upon the closing of our initial public offering.

The fair value of our preferred stock was determined based upon the sales price of our preferred stock to third-party investors, and in 2006 and 2007, when transactions in our preferred stock were not available, based upon valuations prepared by management using the methodology set forth in the practice aid. This methodology considered the probability and fair value of the sale of stock in an initial public offering. The valuation methodologies we used to estimate the fair value of our preferred stock have been applied consistently for all periods presented and the assumptions used were based on the best available information at that time. Accordingly, we do not believe that adjustments to amounts recorded in respect of our redeemable convertible preferred stock will be required.

**RECENT ACCOUNTING PRONOUNCEMENTS**

In July 2006, the Financial Accounting Standards Board ( FASB ) issued Financial Accounting Standards Interpretation No. 48, Accounting for Uncertainty in Income Taxes ( FIN 48 ). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS 109, Accounting for Income Taxes ( SFAS 109 ). FIN 48 prescribes a recognition and measurement method for a tax position taken or expected to be taken in a tax return.

**Table of Contents**

**Management s discussion and analysis of financial condition and results of operations**

FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN 48 is effective for fiscal years beginning after December 15, 2006. We adopted this interpretation on January 1, 2007 and it did not have a material impact on our financial statements.

In September 2006, the FASB issued SFAS 157, Fair Value Measurements ( SFAS 157 ), which defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles, and expands disclosures about fair value measurements. SFAS 157 is effective in fiscal years beginning after November 15, 2007. We do not expect the adoption of SFAS 157 to materially affect our results of operations or financial position.

In February 2007, the FASB issued SFAS 159, The Fair Value Option for Financial Assets and Financial Liabilities ( SFAS 159 ). SFAS 159 permits entities to measure at fair value many financial instruments and certain other items on an instrument-by-instrument basis that are not currently required to be measured at fair value. SFAS 159 is effective for fiscal years beginning after November 15, 2007. We do not expect the adoption of SFAS 159 to materially affect our results of operations or financial position.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements an amendment of Accounting Research Bulletin No. 51 ( SFAS No. 160 ). SFAS No. 160 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income attributable to the parent and to the noncontrolling interest, changes in a parent s ownership interest, and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. SFAS No. 160 also establishes disclosure requirements that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 is effective for us beginning January 1, 2009. We are currently evaluating the potential impact that SFAS No. 160 will have on our financial statements.

In December 2007, the FASB issued SFAS No. 141(R), Business Combinations. This Statement replaces FASB Statement No. 141, Business Combinations. SFAS No. 141(R) establishes principles and requirements for how an acquiring company: recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree; recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. SFAS No. 141(R) further changes the accounting treatment for certain specific items, including: acquisition costs will be generally expensed as incurred; acquired contingent liabilities will be recorded at fair value at the acquisition date and subsequently measured at either the higher of such amount or the amount determined under existing guidance for non-acquired contingencies; in-process research and development will be recorded at fair value as an indefinite-lived intangible asset at the acquisition date; restructuring costs associated with a business combination will be generally expensed subsequent to the acquisition date; and changes in deferred tax asset valuation allowances and income tax uncertainties after the acquisition date generally will affect income tax expense. SFAS No. 141(R) applies prospectively to our business combinations for which the acquisition date is on or after January 1, 2009.

**Table of Contents**

## Business

### OVERVIEW

We are an advanced electronic materials provider that develops, manufactures and sells monocrystalline sapphire and other innovative crystalline products for light-emitting diodes ( LEDs ), radio frequency integrated circuits ( RFICs ), blue laser diodes, optoelectronics and other optical applications. The emergence of sapphire in commercial volumes at competitive prices has enabled the development of new technologies such as high brightness ( HB ) white, blue and green LEDs and highly-integrated RFICs. We apply our proprietary crystal growth technology to produce high-quality sapphire products efficiently to supply a large and growing end-market demand, and we work closely with our customers to meet their quality and delivery needs. We believe we are the leading supplier of sapphire products to the LED industry.

We are a vertically integrated manufacturer of high-quality sapphire substrates and optical windows that are used in a variety of high-growth, high-volume end-market applications. Our largest product line is two to four inch sapphire wafers for use in LEDs and blue laser diodes for solid state lighting and electronic applications. In addition, we have developed six inch sapphire wafers that are used for Silicon-on-Sapphire ( SOS ) RFICs, as well as products for military, aerospace, sensor and other applications. We are also extending our technology to manufacture eight inch and larger diameter products to support next-generation LED, RFIC and optical window applications.

Our fully integrated in-house capabilities enable us to design, assemble and maintain proprietary crystal growth furnaces to grow high purity, low-stress, ultra low defect density sapphire crystals. In addition, we possess state-of-the-art capabilities in high precision core drilling, wafer slicing, surface lapping, edge bevel grinding and wafer cleaning processes. We foster a strong sense of innovation and agility in our product development teams in an attempt to develop new products more effectively and to rapidly capture market growth.

The strong and increasing demand for our products has led us to expand our production capabilities. We plan to leverage our technological advantage in efficiently producing high-quality, large-diameter sapphire products to maintain our leadership position and capitalize on future growth opportunities. To attain this goal, we are accelerating our research and development activities, continuing to enhance our operational capabilities, increasing our brand recognition and diversifying into new market segments.

### INDUSTRY OVERVIEW

Integrated circuits and other semiconductor devices have traditionally been fabricated on silicon substrates. However, for certain advanced applications, new electronic materials have emerged as the substrates of choice due to evolving integration and performance considerations. For example, sapphire is the preferred substrate material for HB white, blue and green LED applications due to its crystal lattice compatibility with the aluminum gallium nitride ( AlGaN ) epitaxial layers, thermal expansion properties, commercial availability and cost efficiency. Other sapphire applications include SOS integrated circuits, optical lenses and windows, and substrates for blue laser diodes.



## **Table of Contents**

### **Business**

#### **Figure 1: Typical LED structure**

#### **LED applications**

Advancements in solid state lighting utilizing HB white, blue and green LEDs over the past decade represent a disruptive technology in the lighting industry, providing significant performance, environmental and economic improvements compared to traditional incandescent or fluorescent lighting. For example, traditional incandescent lamps are inefficient and costly, emitting over 90% of consumed power as heat and lasting only 1,500 to 2,000 hours. Fluorescent lamps produce light by passing electricity through toxic mercury vapor, which creates an environmental disposal problem. LEDs do not contain mercury or lead and are 4.0 to 6.6 times as efficient as traditional incandescent lamps, while providing 35,000 to 50,000 hours of light. These factors, along with their durability, small form factor, excellent color performance, and decreasing costs, have led to a rapidly growing demand for LEDs in applications such as small displays for mobile devices, flashes for digital cameras, backlighting units ( BLUs ) for displays used in notebook computers, desktop monitors, LCD televisions, public display signs, automotive lights, traffic signals, and general and specialty lighting. Applications using LEDs have unit volumes in the billions and are expected to grow significantly. For instance, in the next four years, HB LED sales are expected to double according to Strategies Unlimited, an independent market research firm, based in Mountain View, California. The production volume of HB LEDs is expected to increase from 37.1 billion units in 2007 to 87.1 billion units in 2011. Further, the percentage of gallium nitride ( GaN )-based LEDs, which predominantly use sapphire substrates, is expected to rise from 64.0% to 66.9% of the total HB LED production volume in the same time period. Therefore, as the HB LED market grows, we believe the sapphire substrate market will grow as well.

*Mobile devices.* LEDs are used in color displays for mobile phones and other portable electronics such as GPS systems, MP3 players and digital camera flashes. According to Strategies Unlimited, the full color display penetration in mobile phones was 84% in 2005 and is expected to approach 100% over the next several years. According to a March 2008 report published by Gartner, in 2007, the number of mobile phones sold was approximately 1.15 billion units worldwide. LEDs are well-suited for mobile devices due to their low current drain which extend battery life and durability while generating less heat.

*LED backlighting units for large displays.* LED BLUs are beginning to replace conventional fluorescent BLUs in notebook computers, desktop monitors and LCD flat panel televisions. Benefits of LED BLUs in these applications are extended battery life, thinner displays, quicker response time and better color

## **Table of Contents**

### **Business**

rendition. Displays made with LED BLUs also have no toxic materials, which help electronics manufacturers to comply with environmental regulations. DisplayBank, an independent market research firm, estimates an increase in LED penetration in larger (greater than 10 inch) BLUs from 1% in 2007 to 14% by 2010. The backlight market for large-size LCD screens is estimated to grow by greater than 20% per year, approaching 500 million units by 2010, as forecasted by DisplayBank.

*Automotive lighting.* Automobile manufacturers are increasingly using LEDs in car and truck headlights, turning and tail light functions as well as interior lighting. Benefits include near-instant response time, reduced power usage and more stylish and effective designs. Uses for LEDs in all automotive applications (exterior and interior) are expected to grow at a compound annual growth rate ( CAGR ) of approximately 14% from 2005 to 2010, according to a report published in June 2006 by market research firm Strategies Unlimited. Increased LED usage in other transportation vehicles such as motorcycles and commercial jets offers additional growth potential.

*Commercial signage.* LEDs are becoming more widely used as light sources on large signs and outdoor displays, such as jumbo screens used in sporting arenas and electronic billboard displays. The LED commercial sign/display market will grow at an estimated CAGR of approximately 42% from 2005 to 2010, according to a report published in June 2006 by market research firm Strategies Unlimited.

### **SOS RFIC and optical applications**

SOS integrated circuits consist of a thin layer of silicon grown on a sapphire substrate and are primarily used in advanced wireless and military applications, such as RFICs. In particular, SOS RFICs are currently used in high volumes for mobile phones, broadband television set-top boxes, satellites and radiation-hardened applications for the defense industry. We believe SOS devices also represent a large potential market opportunity for sapphire due to sapphire's outstanding properties as an insulating substrate material with outstanding thermal conductivity and crystal lattice compatibility with silicon, which, among other things, enables monolithic integration in RFICs.

Sapphire and various fluoride materials are utilized for windows and optics for aerospace, sensor, medical and laser applications. Sapphire is used in these applications due to its wide-band transmission, superior strength, scratch resistance and high strength-to-weight ratio. Sapphire's physical properties make it very well suited for jet fighter targeting pod windows, forward-looking infrared ( FLIR ) windows for commercial and business jets as well as unmanned air vehicles or drones, rocket domes and transparent armor for military vehicles. Sapphire substrates are also used in the production of blue laser diodes. Blue laser diode technology allows much higher data storage for HD-DVD applications. Blue laser diodes are just beginning to penetrate potentially high volume applications, such as the Blu-ray Disc DVD players and leading-edge video game systems.

## **Table of Contents**

### **Business**

#### **Sapphire substrate industry supply chain**

The following diagram illustrates the supply chain from the sapphire material to the end application. Sapphire is the base material that feeds the entire value chain.

#### **Figure 2: Sapphire substrate industry supply chain**

The production process for sapphire substrates is substantially similar to that of silicon wafers. A typical process flow consists of crystal growth, fabrication, slicing, lapping and polishing steps. Output quality is measured in flatness, desired crystal planar orientation, etch pitch density and crystalline structure uniformity. A great emphasis is placed on continuously improving yields and increasing production capacity to drive costs lower to take advantage of emerging high-volume opportunities. Device manufacturers are seeking larger diameter sapphire wafers to allow them to develop higher performance applications and achieve economies of scale. Historical methods of sapphire crystal growth, which rely on lower-volume batch processes, are less able to meet the needs of leading end-market customers for high quality crystals, demanding dimensional tolerances, high production volumes, cost efficiency and on-time delivery. Sapphire is the base material that feeds the entire value chain.

#### **THE RUBICON SOLUTION**

We are an advanced electronic materials provider that develops, manufactures and sells monocrystalline sapphire and other innovative crystalline products for LEDs, RFICs, blue laser diodes, optoelectronics and other optical applications. As a leading producer of sapphire and provider of other crystals, we believe that the following are our principal competitive advantages:

#### **Proprietary technology for crystal growth**

We refer to the proprietary technology, equipment and processes we use in the production of our sapphire crystals as ES2, which stands for evolving science, evolving solutions. Due to our understanding of sapphire crystal growth seeding and crystal growth furnace operational parameters, we have developed a full in-house capability to design, build and maintain ES2 crystal growth furnaces with proprietary features. Our ES2 technology enables us to maintain a highly scaleable, efficient operation and to produce large diameter sapphire wafers that we believe exceed the quality of any other sapphire producer today. Our competitors employ the Kyropoulos, Czochralski (CZ), or Edge-defined Film-fed Growth (EFG) method to grow sapphire crystals. We believe that our ES2 technology, which employs an enhanced Kyropoulos methodology, significantly outperforms other methods of sapphire production with respect to capital costs, operating costs, throughput, quality and diameter size. Using our ES2 technology, we can currently produce sapphire products with diameters of up to seven inches in production volumes and we are developing the capability to produce eight inch and larger diameter sapphire products.

## **Table of Contents**

### **Business**

#### **High quality sapphire products**

We believe our sapphire crystal wafers are best-in-class in terms of quality. Our quality advantage is exhibited by our ability to produce crystals with an etch pitch density ( EPD ) of fewer than 100 defects per square centimeter, which is significantly better than the industry standard range. According to *Sapphire & Other Corundum Crystals* by E. Dobrovinskaya, L. Lytvynov, and V. Pishchik (1994), for sapphire grown using other methods, the standard EPD is 5,000 to 100,000 defects per square centimeter. Our sapphire also has ultra high (99.999%) purity levels. Our high purity sapphire helps our customers realize high yields in their processing. In addition, because of the high purity of our products, our customers have the ability to utilize our sapphire for optical applications requiring high transmission in the ultraviolet through mid-infrared spectral ranges. Through our operational expertise in crystal growth, post-growth processing and in-process manufacturing controls of sapphire wafer production, we are able to meet or exceed our customers' key product specifications, such as crystalline quality, dimensional tolerances and crystal orientation, while maintaining high production yields.

#### **Vertical integration**

We possess critical know-how and proprietary processes and metrology for crystal growth and sapphire processing. We grow sapphire crystals and have extensive capabilities to process sapphire into products that meet our customers' needs from cores to wafer and window blanks to large diameter epi-polished wafers. In the areas of fabrication and slicing, we employ high volume manufacturing techniques and utilize customized tooling and metrology to hold very tight dimensional and orientation tolerances for sapphire cores and wafers. We also have high precision lapping, edge bevel grinding and annealing capabilities for as ground wafers and window blanks. We have proprietary six and eight inch polishing and ultra-cleaning equipment and processes for SOS RFIC and other applications that demand larger-diameter epi-polished wafers. By vertically integrating our processes, we are able to achieve significant operating efficiencies and produce high-quality, high-precision products that offer cost and quality benefits to our customers. This vertical integration also helps enable us to expand our range of products and helps to protect our technology and manufacturing trade secrets.

#### **High volume and flexible manufacturing capability**

We provide a high volume and stable US-based supply of products for our customers. We offer reliable, consistent on-time delivery to our customers through our flexible and scalable production operations. We have developed automated manufacturing and metrology platforms at each stage of our production process that allow us to increase capacity rapidly and to switch products in manufacturing easily so that we can meet our customers' specific product demands. We continue to expand our production capacity aggressively to meet the large and growing demand for our high-quality sapphire products.

#### **Lowest total cost for customers**

We compete on the quality of our products and our service levels to supplement our competitive pricing. We believe our high sustained yields, our dedication to consistent production and performance and our commitment to lasting customer relationships help assure our customers of a reliable source of high-quality sapphire products at stable prices. Our in-process quality control practices lead to predictable customer process yields, reduced inspection costs and overall high customer satisfaction. In addition, we work closely with our customers to understand their product specifications and then align our operations to meet their needs. Through close collaboration with our customers, we help them develop new applications for our advanced sapphire products and establish ourselves as a preferred supplier. As such, we believe our solution offers the lowest total cost for our customers.

## **Table of Contents**

### **Business**

### **STRATEGY**

Our goal is to be the leading global provider of advanced monocrystalline substrate and window materials to the solid state lighting, SOS RFIC, aerospace and optical markets. We currently occupy a leading position among sapphire producers worldwide in market volume for two through four inch sapphire products for LEDs. A key element of our strategy is to increase the proportion of our shipments of four and six inch diameter products. The time elapsed from our beginning product development to shipping commercial volumes in the six inch sapphire substrate market was less than one year. As a result, we now have significant market share in the six inch SOS RFIC sapphire substrate market.

Our strategy includes the following key elements:

#### **Extend our technology and manufacturing leadership position**

We believe our specialized manufacturing processes and proprietary technology and trade secrets provide us with significant competitive advantages. We have designed and developed product, equipment and process technology platforms from which we can rapidly increase capacity and stay flexible to meet our customers' needs. At each phase of our manufacturing process, we have developed and standardized automated equipment that employs similar processes to produce a full range of products. For example, all of our furnaces can grow sapphire crystals of the same size in various orientations to produce two through six inch wafers and cores. This reduces our operating costs and significantly improves our product development cycles. We intend to continue to develop advanced technology platforms to further increase crystal boule size and offer market-leading product specifications, while maintaining product quality and manufacturing efficiencies.

#### **Capitalize on opportunities in high-growth markets**

Our sapphire products are used in multiple applications in the high-growth LED and SOS RFIC markets. We also participate in optical market segments where sapphire and fluoride materials are being adopted rapidly in new applications. We intend to continue to expand our opportunities by adding new categories and sizes of products with the goal of providing our customers in multiple high-growth end markets with a robust set of sapphire solutions. For example, one of the largest market segment opportunities is likely to come from the solid state lighting market, which will require higher brightness, lower-cost white LEDs that require larger-size LED chips. Larger LED chips are increasingly being manufactured in volume on four inch sapphire wafers. Our process to manufacture large diameter, high quality sapphire wafers is well-suited to this market and we believe our processes will help enable its growth. We already produce high volumes of four and six inch sapphire products and we continue to add large diameter sapphire production capacity in anticipation of market growth. We expect that next-generation LEDs and SOS RFICs will be produced on six inch and larger sapphire wafers to further drive cost efficiencies. We already have development programs underway to provide eight inch and larger diameter sapphire as we hope to enable the more rapid conversion of LED and SOS production to these larger sapphire substrates.

#### **Enhance operational excellence**

Our unique expertise in producing high-quality sapphire products in many sizes gives us a significant edge in process and product technology. We plan to further refine our proprietary ES2 crystal growth techniques, sapphire processing platforms and process controls to produce even higher quality crystals at greater yields. Our engineering efforts focus on the capability to design, build and maintain ES2 crystal growth furnaces with new proprietary features. We seek to continuously improve our sapphire

## **Table of Contents**

### **Business**

processing and material inspection capabilities. For example, in 2007, we added customized metrology tools in our coring and slicing production lines to tighten orientation tolerances and to increase throughput of large diameter sapphire products. We also promote operational excellence through lowering cycle times, raising yields, and reducing overhead costs. Our ability to understand our customers' design and manufacturing processes enhances our ability to reach these goals. We employ Six Sigma methodologies to continuously improve our operations platforms and we provide extensive training to current and new employees.

#### **Expand our sales and marketing efforts**

We plan to enhance our brand recognition worldwide by increasing our marketing and communications programs and resources. For example, we have sponsored several LED conferences and we plan to extend our sponsorships into other markets, such as SOS RFICs and aerospace. We have enhanced our website, and also plan to extend our public relations campaigns and increase our brand visibility in trade publications and with technical organizations. We rely on direct sales for the majority of our business and we use multiple distribution channels to extend the reach of our sales and support teams. Although we have already entered multiple markets globally, we plan to increase the scale and geographical coverage of our sales efforts.

#### **Penetrate new market segments**

We target high growth market segments where we believe we can gain a leadership position. Although production of sapphire cores and wafers is our focus today, we intend to leverage our crystal growth and processing know-how to develop high-quality crystal products for new substrate and window applications. Sapphire is becoming increasingly popular and is replacing quartz and glass in high-performance and harsh environment applications in the aerospace, petroleum and laser industries. For example, the US military uses sapphire optical windows to construct targeting mechanisms for its jet fighters and drones and transparent armor for land vehicles. We intend to use our proprietary manufacturing technology to produce additional single crystal materials that can be used in optical applications as well as alternative substrates for certain electronic materials applications. As the electronics and optical industries continue to develop new applications that take advantage of the unique properties of both sapphire and other single crystal products, we aim to be the provider of choice for these applications.

## **TECHNOLOGY**

Our proprietary ES2 crystal growth technique produces high-quality sapphire crystals for use in our sapphire products. ES2 is derived from the standard Kyropoulos method of crystal growth. We developed this technique with the goal of establishing greater control over the crystal growth process while maintaining minimal temperature variations. Unlike other techniques, during the ES2 technique, the growing sapphire crystal exists in an unconstrained, low stress environment inside a closed growth chamber. The closed system allows for enhanced control of the melt, resulting in higher quality crystals. The temperature gradient between the melt and the crystal in the ES2 technique is significantly lower than in other crystal growth techniques. These aspects of the ES2 technique enable us to grow crystals that have a significantly lower dislocation density, higher crystal purity and higher uniformity than sapphire crystals grown using other techniques. The ES2 technique provides an inherent annealing process once the crystal is fully grown. This thermal annealing is an integral means of relieving stress in the crystal during the ES2 process. We believe we can readily scale our ES2 technology in a production environment while maintaining high crystal quality even as crystal boule size is increased. As a result of

## **Table of Contents**

### **Business**

our proprietary ES2 technology, we believe that we currently offer the most efficient method for manufacturing large form factor high quality sapphire in the market today.

We have automated the crystal growth process of our proprietary ES2 technique. Our furnace environments are controlled by closed-loop control systems and the overall crystal growth process is run with minimal operator intervention, which reduces the potential for human error. In addition, a single operator can supervise the control of multiple ES2 furnaces simultaneously, which reduces cost.

We believe our proprietary ES2 process provides significant advantages over other crystal growth methods such as CZ and EFG. Unlike the ES2 technique, the CZ and EFG methods grow crystals with much higher levels of stress. This stress can decrease the overall quality of the sapphire crystal and requires increased processing time to relieve this stress, which increases production costs and decreases throughput, especially in larger diameter crystals. During the EFG process, the crystal is grown in a sheet form by pulling it through a die directly from the melt; while in the CZ process, the crystal must be rotated and pulled as the aluminum oxide melt is consumed. These constrained growth environments with higher thermal gradients increase stress and decrease crystal quality.

Our research and development ( R&D ) activity plays a vital role in supporting our technology, product and revenue roadmaps. For 2007, 2006 and 2005, our R&D expenses totaled \$769,000, \$679,000 and \$861,000, respectively. Our R&D is focused on three key areas: large diameter sapphire growth and fabrication; higher precision sapphire processing; and new crystal development. Our technical staff possesses deep and broad expertise in materials science and engineering. We also develop and utilize sophisticated metrology equipment to perform material and process characterization.

### **PRODUCTS**

We offer a wide variety of sapphire products designed to meet the stringent specifications of our customers. Using our proprietary ES2 technology, we grow high-quality sapphire boules. We fabricate our products from the boules and sell them in four general categories: core, as-cut, as-ground and polished. We currently offer two inch, three inch, four inch and six inch diameter wafers, in C, R, A, and M planar orientations. A sapphire crystal has multiple orientation planes resulting from its crystalline structure symmetry. The following diagram illustrates the various planar orientations of a sapphire crystal.

**Figure 3: Sapphire crystal planar orientations**

**Table of Contents****Business**

Each orientation of the crystal structure is represented by a letter and differs in lattice structure. These variations result in different chemical, electrical, and physical properties depending on the respective orientation plane. As a result, customers require different orientation planes depending on the intended application. For example, LED manufacturers typically request C plane crystals while SOS manufacturers typically request R plane crystals.

The following table illustrates our principal sapphire products and applications.

<b>Product</b>	<b>Size</b>	<b>Orientation</b>	<b>Applications</b>
Core	2 , 3 , 4 , 6	C, R, A, M	<ul style="list-style-type: none"> <li>Ø LED</li> <li>Ø Optical windows</li> <li>Ø Blue laser diode</li> </ul>
As-Cut	2 , 3 , 4 , 6	C, R, A, M	<ul style="list-style-type: none"> <li>Ø Wafers for LED</li> <li>Ø Wafers for blue laser diodes</li> <li>Ø Wafers for SOS RFICs</li> </ul>
As-Ground	2 , 3 , 4 , 6	C, R, A, M	<ul style="list-style-type: none"> <li>Ø Wafers for LED</li> <li>Ø Wafers for SOS RFICs</li> <li>Ø Blanks for optical windows</li> <li>Ø Wafer carriers</li> </ul>
Polished	6	C, R, A	<ul style="list-style-type: none"> <li>Ø Epi-polished wafers for SOS RFICs</li> <li>Ø Polished optical windows</li> <li>Ø Double-side polished wafer carriers</li> </ul>

**Core**

Our core product line consists of our sapphire cores drilled from sapphire boules with high-precision, and is available in two, three, four and six inch diameters and in various lengths and orientations.

**As-cut**

Our as-cut product line consists of sapphire cores sliced using a wire saw machine. We believe we are able to offer our customers one of the highest-precision cut sapphire wafers in the market. This is especially important to customers who require precise orientation planes for applications such as LEDs, SOS, RFICs and blue laser diodes.

**As-ground**



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Our as-ground product line consists of cut sapphire wafers that undergo a double-sided lapping and edge grinding process. The lapping process ensures that the surface of the wafer is flat, smooth, and has a high degree of parallelism. The grinding process bevels the edges of the wafers, making them more durable and less susceptible to chipping and cracking.

### **Polished**

Our polished product line consists of finely polished, ultra-clean, six inch sapphire wafers. Our polished wafers undergo two polishing phases including both a mechanical and a chemical mechanical planarization phase. We believe we are currently one of very few firms offering six inch, high-quality R-plane polished wafers.

## **Table of Contents**

### **Business**

### **Other**

We also offer optically-polished windows and ground window blanks of sapphire and various fluoride compounds, such as calcium, barium and magnesium fluoride. We provide sapphire and other crystal products in many sizes, shapes and product formats for specialty applications.

### **MANUFACTURING**

The sapphire wafer manufacturing process is outlined in the following diagram:

#### **Figure 4: Sapphire wafer manufacturing process**

The process of growing the crystal begins by heating the raw material, aluminum oxide, until it reaches an ideal temperature above its melting point. This ideal temperature is essential for our process because it allows us to produce high-purity crystals with very low defect rates. Following the heating, a seed rod is inserted in the melted material as the material is being cooled to crystallize into a boule. Following the growth process, each boule is rigorously inspected by using polarized lighting and magnification to find imperfections, such as bubbles, dislocations and granular deposits within the crystal.

We then drill the resulting boules into cores using our custom high-precision crystal orientation equipment and proprietary processes. We use wire saws to slice each substrate to be of precise size and shape. These substrates are then pre-polished using precision lapping and edge-grinding equipment and then are ready to be polished into epitaxial wafers. All of these processes are performed in clean environments to reduce the chance of crystal contamination. Epi-polishing and wafer cleaning are performed in Class 10,000 and Class 100 clean-room environments, respectively.

We are dedicated to quality assurance throughout our entire operation. We employ detailed material traceability from raw material to finished product. Our quality system is certified as ISO9001:2000 and we have in-house expertise at the Six Sigma Black Belt level.

All of our long-lived assets are located in the US.

### **SALES AND MARKETING**

We market and sell our products through our direct sales force to customers in Asia, North America and Europe. Our direct sales force includes experienced and technically sophisticated sales professionals and engineers who are knowledgeable in the development, manufacturing and use of sapphire substrates, windows and other optical materials. Our sales staff works with customers during all stages of the

## **Table of Contents**

### **Business**

substrate manufacturing process, from developing the precise composition of the substrate through manufacturing and processing the substrate to the customer's specifications.

A key component of our marketing strategy is developing and maintaining strong relationships with our customers, especially at the senior management level. We achieve this through working closely with our customers to optimize our products for their production processes. In addition, we are able to develop long-term relationships with key customers through offering product specification assistance, providing direct access to enable them to evaluate and audit our operations, delivering high quality products and providing superior customer service. We believe that maintaining close relationships with senior management and providing technical support improves customer satisfaction and provides us with a competitive advantage when selling our products.

In order to increase brand recognition of our products and of Rubicon in general, we publish technical articles, advertise in trade journals, distribute promotional materials and participate in industry trade shows and conferences.

### **CUSTOMERS**

Our principal customers are wafer polishing companies and semiconductor device manufacturers. A significant portion of our sales have been to relatively few customers. In the year ended December 31, 2007, our top three customers accounted for 62% of our revenue, and in 2006 and 2005, sales to our top three customers collectively accounted for approximately 57% of our total revenue. Although we are attempting to diversify and expand our customer base, we expect our sales to continue to be concentrated among a small number of customers. However, we also expect that our significant customers may change from time to time. In the year ended December 31, 2007, sales to Crystalwise Technology, Inc., Shinkosha Co., Ltd. and Peregrine Semiconductor Corp. represented approximately 26%, 21% and 15% of our revenues, respectively. In 2006, sales to Crystalwise, Shinkosha and Tera Xtal Technology Corporation represented approximately 27%, 17% and 14% of our revenues, respectively. No other customer accounted for 10% or more of our revenues during those periods.

In the year ended December 31, 2007, 72% of our sales were made to customers in Asia, 26% of our sales were made to customers in North America and 2% of sales were made to customers in Europe. In 2006 and 2005, 87% of our sales were made to customers in Asia, 11% of our sales were made to customers in North America and 2% of our sales were made to customers in Europe. Our contracts with major customers are non-cancelable and provide for minimum levels of product sales for the duration of the contract (typically 12 to 18 months) with the potential for higher sales levels depending on such factors as the customer's needs, our available capacity and/or our ability to reach agreement on key terms. Our standard arrangement with all customers includes 30 day payment terms.

### **BACKLOG**

Our backlog at March 31, 2008 was approximately \$35.5 million, compared to approximately \$19.2 million at March 31, 2007. We expect that all of our backlog as of March 31, 2008 will be filled in 2008. We include in our backlog only those customer orders for which we have signed contracts or accepted purchase orders. We consider backlog to be a reasonable management tool to indicate future customer purchases. However, a portion of our order backlog is subject to cancellations with little or no penalties as well as changes and delays and does not provide an assurance of future sales or profitability.

## **Table of Contents**

### **Business**

#### **INTELLECTUAL PROPERTY**

Our ability to compete successfully depends upon our ability to protect our proprietary technologies and other confidential information. We rely primarily upon a combination of trade secret laws and non-disclosure agreements with employees, customers and potential customers to protect our intellectual property. We have three pending patent applications with the United States Patent and Trademark Office covering aspects of our core production, wafer grinding and lapping technologies. However, we believe that factors such as the technological and innovative abilities of our personnel, the success of our ongoing product development efforts and our efforts to maintain trade secret protection are more important than patents in maintaining our competitive position. We pursue the registration of certain of our trademarks in the United States and currently have six registered trademarks and one trademark pending.

#### **COMPETITION**

We participate in an innovative, specialized and competitive industry. The products we produce must meet certain demanding requirements to succeed in the marketplace. Although we account for a significant percentage of the total market volume today, we face significant competition from other established providers of similar products as well as from potential new entrants into our markets.

We have a few competitors that compete directly with us that are of similar size or smaller than us. These companies tend to focus on providing core and as-cut products rather than offering polished products. There are a limited number of companies that are substantially larger than us that compete with us in a relatively small segment of their overall business. These larger companies tend to focus on providing polished products to customers rather than providing core, as-cut and as-ground products.

We believe that the key competitive factors in our markets are:

Ø consistently producing high-quality products in the desired size, orientation and finish;

Ø driving innovation through focused research and development efforts;

Ø possessing sufficient supply capacity to meet end-market customer demands;

Ø offering solutions through collaborative efforts with customers;

Ø pricing; and

Ø providing a low total cost-of-ownership for customers.

Although we face significant competition, we believe that our proprietary ES2 crystal growth technology and business practices allow us to compete effectively on all of the above factors.

#### **ENVIRONMENTAL REGULATION**

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In our manufacturing process, we use water, oils, slurries, acids, adhesives and other industrial chemicals. We are subject to a variety of federal, state and local laws regulating the discharge of these materials into the environment or otherwise relating to the protection of the environment. These include statutory and regulatory provisions under which we are responsible for the management of hazardous materials we use and the disposition of hazardous wastes resulting from our manufacturing processes. Failure to comply with such provisions, whether intentional or inadvertent, could result in fines and other liabilities to the government or third parties, injunctions requiring us to suspend or curtail operations or other remedies, and could have a material adverse effect on our business.

**Table of Contents**

**Business**

**EMPLOYEES**

As of December 31, 2007, we had 144 full-time employees. Of these 144 employees, 122 work in technology and operations. None of our employees is represented by a labor union. We consider our employee relations to be good. We believe that our future success will depend on our continued ability to attract, hire and retain qualified personnel.

**FACILITIES**

Our executive, research and development and manufacturing functions are located in property that we lease in Franklin Park and Bensenville, Illinois. These facilities total approximately 102,600 square feet in seven buildings, which includes 30,000 square feet in our Bensenville, Illinois facility, which was opened in January 2008. The leases for these facilities terminate from July 2010 through August 2015. We believe these facilities are adequate to meet our current and anticipated manufacturing needs and additional space would be available on commercially reasonable terms.

**Table of Contents**

**Business**

**LEGAL PROCEEDINGS**

On November 2, 2005, Saint-Gobain Ceramics & Plastics, Inc. ( Saint-Gobain ) filed a complaint against Rubicon and Happy R Hewes, our Senior Vice President-Sales and Marketing, in the Worcester County Superior Court, Massachusetts, alleging breach of contract, trade secret misappropriation, tortious interference and unfair competition, all related to our employment of Mr. Hewes, which plaintiff alleges is in violation of a non-compete agreement between Mr. Hewes and Saint-Gobain. Saint-Gobain filed a substantially identical complaint against Rubicon and Mr. Hewes in the Hillsborough County Superior Court, New Hampshire on January 5, 2007. Saint-Gobain, Mr. Hewes and Rubicon entered into a settlement agreement effective November 27, 2007, under which we incurred costs of approximately \$195,000. As a result, both of the complaints have been dismissed.

From time to time we may be named in claims arising in the ordinary course of business. Currently, there are no legal proceedings or claims pending against us or involving us that, in the opinion of our management, could reasonably be expected to have a material adverse effect on our business or financial condition.

**Table of Contents****Management****EXECUTIVE OFFICERS AND DIRECTORS**

The following table sets forth information regarding our directors and executive officers including their names, ages and positions as of April 22, 2008:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Don N Aquilano <sup>(1)(3)</sup>	41	Chairman of the Board
Raja M Parvez	50	President, Chief Executive Officer and Director
William F Weissman	49	Chief Financial Officer, Treasurer and Secretary
Happy (Hap) R Hewes	43	Senior Vice President Sales and Marketing and Assistant Secretary
Donald R Caldwell <sup>(2)(3)</sup>	61	Director
Gordon Hunter <sup>(1)(3)</sup>	56	Director
Michael E Mikolajczyk <sup>(1)(2)</sup>	56	Director
Raymond J Spencer <sup>(2)</sup>	57	Director

(1) *Member of the audit committee.*

(2) *Member of the compensation committee.*

(3) *Member of the nominating and governance committee.*

*Don N Aquilano* has served as a member of our board of directors since May 2002 and as the chairman of our board of directors and a member of the audit committee since May 2005. He joined our nominating and governance committee in August 2007. Since 2000, Mr. Aquilano has served as managing director and president of Gazelle TechVentures, a venture capital fund. Mr. Aquilano holds a BS from the University of Arizona and an MBA from Harvard Business School.

*Raja M Parvez* has served as our president and chief executive officer since January 2006 and as a member of our board of directors since August 2006. Prior to joining us, Mr. Parvez served as chief operating officer, chief manufacturing officer and vice president at CyOptics, Inc., a designer, developer and marketer of indium phosphide optical chips and components for access, metro and long-haul communications systems from July 2001 through December 2005. From July 2000 to July 2001, Mr. Parvez was president and vice president of manufacturing at Optigain, Inc. a subsidiary of FiTel Technologies, a designer and manufacturer of amplifiers for communications systems. From 1984 to 2000, he was at Lucent Technologies, where he served as distinguished and consulting member of the technical staff. His focus was on operational excellence for Lucent-Optoelectronics products, including indium phosphide and lithium niobate components. Mr. Parvez holds a BS in mechanical engineering from the University of Peshawar, an MS in industrial engineering and an MS in management, each from Polytechnic University in New York.

*William F Weissman* joined us in July 2007 as our chief financial officer, treasurer and secretary. From 1995 to 2007, Mr. Weissman served in various capacities at Kanbay International, Inc., an information technology services firm, including chief financial officer, vice president, executive vice president and secretary. Additionally, Mr. Weissman served as a manager of Kanbay LLC, Kanbay International, Inc.'s immediate predecessor company, from December 1997 to August 2000. Mr. Weissman is a certified public accountant and holds a BA in business administration from Seton Hall University.

*Hap R Hewes* has served as our senior vice president sales and marketing since January 2006. He has served as assistant secretary since August 2007. Mr. Hewes also served as a vice president with





## Table of Contents

### **Management**

responsibilities in operations, supply chain and new business development from March 2004 to January 2006. Prior to joining us, Mr. Hewes served in various business management and product development roles from 1997 to 2004 in the photonics group of Saint-Gobain Crystals Division USA, and with Saphikon, Inc., a producer of sapphire products. Mr. Hewes holds a BS in biology from Cornell University and an MBA from the University of Michigan Business School.

*Donald R Caldwell* joined us in February 2001 as a member of our board of directors and has served on the compensation committee since June 2002. He joined our audit committee in August 2007. In March 1999, Mr. Caldwell founded Cross Atlantic Capital Partners, Inc., a venture capital fund manager, and he presently serves as its chairman and chief executive officer. Prior to founding Cross Atlantic Capital Partners, Mr. Caldwell was president and chief operating officer and a director of Safeguard Scientifics, Inc., a holding company which provides management resources and capital, from 1996 to 1999. In addition, since June 1994, Mr. Caldwell has served as a director of Diamond Management & Technology Consultants, Inc., a management and technology consulting firm, and he also serves as a director and a member of the compensation committees of Quaker Chemical Corporation, a provider of process chemicals and chemical specialties, and Voxware, Inc., a supplier of voice driven solutions. Mr. Caldwell is a CPA in the State of New York and holds a BS in accounting from Babson College and an MBA from the Harvard Business School.

*Gordon Hunter* joined us in August 2007 as a member of our board of directors, the compensation committee and the nominating and governance committee. Since June 2002, Mr. Hunter has served as a director and, since January 2005, he has served as the chairman of the board, president and chief executive officer of Littelfuse, Inc., an international supplier of fuses and other circuit protection products for the electronics industry. Mr. Hunter served as the chief operating officer of Littelfuse from November 2003 through December 2004. Prior to joining Littelfuse, Mr. Hunter was vice president, Intel Communications Group, and general manager, Optical Products Group for Intel Corporation. Mr. Hunter was responsible for managing Intel's access and optical communications business segments within the Intel Communications Group after joining Intel in February 2002. Mr. Hunter currently serves on the Council of Advisors of Shure Incorporated. Mr. Hunter holds a BS in electrical engineering from the University of Liverpool, England, and an MBA from London Business School.

*Michael E Mikolajczyk* served as a member of our board from June 2001 until May 2002 and rejoined our board of directors in March 2004. Additionally, Mr. Mikolajczyk has served as a member of our audit committee and compensation committee since March 2004. Since September 2003, Mr. Mikolajczyk has served as managing director of Catalyst Capital Management, LLC, a private equity firm. From 2001 through 2003, Mr. Mikolajczyk worked as an independent consultant providing business and financial advisory services to early stage and mid-cap companies. Mr. Mikolajczyk also served as vice chairman of Diamond Management & Technology Consultants, Inc., a management and technology consulting firm, from 2000 to 2001, president from 1998 to 2000 and chief financial officer from 1994 to 1998. Mr. Mikolajczyk served as chief financial officer of Technology Solutions Company, a business solutions provider, from 1992 to 1994. Mr. Mikolajczyk currently serves as a director of Diamond Management & Technology Consultants, Inc. Mr. Mikolajczyk is a CPA in the State of Michigan and holds a BS in business from Wayne State University and an MBA from Harvard Business School.

*Raymond J Spencer* joined us in January 2008 as a member of our board of directors and the compensation committee. Since February 2007, Mr. Spencer has served as chief executive officer of the Financial Services Strategic Business Unit of Cap Gemini SA, a provider of consulting, technology and outsourcing services. From February 1989 to February 2007, Mr. Spencer served as chairman and chief

## **Table of Contents**

### **Management**

executive officer of Kanbay International, Inc., an information technology services firm. From 1970 to 1989, Mr. Spencer was employed by the Institute of Cultural Affairs (ICA), a not-for-profit development organization. At ICA, Mr. Spencer was the country head for India from 1970 to 1976 and was later involved in worldwide fundraising, government relations and investment operations. Mr. Spencer attended the Adelaide University School of Law.

Our executive officers are appointed by our board of directors to serve until their successors have been duly elected and qualified. There are no family relationships among any of our directors or executive officers.

### **CODE OF ETHICS**

We have adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. The code of business conduct and ethics is available on our website at [www.rubicon-es2.com](http://www.rubicon-es2.com). We expect that any amendments to the code, or any waivers of its requirements, will be disclosed on our website.

### **BOARD OF DIRECTORS**

We currently have six directors. Our bylaws permit our board of directors to establish by resolution the authorized number of directors, and seven directors are currently authorized. Our board of directors is divided into three classes of directors, each serving staggered three-year terms as follows:

Ø Class I consists of Mr. Parvez and Mr. Spencer, whose terms will expire at the annual meeting of stockholders to be held in 2008;

Ø Class II consists of Mr. Hunter and Mr. Mikolajczyk, whose terms will expire at the annual meeting of stockholders to be held in 2009; and

Ø Class III consists of Mr. Caldwell and Mr. Aquilano, whose terms will expire at the annual meeting of stockholders held in 2010. Upon expiration of the term of a class of directors, directors for that class will be eligible to be elected for a three-year term at the annual meeting of stockholders in the year in which that term expires. Each director's term continues until the election and qualification of his successor, or his earlier death, resignation or removal. The authorized number of directors may be changed by resolution duly adopted by at least a majority of our entire board of directors, although no decrease in the authorized number of directors will have the effect of removing an incumbent director from the board of directors until the incumbent director's term expires. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. Accordingly, our classified board could have the effect of delaying or preventing changes in control of our company.

### **Director independence**

Our board of directors undertook a review of the independence of each director and considered whether any director has a material relationship with us that could compromise his ability to exercise independent judgment in carrying out his responsibilities. As a result of this review, our board of directors determined that Messrs. Aquilano, Caldwell, Hunter, Mikolajczyk and Spencer, representing five of our six directors,

## **Table of Contents**

### **Management**

are independent directors as defined under the rules of the NASDAQ Global Market, constituting a majority of our board of directors as required by the rules of the NASDAQ Global Market.

### **BOARD COMMITTEES**

Our board of directors has established an audit committee, a compensation committee and a nominating and governance committee, each of which will have the composition and responsibilities described below.

#### **Audit committee**

Don N Aquilano, Gordon Hunter and Michael E Mikolajczyk, each of whom is a non-employee member of our board of directors, serve on our audit committee. Mr. Mikolajczyk is the chairman of our audit committee. Our board of directors has determined that each member of our audit committee meets the requirements for financial sophistication and that Messrs. Hunter and Mikolajczyk meet the audit committee requirements for independence under the current requirements of the NASDAQ Global Market and the SEC rules and regulations. The rules of the NASDAQ Global Market permit a company that has recently listed on the NASDAQ Global Market in connection with its initial public offering to have a minority of the members of its audit committee not comply with the independence requirements on the date of listing, provided that all of the members satisfy the requirements within one year after listing. Our board of directors has determined that Mr. Aquilano will also meet the independence requirements following this offering because the investment funds with which he is affiliated will own less than 10% of our outstanding stock. Our board of directors has also determined that Mr. Mikolajczyk is an audit committee financial expert as defined in the SEC rules. The audit committee's responsibilities include, but are not limited to:

- ∅ selecting and hiring our independent auditors, and approving the audit and permitted non-audit services to be performed by our independent auditors;
- ∅ evaluating the qualifications, experience, performance and independence of our independent auditors;
- ∅ monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to financial statements or accounting matters;
- ∅ reviewing the adequacy, effectiveness and integrity of our internal control policies and procedures;
- ∅ discussing the scope and results of the audit with the independent auditors and reviewing with management and the independent auditors our interim and year-end operating results; and
- ∅ preparing the audit committee report required by the SEC in our annual proxy statement.

#### **Compensation committee**

Donald R Caldwell, Michael E Mikolajczyk and Raymond J Spencer, each of whom is a non-employee member of our board of directors, serve on the compensation committee. Mr. Caldwell is the chairman of our compensation committee. Our board of directors has determined that each member of our compensation committee meets the requirements for independence under the current requirements of the NASDAQ Global Market. The compensation committee's responsibilities include, but are not limited to:

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- Ø reviewing and approving our chief executive officer's and other executive officers' annual base salaries and annual bonuses;
- Ø evaluating and recommending to the board incentive compensation plans;
- Ø overseeing an evaluation of the performance of our executive officers;
- Ø administering, reviewing and making recommendations with respect to our equity compensation plans;

## Table of Contents

### Management

Ø reviewing and making recommendations to the board of directors with respect to director compensation; and

Ø preparing the compensation committee report required by the SEC in our annual proxy statement.

### **Nominating and governance committee**

Don N Aquilano, Gordon Hunter and Donald R Caldwell, each of whom is a non-employee member of our board of directors, serve on the nominating and governance committee. Mr. Hunter is the chairman of our nominating and governance committee. Our board of directors has determined that each member of our nominating and governance committee meets the requirements for independence under the current requirements of the NASDAQ Global Market. The nominating and governance committee's responsibilities include, but are not be limited to:

Ø developing and recommending to the board criteria for board and committee membership;

Ø assisting our board in identifying prospective director nominees and recommending to the board director nominees for each annual meeting of stockholders;

Ø recommending members for each board committee to our board of directors;

Ø reviewing developments in corporate governance practices and developing and recommending governance principles applicable to our board of directors; and

Ø overseeing the evaluation of the board of directors.

### **DIRECTOR COMPENSATION**

Prior to our initial public offering in November 2007, most of our directors did not receive any compensation for their services as members of our board of directors or any committee of our board of directors because they were representatives of principal stockholders of our company and, as a privately-held company, we believed such compensation to be unnecessary. However, we paid Mr. Aquilano \$50,000 in June 2007 and \$50,000 in August 2007 for his past service as the chairman of our board of directors. We awarded to Messrs. Hunter and Mikolajczyk participation rights in our Management Incentive Bonus Plan (the MIB Plan), which terminated upon completion of our initial public offering, that provided for the payment of bonuses in the event that we were sold. We also awarded to Messrs. Hunter and Mikolajczyk, in June 2007, options to purchase 9,903 and 23,653 shares, respectively, of our common stock. The awards to Mr. Mikolajczyk were made in recognition of his past service as a member of our board of directors and audit and compensation committees. The awards to Mr. Hunter were made in recognition of his past service as a board advisor. Neither Mr. Hunter nor Mr. Mikolajczyk is affiliated with any of our principal stockholders.

Upon the completion of our initial public offering in November 2007, our board of directors adopted a new compensation policy applicable to all of our non-employee directors. This compensation policy provides that each such non-employee director will receive an annual fee of \$50,000, plus \$5,000 per year for service on the audit committee, \$2,500 per year for service on the compensation committee and \$1,000 per year for service on the nominating and governance committee. The chairmen of the audit, compensation and nominating and governance committees will receive, per year, \$10,000, \$5,000 and \$3,000, respectively, in each case in lieu of committee service compensation. No additional payment will be made for meeting attendance. All fees will be paid in quarterly installments and will be payable 50% in cash and 50% in restricted stock. In addition, each of our non-employee directors who is not a representative of a principal stockholder of our company received a one-time grant of restricted stock



**Table of Contents****Management**

upon the later of the closing of our initial public offering and his appointment to the board of directors. Each restricted stock award was valued at \$100,000, based on the market price of our common stock at the time, and vest ratably on each of the first three anniversaries of the date of grant. We also have a policy of reimbursing directors for travel, lodging and other reasonable expenses incurred in connection with their attendance at board or committee meetings or conducting company business.

**DIRECTOR COMPENSATION TABLE**

The following table sets forth information regarding the aggregate compensation we paid to the members of our board of directors for the year ended December 31, 2007:

Name	Fees earned or paid in cash	Stock awards <sup>(1)</sup>	Option awards <sup>(1)</sup>	Non-equity incentive plan compensation	Change in pension value and nonqualified deferred earnings compensation	All other compensation	Total
Don N Aquilano	\$	\$	\$	\$	\$	\$	\$
Raja M Parvez							
Brian Adamsky <sup>(2)</sup>							
Donald R Caldwell							
Byron Denenberg <sup>(2)</sup>							
Gordon Hunter		99,988 <sup>(3)</sup>	12,756 <sup>(4)</sup>				112,744
Michael E Mikolajczyk		99,988 <sup>(3)</sup>	28,230 <sup>(5)</sup>				128,218
Raymond J Spencer							

(1) Amounts represent stock-based compensation recognized in 2007 on all outstanding stock option awards in accordance with SFAS 123R as discussed in Note 8 to our financial statements for the year ended December 31, 2007, included elsewhere in this prospectus.

(2) Messrs. Adamsky and Denenberg resigned from our board of directors effective August 29, 2007.

(3) On November 21, 2007, we awarded 7,142 shares of restricted stock valued at \$14.00 per share on such date to each of Messrs. Hunter and Mikolajczyk which vest ratably over three years beginning on November 15, 2008.

(4) In June 2007, we awarded Mr. Hunter an option to purchase 9,903 shares of common stock at an exercise price of \$8.45 per share, with a one-year vesting period.

(5) In June 2007, we awarded Mr. Mikolajczyk an option to purchase 23,653 shares of common stock at an exercise price of \$8.45 per share, with a one-year vesting period.

**COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION**

None of the members of our compensation committee is or previously served as one of our officers or employees. None of our named executive officers serve, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Two members of our compensation committee, Messrs. Aquilano and Caldwell, are affiliated with entities that have purchased shares in one or more of our private placements of securities. See Certain relationships and related party transactions.





**Table of Contents**

## Executive compensation

### COMPENSATION DISCUSSION AND ANALYSIS

*The following discussion and analysis of compensation arrangements of our named executive officers for 2007 should be read together with the compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt may differ materially from currently planned programs as summarized in this discussion.*

We believe that the compensation of our executive officers should facilitate the achievement of short-term corporate goals as well as the performance of long-term business objectives. It is the responsibility of the compensation committee of our board of directors to administer our compensation practices to ensure that they are competitive and include incentives which are designed to appropriately drive corporate performance. Our compensation committee reviews and approves all of our compensation policies, including executive officer salaries, bonuses and equity incentive compensation.

#### **Objectives of our executive compensation programs**

Our compensation programs for our named executive officers are designed to achieve the following objectives:

- Ø attract and retain talented and experienced executives in our industry;
  - Ø motivate and reward executives whose knowledge, skills and performance are critical to our success;
  - Ø align the interests of our executives and stockholders, by encouraging executives to increase stockholder value and rewarding executives when stockholder value increases; and
  - Ø motivate our executives to manage our business to meet our short-term and long-term corporate goals and business objectives, and reward them for meeting these objectives.
- We use a mix of short-term compensation in the form of base salaries and cash incentive bonuses and long-term compensation in the form of equity incentive compensation to provide a total compensation structure that is designed to encourage our executives to achieve these objectives.

#### **Determining executive compensation**

The compensation committee is responsible for developing, administering and interpreting the compensation program for executive officers and other key employees. Our compensation committee was appointed by our board of directors and consists entirely of directors who are outside directors, for purposes of Section 162(m) of the Code, and non-employee directors for purposes of Rule 16b-3 under the Exchange Act.

The compensation committee may delegate some or all of its responsibilities to one or more subcommittees whenever necessary to comply with any statutory or regulatory requirements or otherwise deemed appropriate by the committee. The compensation committee has the authority to retain consultants and other advisors to assist with its duties and has sole authority to approve the fees and other retention terms of such consultants and advisors.

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Historically, our chief executive officer makes recommendations to the compensation committee regarding the salaries, bonus arrangements and option grants, if any, for key employees, including all

62

## **Table of Contents**

### **Executive compensation**

executive officers. In setting compensation for key employees in 2007, the compensation committee made certain revisions to the chief executive officer's recommendations. Following the completion of the offering, our chief executive officer will continue making such recommendations for all key employees other than himself. For executive officers whose bonus awards are based partly on individual performance, the CEO's evaluation of such performance is provided to and reviewed by the compensation committee. Based on the foregoing, the compensation committee uses its judgment in making compensation decisions that will best carry out our philosophy and objectives for executive compensation.

Within the context of the overall objectives of our compensation programs, we determined the specific amounts of compensation to be paid to each of our executives in 2007 based on a number of factors, including, but not limited to:

- ∅ the roles and responsibilities of our executives;
  
- ∅ the individual experience and skills of our executives;
  
- ∅ the amounts of compensation being paid to our other executives;
  
- ∅ our executives' historical compensation at our company; and
  
- ∅ our understanding of the amount of compensation generally paid by similarly situated companies to their executives with similar roles and responsibilities.

In evaluating the compensation generally paid by similarly situated companies, our compensation committee has obtained guidance on appropriate executive compensation practices from executive search firms in the course of recruiting executives for Rubicon. In addition, we have historically taken into account available data relating to the compensation practices of other companies within and outside our industry.

In 2007, the compensation committee engaged the consulting firm of Hewitt Associates, LLC to assist us in analyzing our current compensation structure and making suggestions for our future compensation structure. In the course of its work, the firm provided the compensation committee with data on average compensation for selected officer positions at the following 12 companies: Advanced Analogic Tech., ATMI, Inc., Cascade Microtech, Inc., Color Kinetics Inc., Cree, Inc., Hittite Microwave Corp., IPG Photoics Corp., Microtune, Inc., Nextest Systems Corp., Supertex, Inc., Techwell, Inc. and Volterra Semiconductor Corp. We considered these companies to be comparable for these purposes because they are in the high-technology field and had annual revenues within a certain range of our own. Many of the compensation decisions for 2007 were made prior to the committee's receipt of this report and others, such as certain of the discretionary bonuses, were based on management's efforts in connection with the initial public offering and were thus not comparable to regular annual compensation of the peer group. Nonetheless, the compensation committee did consider this data along with the other factors described above in negotiating the compensation terms of Mr. Weissman's employment. Mr. Weissman's total compensation as chief financial officer, including discretionary bonuses relating to his efforts in connection with our initial public offering and for our exceeding the incentive bonus performance targets, was comparable to the median total compensation of the peer group.

### **Elements of our executive compensation programs**

Our executive compensation primarily consists of base salary, cash incentive and discretionary bonuses, equity-based incentives and benefit programs. We believe it is important that the interests of our executives are aligned with those of our stockholders; therefore, equity incentive compensation constitutes a significant portion of our total executive compensation.



## **Table of Contents**

### **Executive compensation**

We discuss each of the primary elements of our executive compensation in detail below. While we have identified particular compensation objectives that each element of executive compensation serves, our compensation programs are designed to complement each other and collectively serve all of our executive compensation objectives described above.

#### *Annual cash compensation*

##### *Base salary*

Base salaries are intended to provide a level of compensation sufficient to attract and retain an effective management team when considered in combination with the performance-based and other components of our compensation program. The base salary of each executive officer is reviewed annually to determine if it is equitably aligned with our other executive officers and is at a sufficient level to attract and retain top talent. Salaries are adjusted to reflect individual roles and performance and may be increased at other times if a change in the scope of the officer's responsibilities justifies such consideration or in order to maintain salary equity among executive officers. We believe that a competitive base salary is a necessary element of any compensation program designed to attract and retain talented and experienced executives. We also believe that attractive base salaries can serve as an effective reward for the executives' overall performance.

Our executives' base salaries reflect the initial base salaries that we negotiated with each of them at the time of his or her initial employment and our subsequent adjustments to these amounts. Beginning in 2008, we began to formally evaluate executive performance on an annual basis, and these evaluations are now one of the factors considered in making adjustments to base salaries. The base salaries for most of our executive officers, including our chief executive officer, increased four percent in 2007, which was the average increase in salary for all of our employees in 2007. The size of the increase reflects the committee's perception as to the general increase in wages in our industry during the past year. A modest additional increase in base salary was made mid-year for Ms. Graffy in light of her assumption of additional responsibilities.

##### *Cash incentive bonuses*

The primary objectives of our incentive bonus plan are to provide an incentive for superior work, to motivate our executives toward even higher achievement and business results, to tie our executives' goals and interests to ours and our stockholders' and to enable us to attract and retain highly qualified individuals. Under the plan, each executive is entitled to receive a bonus based on our attainment of corporate performance targets set by the compensation committee. These targets are typically set in the first four months of the year. For 2007, these targets were based on gross revenues and EBITDA which the compensation committee believed were the most appropriate criteria for a company at our stage of development. The targets under our incentive bonus plan are based on internal financial goals set in connection with our board of directors consideration and approval of our annual operating plan. These targets are set at levels that we believe can be achieved if our executive officers perform at a high level and if the assumptions underlying our annual operating plan prove correct. Incentive bonuses are set at a percentage of salary, which, in 2007, ranged from 15% to 35% for our named executive officers. The higher percentages are set for the executives with the greater levels of responsibility, thus furthering the compensation committee's objective to have a greater percentage of compensation at risk as an executive's level of responsibility increases. Each of our named executive officers received his or her incentive bonus for 2007 because we exceeded the performance targets under that plan.

The compensation committee may also, in its discretion, award bonuses to executives based upon such other terms and conditions as the compensation committee may determine. For 2007, the compensation

## Table of Contents

### **Executive compensation**

committee awarded additional bonuses to the executive officers in recognition of their roles in exceeding our EBITDA target under the incentive bonus plan for 2007. These discretionary bonuses were determined in the aggregate as a percentage of our 2007 EBITDA in excess of the target under the incentive bonus plan and were allocated among our executive officers taking into consideration the compensation committee's evaluation of the contributions made by each member of the management team. A significant portion of the discretionary bonus was allocated to our chief executive officer in recognition of his role in our improved financial performance during 2007 and in the recruiting and hiring of additional key personnel. While these bonuses are discretionary, the compensation committee contemplates that it may regularly make such awards in years in which our performance significantly exceeds target. We also granted an additional discretionary bonus in 2007 to each of our executive officers in recognition of his or her extraordinary efforts in connection with our initial public offering and a discretionary bonus of \$250,000 to our chief executive officer in recognition of the extremely positive results of his efforts on behalf of our company.

#### *Equity incentive compensation*

We grant equity incentive awards in the form of stock options to align the interests of our executives with our stockholders by providing our executives with strong incentives to increase stockholder value. These awards represent a significant portion of total executive compensation. In most cases, stock options vest at the rate of 25% of the total option shares on each of the first four anniversaries of the date of grant, thus providing added incentive for the executive to continue his or her employment with us. In 2007, we granted options to purchase a total of 769,125 shares of common stock, of which options to purchase a total of 508,038 shares were granted to our named executive officers, representing 66% of all options granted in 2007.

In 2007, the board of directors approved grants of options to purchase an aggregate of 269,230 shares of our common stock to Mr. Parvez. The compensation committee chose to have one-half of these awards vest immediately or concurrently upon the closing of our initial public offering in recognition of Mr. Parvez's extraordinary efforts over the past 18 months and our financial performance during that period. The remaining half of these option shares will vest ratably on each of the first four anniversaries of the dates of grant. The compensation committee set the size of the grants to Mr. Parvez based on its determination that the aggregate amount of all of Mr. Parvez's equity holdings should represent approximately 5% of our total equity on a fully diluted basis, but before giving effect to the issuance of shares in the initial public offering. The compensation committee considers this targeted level of equity interest to be consistent with the level of ownership typically held by a company's founder immediately prior to its initial public offering. The compensation committee considers Mr. Parvez to be the equivalent of a company founder. Our new chief financial officer received two option awards in 2007. The first, covering 15,384 shares, was made in consideration of Mr. Weissman's consulting services as our interim chief financial officer prior to his employment on July 31, 2007 as our permanent chief financial officer. The second grant, covering 190,348 shares, was made pursuant to the terms of Mr. Weissman's employment agreement with us. The size of the second grant was a negotiated term of the agreement and reflects the compensation committee's determination, based on the committee members' experience with their firms' other portfolio companies, that an appropriate award for a chief financial officer with Mr. Weissman's experience should represent approximately 1.2% of our total equity on a fully-diluted basis but before giving effect to the issuance of shares in our initial public offering. Several additional grants of stock options were made to Ms. Graffy in consideration of her increased responsibilities now that we are a public company. The number and value of stock options granted to each executive is set forth in the 2007 Grants of plan-based awards table.

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**Table of Contents**

**Executive compensation**

Historically, the board has granted stock options at various times during the year based on recommendations from the compensation committee. However, the board recently adopted a policy generally to grant stock options to executives once per year. As such, in the future, such grants normally will be made at a meeting of the board of directors held within a prescribed period following our release of year-end financial results. This period runs from the fourth until the 12<sup>th</sup> business day following the release. Otherwise, we do not have any program, plan or practice to time stock option grants in coordination with the release of material non-public information. With respect to newly hired executives, our practice is typically to make stock option grants at the first meeting of the board of directors following such executive's hire date.

The exercise price of each stock option granted under our stock incentive plans is based on the fair market value of our common stock on the grant date. Prior to our initial public offering, the fair market value of our common stock for purposes of determining the exercise price of stock options was determined by our board of directors based on a number of factors applicable to common stock of privately-held companies including:

- ∅ our stock option grants involved illiquid securities in a private company;
  - ∅ prices of our preferred stock issued to investors in arms-length transactions, and the rights, preferences and privileges of our preferred stock relative to those of our common stock;
  - ∅ our results of operations and financial status;
  - ∅ our stage of development and business strategy;
  - ∅ the composition of and changes to our management team; and
  - ∅ the likelihood of achieving a liquidity event for the shares of our common stock, such as an initial public offering of our common stock or our sale to a third party, given prevailing market conditions.
- In connection with and shortly prior to our initial public offering, our board of directors and stockholders adopted the 2007 Stock Incentive Plan, or 2007 Plan. The 2007 Plan permits the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards and bonus shares. The 2007 Plan replaced our 2001 Equity Plan effective upon the consummation of our initial public offering. For a further description, please see "Employee benefit plans - 2007 Stock Incentive Plan" below.

*Management incentive bonus plan*

We previously had a Management Incentive Bonus Plan (the "MIB Plan"), which was terminated upon completion of our initial public offering, that provided for the payment of bonuses to certain of our employees, including each of our named executive officers, in the event that we were sold. The purpose of the MIB Plan was to provide those employees with an opportunity to participate financially in the proceeds of such a transaction that was in our and our stockholders' best interests, but which may otherwise have created personal uncertainties for them. Pursuant to the MIB Plan, upon the closing of a sale transaction of Rubicon, each participant in the MIB Plan would have received a bonus in an amount equal to the sales proceeds multiplied by a specified percentage for that participant. Each participant's specified percentage was approved by resolution of the board of directors at the time that employee was designated a participant under the MIB Plan and was subject to increase by the board of directors from time to time. These bonuses would have been paid in cash or, at our option, in the same form of consideration as payable in the sale transaction.





## **Table of Contents**

### **Executive compensation**

#### *Benefits*

All of our executive officers are eligible for benefits offered to employees generally, including life, health, disability and dental insurance and our 401(k) plan. Consistent with our compensation philosophy, we intend to continue to maintain our current benefits for our executive officers. The compensation committee, in its discretion, may revise the executive officers' benefits if it deems it advisable.

#### *Severance and change in control arrangements*

Our named executive officers have employment and/or other agreements that provide various benefits triggered by such employment-related actions as termination without cause, resignation with good reason and/or termination without cause following a change in control. Such benefits may include salary continuation, guaranteed bonuses, lump sum severance and/or the acceleration of stock option vesting. See *Employment and severance arrangements* below for a description of the severance and change in control arrangements for our named executive officers. In addition, each of our equity incentive plans provides for a potential acceleration of vesting of outstanding awards in the event that we undergo a change in control, as defined in such plans. See *Employee benefit plans* below for a description of the change in control provisions contained in our equity incentive plans.

In setting the terms of and determining whether to approve these severance and change in control arrangements, our compensation committee or board of directors, as applicable, recognized that executives often face challenges securing new employment following a termination of their existing employment and that distractions created by uncertain job security may have a detrimental impact on their performance. With the exception of the acceleration of stock option vesting, none of these benefits are triggered by a change in control unless the named executive officer's employment is terminated without cause following such change in control. The acceleration of stock option vesting upon a change in control occurs only if the option is not assumed, or an equivalent right substituted, by the successor corporation. We believe the acceleration of option vesting under such circumstances is appropriate to preserve the benefit intended to be provided to the executive while avoiding the acceleration of benefits where the executive is enjoying a continuation of the same or comparable benefit following the change in control.

#### *Effect of accounting and tax treatment on compensation decisions*

In the review and establishment of our compensation programs, we consider the anticipated accounting and tax implications to us and our executives. In this regard, we may begin utilizing restricted stock and/or restricted stock units as additional forms of equity compensation incentives in response to changes in the accounting treatment of equity awards under SFAS 123R. While we consider the applicable accounting and tax treatment, these factors alone are not dispositive, and we also consider the cash and non-cash impact of the programs and whether a program is consistent with our overall compensation philosophy and objectives.

Section 162(m) of the Code imposes a limit on the amount of compensation that we may deduct in any one year with respect to our chief executive officer and each of our next four most highly compensated executive officers, unless certain specific and detailed criteria are satisfied. Performance-based compensation, as defined in the Code, is fully deductible if the programs are approved by stockholders and meet other requirements. In addition, stock options granted under our 2001 Equity Plan as well as equity and cash awards granted under our 2007 Stock Incentive Plan are exempt from Section 162(m) of the Code pursuant to an exemption available for plans adopted prior to the time a company becomes a public company. This exemption for a pre-IPO compensation plan will no longer be available to us after the date of our 2011 annual meeting, or if we materially modify the plan. Subsequent to the expiration of this pre-IPO exemption, we intend to assess the impact of Section 162(m) on our compensation practices and determine whether to qualify equity and cash awards as performance-based compensation.

**Table of Contents****Executive compensation****SUMMARY COMPENSATION TABLE**

The table below sets forth, for the 2007 and 2006 calendar years, the compensation earned by our president and chief executive officer, our chief financial officer, and our only other executive officer serving during 2007 and 2006. Such persons are referred to herein as our named executive officers.

Name and principal position	Year	Salary	Bonus	Option awards <sup>(1)</sup>	All other compensation	Total
Raja M Parvez	2007	\$ 286,000	\$ 740,000	\$ 588,536	\$ 53,282 <sup>(2)</sup>	\$ 1,667,818
President and Chief Executive Officer	2006	275,000	165,000	53,876	60,767 <sup>(2)</sup>	554,643
William F Weissman	2007	84,615	91,096	71,170		246,881
Chief Financial Officer <sup>(3)</sup>						
Mardel A Graffy <sup>(4)</sup>	2007	125,344	53,524	4,753		183,621
	2006	118,491	21,774	35		140,300
Hap R Hewes	2007	187,200	87,440	7,286		281,926
Senior Vice President Sales & Marketing	2006	180,000	46,000	2,764		228,764

(1) Amounts represent stock-based compensation recognized in 2007 on all outstanding stock option awards in accordance with SFAS 123R as discussed in Note 8 to our financial statements for the year ended December 31, 2007, included elsewhere in this prospectus.

(2) Reflects the reimbursement of commuting expenses prior to Mr. Parvez's pending relocation from Pennsylvania to Illinois.

(3) Mr. Weissman became our chief financial officer in July 2007.

(4) Until July 30, 2007, Ms. Graffy acted as our principal financial officer, although not formally an executive officer.

**2007 GRANTS OF PLAN-BASED AWARDS**

The following table lists grants of plan-based awards made to our named executive officers in 2007 and related fair value compensation for 2007:

Name	Grant date	Date grant approved	by board	Estimated future payouts under Non-equity incentive plan awards	All other option awards: number of securities underlying options	Exercise or base price of option awards (\$/Sh)	Grant date fair value of stock and option awards <sup>(1)</sup>
Raja M Parvez	June 18, 2007	June 18, 2007	June 18, 2007		161,538	\$ 8.45	\$ 330,528
	November 21, 2007	June 18, 2007	June 18, 2007	100,000 <sup>(2)</sup>	107,692	14.00	766,408
William F Weissman	June 18, 2007	June 18, 2007	June 18, 2007		15,384	8.45	31,479
	August 29, 2007	August 29, 2007	August 29, 2007	21,096 <sup>(2)</sup>	190,348	8.45	381,037
Mardel A Graffy	June 18, 2007	June 18, 2007	June 18, 2007		3,846	8.45	7,870

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	August 29, 2007 December 3, 2007	August 29, 2007 December 3, 2007		7,692 10,000	8.45 18.50	15,398 93,019
Hap R Hewes	June 18, 2007	June 18, 2007	18,524 <sup>(2)</sup>	11,538	8.45	23,609
			37,440 <sup>(2)</sup>			

(1) Amounts represent total fair value of the stock option awards under SFAS 123R as discussed in Note 8 to our financial statements for the year ended December 31, 2007, included elsewhere in this prospectus.

(2) Bonus awards were earned and paid at the target level for 2007 and are included in the Bonus column of the Summary compensation table.

**Table of Contents**

**Executive compensation**

**Discussion of summary compensation and grants of plan-based awards tables**

Our executive compensation policies and practices, pursuant to which the compensation set forth in the Summary compensation table and the 2007 Grants of plan-based awards table was paid or awarded, are described above under Compensation discussion and analysis. See also Employment and severance arrangements. For 2007, our executives received bonuses under the incentive bonus plan as well as discretionary bonuses, all of which are included in the Bonus column of the Summary compensation table. The incentive bonuses are also shown in the Target column of the 2007 Grants of plan-based awards table. Discretionary bonuses for the named executive officer were made in recognition of our exceeding the performance targets under the 2007 incentive bonus plan, as follows: Mr. Parvez \$250,000; Mr. Weissman \$20,000; Ms. Graffy \$6,000; and Mr. Hewes \$20,000. Additional discretionary bonuses were made to our named executive officers in recognition of their extraordinary efforts in connection with our initial public offering, as follows: Mr. Parvez \$140,000; Mr. Weissman \$50,000; Ms. Graffy \$29,000 and Mr. Hewes \$30,000. A discretionary bonus of \$250,000 was also awarded to our chief executive officer, Mr. Parvez, in recognition of the extremely positive results of his efforts on behalf of Rubicon.

**OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END**

The following table sets forth information regarding grants of plan based option awards held by our named executive officers as of December 31, 2007:

Name	Option Awards				Stock Awards			Equity plan awards: market or payout value of unearned shares or other rights that have not vested
	Number of securities underlying unexercised options exercisable	Number of securities underlying unexercised options unexercisable	Option exercise price (\$/Sh)	Option expiration date	Number of shares of stock that have not vested	Market value of shares of stock that have not vested	Equity plan awards: number of unearned shares or other rights that have not vested	
Raja M Parvez	471,021 <sup>(1)</sup>		\$ 0.91	July 1, 2016				
	80,769 <sup>(2)</sup>	80,769 <sup>(2)</sup>	8.45	June 18, 2017				
	53,846 <sup>(3)</sup>	53,846 <sup>(3)</sup>	14.00	November 21, 2017				
William F Weissman	15,384 <sup>(4)</sup>		8.45	June 18, 2017				
		190,348 <sup>(5)</sup>	8.45	August 29, 2017				
Mardel A Graffy	2,884 <sup>(5)</sup>	2,884 <sup>(5)</sup>	4.94	January 31, 2015				
	481 <sup>(5)</sup>	1,442 <sup>(5)</sup>	0.78	July 1, 2016				
		3,846 <sup>(5)</sup>	8.45	June 18, 2017				
		7,692 <sup>(5)</sup>	8.45	August 29, 2017				
		10,000 <sup>(5)</sup>	18.50	December 3, 2017				
Hap R Hewes	10,962 <sup>(5)</sup>	3,653 <sup>(5)</sup>	4.94	March 29, 2014				
	13,269 <sup>(5)</sup>	4,423 <sup>(5)</sup>	4.94	December 31, 2014				
	28,846 <sup>(5)</sup>	86,538 <sup>(5)</sup>	0.78	July 1, 2016				
		11,538 <sup>(5)</sup>	8.45	June 18, 2017				

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- (1) *These options were immediately vested upon grant. Includes options covering 200,000 shares held by The Parvez Family 2007 Irrevocable Trust, dated September 26, 2007 for the benefit of Mr. Parvez's children. Mr. Parvez disclaims beneficial ownership of the options held by such trust.*  
*(footnotes continued on following page)*

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## **Table of Contents**

### **Executive compensation**

- (2) *One-half of the options were immediately vested upon grant. The remaining options vest at the rate of 25% of the total option shares on each of the first four anniversaries of the date of grant.*
- (3) *One-half of the options vested on November 21, 2007, the consummation of our initial public offering. The remaining options vest at the rate of 25% of the option shares on each of the first four anniversaries of the initial public offering.*
- (4) *These options were immediately vested on November 21, 2007, the consummation of the initial public offering*
- (5) *These options vest at the rate of 25% of the total option shares on each of the first four anniversaries of the date of grant.*

### **OPTION EXERCISES AND STOCK VESTED**

None of our named executive officers exercised stock options or had any restricted stock vest in 2007.

### **PENSION BENEFITS**

None of our named executive officers participates in or has account balances in qualified or non-qualified defined benefit plans sponsored by us.

### **NONQUALIFIED DEFERRED COMPENSATION**

None of our named executive officers participates in or has account balances in non-qualified defined contribution plans or other deferred compensation plans maintained by us.

### **EMPLOYMENT AND SEVERANCE ARRANGEMENTS**

#### **Raja M Parvez**

We entered into an employment agreement with Raja Parvez, our president and chief executive officer, dated November 17, 2005, as amended July 25, 2007.

*Term.* The term of the agreement commenced on January 2, 2006 and expires on January 2, 2009 subject to automatic one-year extensions unless either party provides the other with written notice of non-renewal at least 60 days prior to the end of the then-current term.

*Compensation.* Under the terms of his agreement, Mr. Parvez is entitled to an annual base salary of \$275,000, subject to annual review and adjustment, and an annual discretionary bonus of up to \$75,000 based upon the achievement of business objectives. Mr. Parvez' actual salary and bonuses for 2007 are shown in the Summary compensation table. Mr. Parvez was also granted a participation right in the MIB Plan. The MIB Plan terminated upon completion of the initial public offering. We have also agreed to reimburse Mr. Parvez for reasonable commuting expenses (including travel and lodging costs and meal expenses) associated with his maintaining a presence in Illinois prior to his relocation from Pennsylvania.

*Severance.* In the event that Mr. Parvez's employment is terminated by us without cause or if he resigns for good reason, he will receive a lump sum severance payment equal to his annual base salary in effect at that time and health and welfare benefits for a period of 12 months or six months, respectively, after his termination date. For purposes of the agreement, (i) cause is defined as willful misconduct materially and adversely affecting us; theft, fraud, embezzlement or similar behavior; indictment or conviction of a felony; or willfully failing to substantially perform the material duties of his position, other than a failure resulting from incapacity due to physical or mental illness, following a demand for performance delivered by the board of directors and a specified cure period of not less than 30 days; and (ii) good reason is defined as a reduction in base salary or a diminution in benefits;

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**Table of Contents**

**Executive compensation**

substantial diminution in Mr. Parvez's duties, responsibilities or title, if uncured 30 days after written notice of the diminution was delivered to us by Mr. Parvez; or relocation for a period of greater than six consecutive months greater than 100 miles from the Chicago metropolitan area.

*Restrictive Covenants.* The agreement contains customary non-competition and non-solicitation covenants on the part of Mr. Parvez. These restrictions survive for a period of 12 months after Mr. Parvez's resignation or termination; and, in the event of a breach of his employment agreement, the period is automatically extended by the period of the breach.

**William F Weissman**

We entered into an employment agreement with Mr. Weissman, our chief financial officer, effective as of July 30, 2007. The key terms of the agreement are summarized below.

*Term.* The term of the agreement commenced on July 30, 2007 and expires on June 30, 2008, subject to automatic one-year extensions unless either party provides the other with written notice of non-renewal at least 60 days prior to the end of the then-current term.

*Compensation.* Under the terms of his agreement, Mr. Weissman was entitled to a 2007 annual base salary of \$200,000 and an annual discretionary bonus targeted at 25% of his annual base salary. In addition, Mr. Weissman was granted in 2007 an option to purchase 190,348 shares of our common stock at an exercise price of \$8.45 per share. The option vests at the rate of 25% of the total option shares on each of the first four anniversaries of the date of grant. Mr. Weissman was also granted a participation right in the MIB Plan. The MIB Plan terminated upon completion of the initial public offering. Prior to his employment as our chief financial officer, Mr. Weissman was granted an option to purchase 15,384 shares of our common stock at an exercise price of \$8.45 per share in recognition of his services as our interim chief financial officer. This option vested in full upon the closing of our initial public offering.

*Severance terms.* In the event that Mr. Weissman's employment agreement is terminated by us without cause or if he resigns for good reason, he will receive a continuation of his annual base salary for six months thereafter and his options will become fully vested provided that Mr. Weissman delivers a release of claims. In addition, he will receive a continuation of his medical and welfare benefits for a period of six months thereafter. If within one year after a change in control, we terminate Mr. Weissman without cause, he will be entitled to a lump sum payment equal to six months of his annual base salary in lieu of the salary continuation described above.

For purposes of the agreement (i) cause is defined as willful misconduct materially and adversely affecting us; theft, fraud, embezzlement or similar behavior; indictment or conviction of a felony; or willfully failing to substantially perform the material duties of his position, other than failure resulting from incapacity due to physical or mental illness, following a demand for performance delivered by the board of directors and a specified cure period of not less than 10 days; and (ii) good reason is defined as a reduction in base salary; substantial diminution in Mr. Weissman's duties, responsibilities or title, if uncured by us within 30 days of receipt of notice from Mr. Weissman; or relocation for a period of greater than six consecutive months greater than 100 miles from the Chicago metropolitan area.

*Restrictive covenants.* The agreement contains customary non-competition and non-solicitation covenants on the part of Mr. Weissman. These restrictions survive for a period of 12 months after Mr. Weissman's resignation or termination, and in the event of a breach of his employment agreement, the period is automatically extended by the period of the breach.



## Table of Contents

### **Executive compensation**

#### **Mardel A Graffy**

We entered into a change in control severance agreement as of August 30, 2007 with Ms. Graffy. This agreement provides that if, within one year after a change in control, we terminate Ms. Graffy without cause, she will be entitled to a lump sum payment equal to six months of her annual base salary provided that Ms. Graffy delivers a release of claims. For purposes of the agreement, cause is defined as willful misconduct materially and adversely affecting us; theft, fraud, embezzlement or similar behavior; indictment or conviction of a felony; or willfully failing to substantially perform the material duties of her position, other than failure resulting from incapacity due to physical or mental illness, following a demand for performance delivered by the board of directors and a specified cure period of not less than 10 days.

#### **Hap R Hewes**

We entered into an employment agreement as of March 29, 2004, a non-competition agreement as of April 6, 2005 and a severance agreement as of September 8, 2005 with Mr. Hewes, our senior vice president of sales and marketing. The key terms of these agreements are summarized below.

*Term.* Mr. Hewes is considered an employee at will and either party may terminate the agreement on 30 days advance written notice.

*Compensation.* Under the terms of his agreement, Mr. Hewes is entitled to a minimum annual base salary of \$140,000 and an annual discretionary bonus of up to 40% of his base salary.

*Severance terms.* Under the terms of the severance agreement, if Mr. Hewes is terminated by us without cause or if he resigns for good reason, he will receive, provided that Mr. Hewes delivers a release of claims, (i) a continuation of his annual base salary for six months thereafter, (ii) a bonus equal to two times the minimum bonus specified in our 2005 performance bonus plan, (iii) a continuation of his medical and welfare benefits for a period of 12 months thereafter, (iv) if the termination occurs within the second half of a vesting year, accelerated vesting of the options that would have vested at the end of such period, and (v) an extension of the exercise period of his options until the later of (a) two years after his termination and (b) the expiration date of the options.

For purposes of the severance agreement, (i) cause is defined as commission of a willful or grossly negligent act or the willful or grossly negligent omission to act, which is intended to cause or causes or is reasonably likely to cause material harm to us; commission or conviction of, or a plea of no contest to, any felony, crime or offense involving dishonesty or fraud or that is significantly injurious to us; breach of any material term of any agreement with us that remains uncured for 30 days following written notice; willful neglect of or continued failure to substantially perform, in any material respect, his duties or obligations to us, which neglect or failure continues for 30 days following written notice; or use or abuse of illegal drugs at any time or Mr. Hewes being under the influence of alcohol during any time in which he is required to perform his duties and obligations to us; and (ii) good reason is defined as the assignment to Mr. Hewes of duties materially inconsistent with his level of authority or responsibilities, or any other action by us that results in material diminution of his position, compensation, authority, duties or responsibilities; a breach by us of any material term of any agreement with Mr. Hewes that remains uncured for 30 days following written notice; a requirement that the primary business location of Mr. Hewes move more than 75 miles from his principal office location; or failure of a successor to substantially all of our business or assets to assume expressly, and agree to perform under the terms of, the severance agreement.

**Table of Contents****Executive compensation**

*Restrictive covenants.* The non-competition agreement contains customary non-competition and non-solicitation covenants on the part of Mr. Hewes. These restrictions survive for a period of 36 months after Mr. Hewes' resignation or termination; provided, however, that the restrictions will remain in effect after the termination of his employment only for so long as we are paying Mr. Hewes an amount equal to 50% of his annual base salary on a monthly basis.

**Potential payments upon termination of employment**

The table below shows the estimated amount of payments and benefits that we would provide to the named executive officers assuming that their employment was terminated as of December 31, 2007 by us without cause, including following a change in control, or by the officer with good reason. The table also shows the estimated amount of benefits that we would provide upon the occurrence of a change in control, as defined in the 2007 Stock Incentive Plan or the 2001 Equity Plan, as of December 31, 2007, if the named executive officer's options were not assumed, or an equivalent right substituted, by the successor corporation.

	Cash severance			Continuation of medical and welfare benefits (in dollars)	Accelerated vesting of stock options <sup>(1)</sup>	Total benefits
	Salary continuation	Bonus	Lump sum			
<b>Raja M Parvez</b>						
Termination without cause	\$	\$	\$ 286,000 <sup>(2)</sup>	\$8,360	\$ 0	\$ 294,360
Termination for good reason			286,000 <sup>(2)</sup>	4,180	0	290,180
Termination following a change in control			286,000 <sup>(2)</sup>	8,360	0	294,360
Change in control <sup>(3)</sup>					1,760,768	1,760,768
<b>William F Weissman</b>						
Termination without cause	100,000			4,180	2,912,324	3,016,504
Termination for good reason	100,000			4,180	2,913,324	3,016,504
Termination following a change in control			100,000	4,180	2,912,324	3,016,504
Change in control <sup>(3)</sup>					2,912,324	2,912,324
<b>Mardel A Graffy</b>						
Termination without cause						
Termination for good reason						
Termination following a change in control			63,598			63,598
Change in control <sup>(3)</sup>					316,428	316,428
<b>Hap R Hewes</b>						
Termination without cause	93,600	36,000		8,360	112,863	250,823
Termination for good reason	93,600	36,000		8,360	112,863	250,823
Termination following a change in control	93,600	36,000		8,360	112,863	250,823
Change in control <sup>(3)</sup>					2,316,254	2,316,254

(1) The value of option vesting acceleration shown in the table above was calculated by multiplying the number of shares subject to each accelerated option by the difference between the fair market value of our common stock as of December 31, 2007 and the exercise price of the option. The fair market value of our common stock as of December 31, 2007 was \$23.75.

(2) Mr. Parvez's severance payment is payable 50% on the date of termination and 50% on the date that is six months later.

(3) Assumes stock options are not assumed, or equivalent rights substituted, by the successor corporation.

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## **Table of Contents**

### **Executive compensation**

### **Employee benefits plans**

#### *2007 Stock Incentive Plan*

Our 2007 Stock Incentive Plan, or 2007 Plan, was adopted by our board of directors and approved by our stockholders in August 2007.

The 2007 Plan permits us to make grants of incentive stock options, within the meaning of Section 422 of the Code, to our employees and any parent and subsidiary corporation's employees, non-qualified stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards and bonus shares to our employees, directors and consultants and our parent and subsidiary corporation's employees and consultants. These are referred to in the 2007 Plan as awards.

We reserved 2,307,692 shares of our common stock for the issuance of awards under the 2007 Plan. This number is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. Under certain circumstances, shares that are the subject of a previously-issued award can become available again for future grants under the 2007 Plan. As of December 31, 2007, 333,734 shares were awarded under the 2007 Plan.

*Plan administration.* The 2007 Plan is administered by the compensation committee of the board of directors. The board of directors may appoint different committees to administer the 2007 Plan for different groups of persons eligible to receive awards. The board of directors may also delegate all or part of the committee's duties to our chief executive officer, including the granting of awards, for awards to individuals other than (i) officers covered by Section 16 of the Exchange Act, (relating to certain reporting requirements and short-swing profits disgorgement provisions of the US securities laws), or (ii) our officers who are covered employees for purposes of Section 162(m) of the Code (relating to certain limitations on our federal income tax deduction for compensation paid to covered employees) (discussed below).

If the committee desires that the awards granted to our officers who are covered employees qualify as performance-based compensation for purposes of Section 162(m) of the Code (Code Section 162(m) generally limits a company's deduction for compensation paid to any covered employee to \$1,000,000 annually, subject to certain exceptions, including an exception for performance-based compensation), the committee must be comprised of two or more directors who qualify as outside directors for purposes of Section 162(m) of the Code. If the committee desires that the grants of awards to our officers who are subject to Section 16 of the Exchange Act be exempt under Rule 16b-3 of the Exchange Act from application of the short-swing profits liability provisions of Section 16, the committee must be comprised of two or more directors who qualify as non-employee directors for purposes of Rule 16b-3 of the Exchange Act. If required by the rule of any stock exchange, the 2007 Plan will be administered by independent directors, as defined by any applicable rule.

The committee has full power and authority to select the eligible persons to whom awards will be granted, to make any combination of awards to the persons selected, to accelerate the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of the 2007 Plan.

*Eligibility.* The committee may grant awards to our officers, employees, non-employee directors and consultants. However, incentive stock options may be granted only to employees. There are certain annual limits on the number or amount of awards that may be granted under the 2007 Plan. No awards covering more than 200,000 shares of common stock may be granted to any one individual during any

## **Table of Contents**

### **Executive compensation**

single calendar year (including awards that are denominated with reference to our common stock that may be payable in cash). In addition, the maximum amount of awards denominated in cash (including awards that are denominated in cash that may be payable in shares of common stock) that may be granted to any one individual in any single year is \$2,400,000.

*Options.* Options to purchase our common stock may be granted under our 2007 Plan. The exercise price of options awarded under the 2007 Plan may not be less than the fair market value of our common stock on the date of the option grant. The term of each option may not exceed ten years from the date of grant. The committee will specify in the option agreement at what time or times each option may be exercised, including the period of time after disability, death, or other termination of employment during which options that have become exercisable may be exercised.

To qualify as incentive options, options must meet additional federal tax requirements, including a \$100,000 limit on the value of shares subject to incentive options which first become exercisable in any one calendar year, and a shorter term and higher minimum exercise price in the case of certain large stockholders.

*Stock appreciation rights.* Stock appreciation rights may be granted under our 2007 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. The committee determines the terms of the stock appreciation rights granted, including when such rights become exercisable and whether to pay the increased appreciation in cash or with shares of our common stock, or a combination thereof.

*Restricted stock.* Restricted stock may be granted under our 2007 Plan. Restricted stock awards are shares of our common stock issued to an employee or other service provider that vest in accordance with terms and conditions established by the committee. The committee will determine the number of shares of restricted stock granted to any employee or other service provider. The committee may impose whatever conditions to vesting it determines to be appropriate and may grant restricted stock without requiring the payment of any purchase price. For example, the committee may set restrictions based on continuous employment and (or) the achievement of specific performance goals. Shares of restricted stock that do not vest are forfeited. Except as otherwise provided in the applicable restricted stock agreement, the recipient of a restricted stock award has all the rights of a stockholder of our common stock, including the right to vote shares and the right to receive any cash dividends.

*Restricted stock units.* Our 2007 Plan also permits us to grant restricted stock units. A restricted stock unit is a contingent right to receive a share of our common stock in the future in accordance with terms and conditions established by the committee. The committee will determine the number of shares of restricted stock granted to any employee or other service provider and the conditions under which the restricted stock units will vest. The committee may impose vesting conditions based on continuous employment and (or) the achievement of specific performance goals. Restricted stock units that do not vest are forfeited.

Dividend equivalents may be granted with respect to restricted stock units under our 2007 Plan. A dividend equivalent entitles the recipient to an amount equal to the dividend payable on the shares underlying a grant of restricted stock units. Dividend equivalents are credited as additional restricted stock units as of the date on which a dividend on our common stock is paid and are subject to the same terms and conditions and to the same payment provisions as the restricted stock units to which they relate.

*Performance awards.* Our 2007 Plan also permits us to grant performance awards. A performance award is a right to receive a payment that is contingent upon the attainment of one or more performance

## Table of Contents

### **Executive compensation**

objectives established by the committee for a performance period. A performance award may be denominated in cash or in shares of our common stock. The committee will determine the number of performance awards granted to any employee or other service provider, the length of the performance period, the performance objectives, the formula for determining the amount earned under the performance award, any related forfeiture conditions, and any other terms and conditions that it determines to establish.

*Bonus shares.* Our 2007 Plan also permits us to grant bonus shares to employees, directors and consultants. A bonus share is a grant of common stock to an employee, director or consultant without any payment from the recipient and without any restrictions, in recognition of past performance or as an incentive to become an employee or to provide services to us or any of our subsidiaries.

*Non-transferability.* Our 2007 Plan does not allow for the transfer of restricted stock units and performance awards. Only the recipient of an option or stock appreciation right may exercise the option or stock appreciation right during his or her lifetime. A recipient of restricted stock may not transfer the restricted stock until the restrictions established by the committee in connection with the grant have lapsed. A recipient of bonus shares may not transfer the bonus shares until they have actually been delivered. The committee may impose any additional restrictions on the transfer of common shares delivered in payment of an award that it deems appropriate. The committee may approve exceptions to the transfer restrictions for restricted stock, option and stock appreciation right awards.

*Designation of awards as performance-based compensation.* The committee may designate awards of restricted stock, restricted stock units or performance awards as intended to qualify as performance-based compensation for purposes of Section 162(m) of the Code. Awards so qualified are not subject to the \$1,000,000 federal annual deduction limit that applies to compensation paid by a company to each of its covered employees (generally, a company's chief executive officer and its four highest compensated executive officers). If the committee intends to qualify an award as performance-based compensation for purposes of Section 162(m) of the Code, additional requirements apply to such awards, including a requirement that only one or more of the performance factors set forth in the plan may constitute the performance objectives for the award. Additionally, the committee can have no discretion to increase the award above the amount payable under the award for any given level of performance. Stock options and stock appreciation rights will generally by their terms qualify as performance-based compensation for purposes of Section 162(m) of the Code.

*Cancellation and rescission.* The 2007 Plan also provides that unless the applicable award agreement provides otherwise, the committee may cancel any unvested, unexercised or unpaid award if the recipient is not in compliance with the terms of the award agreement and the 2007 Plan, or if the award recipient has engaged in any adverse conduct. In addition, the 2007 Plan provides that unless the applicable award agreement provides otherwise, for a period of two years following the exercise, payment or delivery of an award, the committee may rescind the award upon its determination that the recipient has engaged in adverse conduct prior to the delivery of the award or during the two-year rescission period.

*Change in control.* Our 2007 Plan provides that in the event of our change in control, as defined in the 2007 Plan, each outstanding award will be treated as the committee determines, including that the successor corporation or its parent or subsidiary will assume or substitute an equivalent award for each outstanding award. The committee is not required to treat all awards similarly. If there is no assumption or substitution of outstanding awards, the award recipient will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, all restrictions on restricted stock and restricted stock units will lapse and all performance goals or other vesting requirements for performance

## Table of Contents

### **Executive compensation**

awards will be deemed achieved at 100% of target levels and all other terms and conditions will be deemed met. If an option or stock appreciation right is not assumed or substituted, the committee will provide notice to the award recipient that the option or stock appreciation right will be fully vested and exercisable for a period of time determined by the committee in its discretion, and the option or stock appreciation right will terminate upon the expiration of such period.

Prior to the issuance of any shares of common stock in settlement of an award under the 2007 Plan, the committee may require an award holder to satisfy conditions relating to the issuance of shares that the committee deems necessary.

Our 2007 Plan will automatically terminate in 2017, unless we terminate it sooner. In addition, our board of directors has the authority to amend, suspend or terminate the 2007 Plan, provided such action does not impair the rights of any participant.

The 2007 Plan is unfunded; any obligations relating to the 2007 Plan constitute unfunded, unsecured obligations of Rubicon.

#### *2001 Equity Plan*

Our 2001 Equity Plan, or 2001 Plan, was adopted by our board of directors on July 30, 2001 and approved by our stockholders on August 2, 2001. Our board of directors determined not to grant any additional awards under the 2001 Plan after the completion of our initial public offering on November 21, 2007. However, the 2001 Plan continues to govern the terms and conditions of the outstanding awards granted under it. As of December 31, 2007, options to purchase 1,366,381 shares of our common stock were issued and outstanding and 46,727 shares remained available for future awards under the plan. The 2001 Plan permitted us to make grants of incentive stock options, non-qualified stock options, and stock purchase rights. No stock purchase rights were ever granted under such plan.

*Administrative committee.* The administrator of our 2001 Plan is either the board of directors or any of its committees or any delegate of the board or of the committee appointed by the board of directors. The 2001 Plan may be administered by different committees for different groups of person eligible to receive awards.

*Options.* The exercise price of incentive stock options awarded under the 2001 Plan may not be less than the fair market value of our common stock on the date of the option grant. The term of each option may not exceed ten years from the date of grant. The Committee will specify in the option agreement at what time or times each option may be exercised, including the period of time after disability, death, or other termination of employment during which options that have become exercisable may be exercised.

*Non-transferability.* Unless the administrator provides otherwise, our 2001 Plan does not allow for the transfer of options and only the recipient of an option may exercise the option during his or her lifetime.

*Dissolution, liquidation, merger, reorganization or sale.* Our 2001 Plan provides for the following in the event of a dissolution, merger, reorganization or sale:

Ø In the event of any proposed dissolution or liquidation, the administrator may provide holders of outstanding options with a 10-day period in which to exercise all outstanding options and may provide for the lapse of any Company repurchase option right.

Ø In the event of any merger, consolidation or similar reorganization in which the outstanding options and stock purchase rights will not be assumed or an equivalent option or right is not substituted by the



## **Table of Contents**

### **Executive compensation**

successor entity, the options and stock purchase rights will fully vest and become exercisable for a period of 15 days, after which, the unexercised options and stock purchase rights will terminate.

Prior to the issuance of any shares of common stock in settlement of an award under the 2001 Plan, the committee may require an award holder to satisfy conditions relating to the issuance of shares that the committee deems necessary.

Our 2001 Plan will automatically terminate in 2011, unless we terminate it sooner. In addition, our board of directors has the authority to amend, suspend, or terminate the 2001 Plan, provided such action does not impair the rights of any participant.

The 2001 Plan is unfunded; any obligations relating to the 2001 Plan constitute unfunded, unsecured obligations of Rubicon.

### **Limitation on liability and indemnity**

Our amended and restated certificate of incorporation contains provisions that limit or eliminate the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as a director, except liability for:

Ø any breach of the director's duty of loyalty to us or our stockholders;

Ø any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

Ø unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions as provided in Section 174 of the Delaware General Corporation Law; or

Ø any transaction from which the director derived an improper personal benefit.

Our amended and restated bylaws provide that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. Our amended and restated bylaws also provide that we are obligated to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered into agreements and intend to continue to enter into agreements to indemnify our executive officers and directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding for which indemnification is available. We believe these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' insurance.

The limitation of liability provisions in our amended and restated certificate of incorporation and the indemnification provisions in our amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. These provisions may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. Insofar as indemnification for liabilities arising





**Table of Contents**

**Executive compensation**

under the Securities Act may be permitted to directors, officers, or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

79

**Table of Contents**

## Certain relationships and related party transactions

### **POLICY AND PROCEDURES FOR REVIEW, APPROVAL OR RATIFICATION**

We recognize that transactions between Rubicon and related persons present a potential for actual or perceived conflicts of interest. Our general policies with respect to such transactions are included in our Code of Business Conduct & Ethics (the "Code of Ethics") which is administered by our audit committee. All employees and members of our board of directors agree to be bound by the Code of Ethics. As a supplement to the Code of Ethics, the audit committee adopted a policy setting out the procedures and standards to be followed for the identification and evaluation of related party transactions. For purposes of the policy, a related party transaction is any transaction or series of related transactions in excess of \$120,000 in which we are a party and in which a related person has a material interest. Related persons include our directors, director nominees, executive officers, beneficial owners of 5% or more of any class of our voting securities and members of their immediate families. The audit committee has determined that certain transactions are deemed to be pre-approved under this policy. These include (i) transactions with another company in which the related person's only interest is as a director or beneficial owner of less than 10% of the equity interests in that other company and (ii) certain compensation arrangements that have either been disclosed in our public filings with the SEC or approved by our compensation committee.

We collect information about potential related party transactions in our annual questionnaires completed by directors, executive officers and beneficial owners of 5% or more of any class of our voting securities. Potential related party transactions are first reviewed and assessed by our corporate secretary to consider the materiality of the transactions and then reported to the audit committee. If a related party transaction is identified during the year, it is reported promptly to the audit committee. The audit committee reviews and considers all relevant information available to it about each related party transaction. A related party transaction is approved or ratified only if the audit committee determines that it is in, or is not inconsistent with, our best interests and those of our stockholders and is in compliance with the Code of Ethics.

The following related party transactions have been ratified by the audit committee in accordance with the policy described above. We believe that we have executed all of the transactions set forth below on terms no less favorable to us than we could have obtained from unaffiliated third parties.

#### **Private placements of securities**

From January 2005 through December 2006, we issued certain series of preferred stock to investors and exchanged certain series of preferred stock for other series of preferred stock. Such transactions, including the original issuances of securities exchanged by the investors, are described as follows:

- Ø In June 2005, we issued and sold an aggregate of 6,123,619 shares of our Series D preferred stock at a price per share of approximately \$0.83, for an aggregate purchase price of \$5,000,000.
  
- Ø From December 2005 through December 2006, we issued and sold an aggregate of 46,681,517 shares of our Series E preferred stock at a price per share of approximately \$0.28 and warrants to purchase 6,790,802 shares of Series E preferred stock, for an aggregate purchase price for the shares and warrants of approximately \$13,088,133.
  
- Ø Simultaneously with the sale and issuance of the Series E preferred stock in December 2005, 14,001,191 shares of our Series B preferred stock were exchanged for 14,001,191 shares of Series B-2 preferred stock; 12,693,013 shares of our Series C preferred stock were exchanged for 12,693,013



**Table of Contents****Certain relationships and related party transactions**

shares of Series C-2 preferred stock, 5,258,432 shares of Series D preferred stock were exchanged for 5,258,432 shares of Series D-2 preferred stock and warrants to purchase 647,379 shares of Series B preferred stock were amended to provide for the purchase of 647,379 shares of Series B-2 preferred stock.

All of our outstanding shares of preferred stock automatically converted into shares of common stock immediately prior to the closing of our initial public offering on November 21, 2007.

The following table summarizes the above described issuances of our preferred stock and warrants to purchase preferred stock by our directors, executive officers, entities affiliated with such persons and holders of more than 5% of any class of our outstanding voting securities:

<b>Purchaser</b>		<b>Series D and Series D-2 preferred stock</b>	<b>Series E preferred stock and warrants</b>
Funds affiliated with Cross Atlantic	Shares purchased	3,256,147	39,367,388 <sup>(3)</sup>
Capital Partners <sup>(1)(2)</sup>	Amount paid	\$ 2,685,130	\$ 10,069,503
Funds affiliated with Gazelle	Shares purchased	438,347	6,656,352 <sup>(5)</sup>
TechVentures <sup>(1)(4)</sup>	Amount paid	\$ 364,355	\$ 1,666,509
Funds affiliated with	Shares purchased	507,205	1,958,995
KB Partners <sup>(6)</sup>	Amount paid	\$ 415,565	\$ 549,694
Michael E Mikolajczyk <sup>(1)(7)</sup>	Shares purchased	60,153	130,285
	Amount paid	\$ 50,000	\$ 36,556

- (1) In December 2005, certain of the issued and outstanding Series D preferred stock were exchanged, on a one-for-one basis, into shares of Series D-2 preferred stock.
- (2) Donald R Caldwell, a member of our board of directors, is a director of and owns 100% of Cross Atlantic Capital Partners, Inc., the appointed investment manager for Cross Atlantic Technology Fund, L.P., Cross Atlantic Technology Fund II, L.P. and The Co-Investment 2000 Fund, L.P., the purchasers of the securities shown in the table above. Mr. Caldwell and Brian Adamsky, a former member of our board of directors, are sometimes identified as managing directors of Cross Atlantic Technology Fund, L.P. Mr. Caldwell is also a limited partner of Cross Atlantic Technology Fund, L.P. and a limited partner of its general partner. Messrs. Caldwell and Adamsky are limited partners of the general partner of Cross Atlantic Technology Fund II, L.P. and are sometimes identified as managing directors of Cross Atlantic Technology Fund II, L.P. Mr. Caldwell is a limited partner of the general partner of The Co-Investment 2000 Fund, L.P. and Messrs. Caldwell and Adamsky are sometimes identified as managing directors of The Co-Investment 2000 Fund, L.P.
- (3) Includes warrants to purchase 267,826 shares of common stock (previously exercisable for 3,481,777 shares of Series E preferred stock).
- (4) Don N Aquilano, the chairman of our board of directors, is the managing director and president of Gazelle Tech Ventures, Inc., the manager of the general partner of Gazelle Tech Ventures, L.P. and the Gazelle Co-Investment Fund, L.P., the purchasers of the securities shown in the table above.
- (5) Includes warrants to purchase 55,144 shares of common stock (previously exercisable for 716,932 shares of Series E preferred stock).
- (6) Byron A Denenberg, a former member of our board of directors, is a partner of KB Partners Venture Fund II, L.P. and KB Partners Affiliates Fund II, L.P., the purchasers of the securities shown in the table above.
- (7) Mr. Mikolajczyk is a member of our board of directors.



## **Table of Contents**

### **Certain relationships and related party transactions**

#### **Registration rights agreement**

We have granted registration rights to holders of our preferred stock pursuant to an amended and restated registration rights agreement, dated November 2005. See [Description of capital stock](#) [Registration rights](#).

#### **Stockholders agreements**

We entered into certain stockholders agreements dated June 2005 and November 2005, each of which automatically terminated upon the closing of our initial public offering in November 2007. Pursuant to these agreements, the holders of a majority of: (1) our Series A preferred stock had the right to designate one member to our board of directors; (2) our Series B preferred stock had the right to designate two members to our board of directors; (3) our Series C and Series D preferred stock, voting together, had the right to designate one member to our board of directors; (4) all series of preferred stock, voting together, had the right to designate two members to our board of directors; and (5) our common stock had the right to designate one member to our board of directors.

#### **Stock purchase agreements**

In connection with our private placements of securities, we entered into various stock purchase agreements with our investors, each of which automatically terminated upon the closing of our initial public offering in November 2007. Under the terms of the purchase agreements for the Series B, Series C, Series D and Series E preferred stock, any investor holding at least 250,000 shares of a series of preferred stock had the right to designate one representative to attend any meeting of our board of directors as an observer and that representative was entitled to receive notices, proposed written consents of the board of directors and board meeting materials in the same manner as the members of our board of directors.

#### **Voting agreements**

As of August 29, 2007, certain of our stockholders entered into two voting agreements related to the rights to designate members of our board of directors. One voting agreement was among KB Partners Venture Fund II, L.P. (the [KB Fund](#) ) and the other holders of our Series B preferred stock (the [KB Voting Agreement](#) ). The other voting agreement was among Cross Atlantic Technology Fund, L.P., Cross Atlantic Technology Fund II, L.P., The Co-Investment 2000 Fund, L.P. and the other holders of each series of our preferred stock. The [KB Voting Agreement](#) provided that [KB Fund](#) had the right to designate a representative to attend our board meetings as an observer prior to, and after completion of, our initial public offering. [KB Fund](#) relinquished its right to have a representative attend our board meetings on March 13, 2008. Other than [KB Fund](#)'s right to designate a representative to attend our board meetings as an observer after completion of our initial public offering, these voting agreements automatically terminated upon the closing of our initial public offering.

#### **Employment and severance arrangements with executive officers**

We have entered into employment and severance arrangements with our executive officers as described under the caption [Executive compensation](#) [Employment and severance arrangements](#).

#### **Indemnification agreements**

We have entered and expect to continue to enter into agreements to indemnify our directors and executive officers. For a description of these agreements, see [Executive compensation](#) [Limitation on liability and indemnity](#).

**Table of Contents**

**Certain relationships and related party transactions**

**Facility lease**

We lease one of our manufacturing and office facilities from Radion Mogilevsky and his wife, Nanette Mogilevsky. The lease expires on July 31, 2010. The rent under the lease is currently \$11,236 per month and is subject to annual increases of six percent on each August 1st during the lease term. We have a right of first refusal under the lease to purchase the facility if the Mogilevskys receive a purchase offer that they wish to accept from an unrelated third party. Mr. Mogilevsky held greater than 5% of the outstanding shares of our common stock prior to the completion of our initial public offering, but upon completion of that offering Mr. Mogilevsky's holdings were no longer greater than 5% of the outstanding shares of our common stock.

83



**Table of Contents**

## Principal and selling stockholders

Unless otherwise noted, the following table sets forth, as of April 22, 2008, the beneficial ownership of our common stock by:

Ø each person that is a beneficial owner of 5% of more of our outstanding shares of common stock;

Ø each of our named executive officers;

Ø each of our directors;

Ø all of our executive officers and directors as a group; and

Ø all selling stockholders.

Beneficial ownership is determined in accordance with the rules of the SEC. Except as described below, in computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of April 22, 2008 are deemed outstanding but are not deemed outstanding for computing the percentage ownership of any other person. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to such securities. Except as otherwise indicated, all of the shares reflected in the table are shares of common stock and all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws. Percentage of beneficial ownership is based on 20,662,684 shares of common stock outstanding as of April 22, 2008 and, for purposes of the percentage of beneficial ownership after the offering, after giving effect to certain option exercises as noted below. The selling stockholders have granted the underwriters an option to purchase up to 525,000 additional shares of our common stock to cover overallocments, if any, and the table below assumes no exercise of that option, except as described in footnote . Unless otherwise indicated in the footnotes below, the address for each beneficial owner is c/o Rubicon Technology, Inc., 9931 Franklin Avenue, Franklin Park, Illinois 60131.

**Table of Contents****Principal and selling stockholders**

Name of beneficial owner	Shares beneficially owned prior to the offering		Number of shares offered( )	Shares beneficially owned after the offering	
	Number	Percent		Number	Percent
<b>5% stockholders and affiliates:</b>					
BCG, Inc.; BAMCO; BSC and Ronald Baron <sup>(1)</sup>	1,200,000	5.81%		1,200,000	5.75%
Cross Atlantic Technology Fund, L.P. <sup>(2)(3)</sup>	986,852	4.77%	247,625	739,227	3.54%
Cross Atlantic Technology Fund II, L.P. <sup>(2)(4)</sup>	3,445,512	16.57%	864,561	2,580,951	12.28%
The Co-Investment 2000 Fund, L.P. <sup>(2)(5)</sup>	3,877,781	18.62%	973,009	2,904,772	13.80%
FMR LLC <sup>(6)</sup>	1,895,063	9.17%		1,895,063	9.07%
Gazelle TechVentures, Inc. <sup>(7)</sup>	2,201,542	10.61%	552,420	1,649,122	7.86%
KB Partners Funds <sup>(8)</sup>	1,374,248	6.65%	618,411	755,837	3.62%
<b>Executive officers and directors:</b>					
Raja M Parvez <sup>(9)</sup>	425,828	2.02%	135,063	290,765	1.37%
William F Weissman <sup>(10)</sup>	15,384	*		15,384	*
Hap R Hewes <sup>(11)</sup>	59,614	*	39,807	19,807	*
Don N Aquilano <sup>(12)</sup>	2,201,542	10.61%	552,420	1,649,122	7.86%
Donald R Caldwell <sup>(13)</sup>	8,317,245	39.67%	2,085,195	6,232,050	29.48%
Gordon Hunter <sup>(14)</sup>	29,271	*		29,271	*
Michael E Mikolajczyk <sup>(15)</sup>	97,015	*		97,015	*
Raymond J Spencer	9,200	*		9,200	*
<b>All executive officers and directors as a group</b>	11,155,099 <sup>(16)</sup>	51.65%	2,812,485	8,342,614 <sup>(17)</sup>	38.54%
<b>Other selling stockholders:</b>					
Michael Connolly	3,405	*	3,405		*
Mark L Gordon Estate, 23-44732 <sup>(18)</sup>	17	*	17		*
River Cities Capital Fund II, Limited Partnership <sup>(19)</sup>	827	*	827		*
River Cities SBIC III, L.P. <sup>(20)</sup>	3,495	*	3,495		*
Mark E and Debbie L Siefertson	7,244	*	7,244		*
Mitchell Tyson	2,615	*	2,615		*
The Parvez Family 2007 Irrevocable Trust, dated September 26, 2007 <sup>(21)</sup>	200,000	*	50,000	150,000	*
Philip P McGuigan <sup>(22)</sup>	1,501	*	1,501		*

\* Represents less than 1% of the outstanding shares of common stock.

(footnotes on following page)

**Table of Contents****Principal and selling stockholders**

## Notes:

- (1) *The ownership information set forth in the table is based on information contained in a statement on Schedule 13G, filed on February 12, 2008 (the "Baron 13G"), with the SEC by Baron Capital Group, Inc. ("BCG"), BAMCO, Inc. ("BAMCO"), Baron Small Cap Fund ("BSC") and Ronald Baron with respect to ownership of shares of our common stock. The Baron 13G reflects that BCG, BAMCO, BSC and Ronald Baron each have shared voting power and shared dispositive power with respect to 1,200,000 shares of common stock. BAMCO is a subsidiary of BCG and an investment adviser registered under Section 205 of the Investment Advisers Act of 1940. Ronald Baron owns a controlling interest in BCG. BSC is an investment company registered under Section 8 of the Investment Company Act of 1940 and an investment advisory client of BAMCO. Each of BCG and Ronald Baron disclaim beneficial ownership of such shares of common stock held by their controlled entities (or the investment advisory clients thereof). BAMCO disclaims beneficial ownership of shares held by its investment advisory clients to the extent such shares are held by persons other than BAMCO and its affiliates. The address of each of these beneficial owners is: 767 Fifth Avenue, New York, New York 10153.*
- (2) *Cross Atlantic Technology Fund, L.P. ("Cross Atlantic Technology Fund"), Cross Atlantic Technology Fund II, L.P. ("Cross Atlantic Technology Fund II") and The Co-Investment 2000 Fund, L.P. (the "Co-Investment Fund") are limited partnerships in the business of venture capital investing. Each of these funds has appointed Cross Atlantic Capital Partners, Inc. as its investment manager. Donald R Caldwell, a member of our board of directors, is a director of and owns 100% of Cross Atlantic Capital Partners, Inc. The address for each of these entities is Five Radnor Corporate Center, Suite 555, 100 Matsonford Road, Radnor, Pennsylvania 19087.*
- (3) *Represents 979,390 shares of common stock beneficially owned by Cross Atlantic Technology Fund and warrants to purchase 7,462 shares of our common stock, which are immediately exercisable. XATF Management, L.P. ("XATF Management") is the general partner of Cross Atlantic Technology Fund. Cross Atlantic Capital Partners, Inc. is the general partner of XATF Management. Mr. Caldwell, Gerry McCrory, Brian Adamsky, Richard Fox, Frederick Tecce and Hazel Cameron are officers of Cross Atlantic Capital Partners, Inc., are sometimes identified as managing directors of Cross Atlantic Technology Fund and may be deemed to share voting and investment power with respect to all shares held by Cross Atlantic Technology Fund.*
- (4) *Represents 3,317,509 shares of common stock beneficially owned by Cross Atlantic Technology Fund II and warrants to purchase 128,003 shares of common stock, which are immediately exercisable. XATF Management II, L.P. ("XATF Management II") is the general partner of Cross Atlantic Technology Fund II. Cross Atlantic Capital Partners II, Inc. is the general partner of XATF Management II. Mr. Caldwell is a director, shareholder and officer of Cross Atlantic Capital Partners II. Gerry McCrory, Brian Adamsky, Richard Fox, Frederick Tecce and Hazel Cameron are officers of Cross Atlantic Capital Partners II, and together with Mr. Caldwell, are sometimes identified as managing directors of Cross Atlantic Technology Fund II and may be deemed to share voting and investment power with respect to all shares held by Cross Atlantic Technology Fund II.*
- (5) *Represents 3,709,026 shares of common stock beneficially owned by The Co-Investment Fund and warrants to purchase 168,755 shares of common stock, which are immediately exercisable. The general partner of The Co-Investment Fund is Co-Invest Management, L.P. ("Co-Invest Management"). Co-Invest Capital Partners, Inc. ("Co-Invest Capital") is the general partner of Co-Invest Management. Donald R Caldwell is a shareholder, director and officer of Co-Invest Capital. Messrs. Adamsky, Fox, McCrory and Tecce and Ms. Cameron are officers of Co-Invest Capital and Messrs. Caldwell, Fox and Tecce are sometimes identified as managing directors of The Co-Investment Fund. Messrs. Caldwell, Adamsky, Fox, McCrory and Tecce and Ms. Cameron may be deemed to share voting and investment power with respect to all shares held by The Co-Investment Fund.*

(footnotes continued on following page)

**Table of Contents****Principal and selling stockholders**

- (6) *The ownership information set forth in the table is based on information contained in a statement on Schedule 13G, filed on February 14, 2008 (the FMR 13G ), with the SEC by FMR LLC with respect to ownership of shares of our common stock. The FMR 13G reflects that FMR LLC and Fidelity Management & Research Company ( Fidelity ), a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, has sole dispositive power with respect to 1,895,063 shares of our outstanding common stock as a result Fidelity of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940, including Fidelity Growth Company Fund ( FGCF ), which holds 1,582,663 shares of common stock. Edward C Johnson 3d, Chairman of FMR LLC, and members of his family, through their direct and indirect ownership of shares of FMR LLC and the execution of certain voting agreement among FMR LLC shareholders may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. The address of FMR LLC, Fidelity and FGCF is: 82 Devonshire Street, Boston Massachusetts 02109.*
- (7) *Includes 2,013,405 shares of common stock beneficially owned by Gazelle TechVentures Fund, L.P. and 95,709 shares of common stock beneficially owned by Gazelle Co-Investment Fund, L.P. (collectively, the Gazelle Funds ). Includes warrants to purchase 88,237 shares of common stock, which are held by Gazelle TechVentures Fund, L.P. and are immediately exercisable and warrants to purchase 4,191 shares of common stock, which are held by Gazelle Co-Investment Fund, L.P. and are immediately exercisable. Gazelle TechVentures Fund, L.P. has agreed to sell 526,044 shares of its common stock and Gazelle Co-Investment Fund, L.P. has agreed to sell 26,376 shares of its common stock in the offering. Don N Aquilano, the chairman of our board, is the managing director and president of Gazelle TechVentures, Inc., the manager of Monument Technology Partners, LLC, which is the general partner of the Gazelle Funds. Mr. Aquilano may be deemed to have sole voting and investment power as to the shares and warrants beneficially owned by the Gazelle Funds. The address for the Gazelle Funds is: Gazelle TechVentures, Inc., 11611 North Meridian Street, Suite 310, Carmel, Indiana 46032, Attention: Don N Aquilano.*
- (8) *Includes 1,333,069 shares of common stock beneficially owned by KB Partners Venture Fund II, L.P., of which 14,904 shares of common stock were acquired as the result of the net exercise on April 8, 2008 of warrants to purchase 19,922 shares of common stock. Includes 41,179 shares of common stock beneficially owned by KB Partners Affiliates Fund II, L.P., of which 469 shares of common stock were acquired as a result of the net exercise on April 8, 2008 of warrants to purchase 628 shares of common stock. (KB Partners Venture Fund II, L.P. and KB Partners Affiliates Fund II, L.P. collectively referred to herein as the KB Partners Funds ). KB Partners Venture Fund II, L.P. has agreed to sell 599,881 shares of its common stock and KB Partners Affiliates Fund II, L.P. has agreed to sell 18,530 shares of its common stock in the offering. Voting and investment power over the shares and warrants beneficially owned by KB Partners Funds is shared equally among four partners, Byron A Denenberg, Keith D Bank, Robert A Garber and Robert M Zieserl. Messrs. Denenberg, Bank, Garber and Zieserl disclaim beneficial ownership of the shares held by the KB Partners Funds, except to the extent of their proportionate pecuniary interests therein. The address for the KB Partners Funds is: KB Partners, LLC, 1101 Skokie Blvd., Suite 260, Northbrook, Illinois 60062, Attention: Byron Denenberg.*
- (9) *Beneficial ownership prior to this offering represents options to purchase 425,828 shares of common stock, which are immediately exercisable.*
- (10) *Represents an option to purchase 15,384 shares of common stock, which is exercisable within 60 days of April 22, 2008.*
- (11) *Beneficial ownership prior to this offering represents an option to purchase 59,614 shares of common stock, which is exercisable within 60 days of April 22, 2008.*

*(footnotes continued on following page)*

**Table of Contents**

**Principal and selling stockholders**

- (12) Represents shares held by the Gazelle Funds. See footnote (7) above for a description of Mr. Aquilano's relationship with the Gazelle Funds.
- (13) Represents 7,100 shares of common stock. Also represents shares held by Cross Atlantic Technology Fund, L.P., Cross Atlantic Technology Fund II, L.P. and The Co-Investment Fund 2000 L.P. See footnotes (1) through (4) above for a description of the relationship among Mr. Caldwell and Cross Atlantic Technology Fund, L.P., Cross Atlantic Technology Fund II, L.P. and The Co-Investment Fund 2000 L.P.
- (14) Represents 1,508 shares of common stock and an option to purchase 27,763 shares of common stock, which is exercisable within 60 days of April 22, 2008.
- (15) Represents 86,346 shares of common stock. Includes an option to purchase 9,903 shares of common stock held by Michael Mikolajczyk and an option to purchase 66 shares of common stock held by his son, Mark Mikolajczyk, each of which are exercisable within 60 days of April 22, 2008. Includes 700 shares of common stock held by Mark Mikolajczyk. Michael Mikolajczyk disclaims beneficial ownership of the common stock and the shares underlying the common stock option held by Mark Mikolajczyk.
- (16) Includes 10,219,893 shares of common stock which are beneficially owned by our named executive officers and directors, warrants to purchase 396,648 shares of our common stock, which are exercisable within 60 days of April 22, 2008 and options to purchase 538,558 shares of our common stock, which are exercisable within 60 days of April 22, 2008.
- (17) Includes 7,582,278 shares of common stock which are beneficially owned by our named executive officers and directors, warrants to purchase 396,648 shares of our common stock, which are exercisable within 60 days of April 22, 2008 and options to purchase 363,688 shares of our common stock, which are exercisable within 60 days of April 22, 2008.
- (18) Alan Rutkoff, as executor of the estate of Mark Gordon, has the power to vote and dispose of the shares owned by Mark L Gordon Estate, 23-44732. Mr. Gordon was a partner in two law firms, Gordon & Glickson LLC and McGuireWoods LLP, which firms served as our counsel during the past three years.
- (19) R. Glen Mayfield has the power to vote and dispose of the shares owned by River Cities Capital Fund II, Limited Partnership. The address for River Cities Capital Fund II, Limited Partnership is 221 East 4th Street, Suite 2400, Cincinnati, OH 45202.
- (20) R. Glen Mayfield has the power to vote and dispose of the shares owned by River Cities SBIC III, L.P. The address for River Cities SBIC III, L.P. is 221 East 4th Street, Suite 2400, Cincinnati, OH 45202.
- (21) Beneficial ownership prior to this offering represents an option to purchase 200,000 shares of common stock held by The Parvez Family 2007 Irrevocable Trust, dated September 26, 2007, which is exercisable within 60 days of April 22, 2008.
- (22) Mr. McGuigan was a partner in two law firms, Gordon & Glickson LLC and McGuireWoods LLP, which firms served as our counsel during the past three years.

(footnotes continued on following page)

**Table of Contents****Principal and selling stockholders**

( ) *Certain of the selling stockholders have granted the underwriters the option to purchase an aggregate of 525,000 shares to cover overallocments. The selling stockholders named in the table below have granted the underwriter the option to purchase the number of shares shown next to their names. If the option to purchase additional shares were exercised in full, the individuals would beneficially own the number and percentage of shares of our common stock shown in the table below:*

<b>Name of selling stockholder</b>	<b>Shares subject to option to purchase additional shares</b>	<b>Number of shares beneficially owned following offering if option to purchase additional shares is exercised</b>	
		<b>Number</b>	<b>Percent</b>
Cross Atlantic Technology Fund, L.P.	12,892	726,335	3.45%
Cross Atlantic Technology Fund II, L.P.	45,015	2,535,936	11.98%
The Co-Investment 2000 Fund, L.P.	50,661	2,854,111	13.46%
Gazelle TechVentures Fund, L.P.	117,983	1,457,615	6.90%
Gazelle Co-Investment Fund, L.P.	11,025	62,499	*
KB Partners Affiliates Fund II, L.P.	4,118	18,531	*
KB Partners Venture Fund II, L.P.	133,306	599,882	2.85%
The Parvez Family 2007 Irrevocable Trust, dated September 26, 2007			*
	150,000		

**Table of Contents**

## Description of capital stock

### **GENERAL**

Our authorized capital stock consists of 85.0 million shares of common stock, par value \$0.001 per share, and 5.0 million shares of undesignated preferred stock, par value \$0.001 per share. The following description of our capital stock is intended as a summary only and is qualified in its entirety by reference to our amended and restated certificate of incorporation and amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part. We refer in this section to our amended and restated certificate of incorporation as our certificate of incorporation, and we refer to our amended and restated bylaws as our bylaws.

As of December 31, 2007, we had 20,488,608 shares of our common stock outstanding, options to purchase 1,366,381 shares of our common stock under our 2001 Equity Plan, 737,698 of which were vested, options to purchase 319,450 shares of our common stock under our 2007 Stock Incentive Plan, 53,846 of which were vested, 24,663 outstanding options to purchase common stock issued as compensation to former board members and board advisors, 19,182 of which were vested, and warrants to purchase 795,845 shares of common stock, all of which are exercisable.

### **COMMON STOCK**

As of December 31, 2007, there were 20,488,608 shares of our common stock outstanding. As of December 31, 2007, there were 87 holders of our common stock.

Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors from time to time, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our liquidation, dissolution, distribution of assets or winding up, holders of our common stock are entitled to share ratably in our remaining assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except as described below in **Anti-takeover effects of Delaware law and provisions of our certificate of incorporation and bylaws**, a majority vote of common stockholders is generally required to take action under our certificate of incorporation and bylaws.

All outstanding shares of common stock are fully paid and nonassessable.

### **PREFERRED STOCK**

Our board of directors is authorized, without action by the stockholders, to designate and issue up to 5.0 million shares of preferred stock in one or more series. Our board of directors can fix the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. The issuance of preferred stock with voting or conversion rights may adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of delaying, deferring or preventing a change in control and could harm the market price of our common stock.

Our board of directors will make any determination to issue such shares based on its judgment as to our best interests and the best interests of our stockholders. We have no current plans to issue any shares of preferred stock.





**Table of Contents**

**Description of capital stock**

**OPTIONS**

As of December 31, 2007, we had outstanding options to purchase 1,366,381 shares of common stock under our 2001 Equity Plan, 737,698 of which were vested. These options have an average exercise price of \$3.6227. As of December 31, 2007, we had outstanding options to purchase 319,450 shares of common stock under our 2007 Stock Incentive Plan, 53,846 of which were vested. These options have an average exercise price of \$15.5447. As of December 31, 2007, we had 24,663 outstanding options to purchase common stock, which were issued pursuant to stock option agreements, as compensation to board members and board advisors, 19,182 of which were vested. These options have an average exercise price of \$4.9400.

**WARRANTS**

As of December 31, 2007, the following warrants were outstanding:

Type of warrant	Number of shares of common stock issuable upon exercise of warrant	Exercise price per share of common stock	Expiration
Common stock			