

# **INTEVAC INC**

## FORM S-3/A

(Securities Registration Statement (simplified form))

## Filed 01/07/04

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Telephone 4089869888

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Industry Industrial Machinery & Equipment

Sector Industrials

Fiscal Year 12/31

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## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## Amendment No. 1

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## Form S-3

## REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

## Intevac, Inc.

(Exact name of registrant as specified in its charter)

## California

(State of incorporation)

### 94-3125814

(I.R.S. Employer Identification No.)

## 3560 Bassett Street Santa Clara, California 95054

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

Kevin Fairbairn
President and Chief Executive Officer
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3560 Bassett Street
Santa Clara, CA 95054
(408) 986-9888

(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 the effective date of this Registration Statement.

If the only sec	irities being registere	d on this Form are being	offered pursuant to	dividend or inter	est reinvestment pla	ns, please check the
ollowing box.						
If any of the se	curities being register	red on this Form are to b	e offered on a delay	yed or continuous	basis pursuant to Ri	ale 415 under the
Securities Act of 1	933, as amended (the	"Securities Act"), other	than securities offe	ered only in conne	ction with dividend	or interest reinvestment
lans, check the fo	llowing 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 number of the earlier effective registration statement for the same offering.  $\square$ 

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 number of the earlier effective registration statement for the same offering.  $\square$ 

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.  $\Box$ 

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant 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.							

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

## **SUBJECT TO COMPLETION, DATED JANUARY 7, 2004**

## **PROSPECTUS**

4,000,000 Shares



## Common Stock

We are offering 2,500,000 shares of our common stock. The selling shareholder is offering an additional 1,500,000 shares. We will not
receive any of the proceeds from the sale of shares by the selling shareholder. Our common stock is listed traded on The Nasdaq National Marke
under the symbol "IVAC". On January 5, 2004, the last reported sale price for our common stock on The Nasdaq National Market was
\$14.42 per share.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 5.

	Per Share	Total
Public Offering Price	\$	\$
Underwriting Discounts	\$	\$
Proceeds, before expenses, to Intevac	\$	\$
Proceeds, before expenses, to Selling Shareholder	\$	\$

The underwriters have an option to purchase up to 600,000 additional shares of our common stock from the selling shareholder to cover over-allotments.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved of these securities or determined if this prospectus is truthful or complete. It is illegal for any person to tell you otherwise.

Needham & Company, Inc.

Piper Jaffray Thomas Weisel Partners LLC

The date of this prospectus is

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Neither we nor any of the underwriters have authorized anyone to provide information different from that contained in this prospectus. When you make a decision about whether to invest in our common stock, you should not rely upon any information other than the information in this prospectus. Neither the delivery of this prospectus nor the sale of our common stock means that information contained in this prospectus is correct after the date of this prospectus.

In this prospectus "Intevac," "we," "us" and "our" refer to Intevac, Inc. and its subsidiaries. Unless otherwise indicated, all information in this prospectus assumes no exercise of the underwriters' over-allotment option.

"Intevac," "Intevac® MDP-250," "Intevac® 200 Lean," "LIVAR," "D-STAR" and "EBAPS," among others, are our registered trademarks. This prospectus also includes trademarks of other persons.

### PROSPECTUS SUMMARY

You should read the following summary together with the more detailed information concerning our company, the common stock being sold in this offering and our financial statements appearing in this prospectus and in the documents incorporated by reference in this prospectus. Because this is only a summary, you should read the rest of this prospectus and the documents incorporated by reference before you invest in our common stock. Read this entire prospectus carefully, especially the risks described under "Risk Factors."

## The Company

We are the world's leading provider of disk sputtering equipment for the thin-film disk industry and a developer of leading technology for extreme low light imaging sensors, cameras and systems. We operate two businesses: Equipment and Imaging.

## **Equipment Business**

Our Equipment business designs, manufactures, markets and services complex capital equipment which deposits highly engineered thin-films onto thin-film disks used in hard disk drives, the primary storage medium for digital data. We believe the rapid growth of digital data, the transition from videocassette recorders to digital video recorders and the growth of new consumer applications, such as personal video recorders, video game consoles and MP3 players, along with new technology advances in the industry, provide us with a significant growth opportunity. IDC expects that the number of hard disk drives to be shipped between 2002 and 2007 will grow at a compounded annual rate of approximately 10.7%, from 219 million units to 365 million units. In addition, we believe that the majority of thin-film disk manufacturers are capacity constrained, and three of the leading manufacturers, Hitachi Global Storage Technologies, or HGST, Maxtor and Seagate, announced significant thin-film disk manufacturing capacity expansions during 2003.

As the demand for storage capacity increases, advances in recording technology are increasing the amount of information that can be stored on a hard disk. The next generation storage technology, called perpendicular recording, greatly increases the amount of information that can be stored on a thin-film disk, but requires sputtering equipment that can accommodate additional process steps. As thin-film disk manufacturers purchase new disk sputtering equipment to meet increased demand, they also require disk sputtering equipment that will accommodate the additional process steps required for the transition to perpendicular recording.

Our systems represent approximately half of the worldwide installed base of thin-film disk sputtering systems and produced approximately half of all thin-film disks made in 2003. In the period from 1995 through the middle of 1998, we sold approximately \$300 million of our disk manufacturing equipment. Our customers include the world's leading thin-film disk manufacturers, such as HGST, Komag, Maxtor and Seagate. We are one of two companies that have announced a new system designed to manufacture disks capable of perpendicular recording. In 2003, we introduced the 200 Lean, a modular disk sputtering system designed for low cost of ownership. The 200 Lean provides significantly enhanced capabilities relative to the installed base of our MDP-250 systems. During 2003, we have received orders for ten of our new 200 Lean disk sputtering systems, and we delivered our first system in December 2003. This is the first production order from a major hard disk drive manufacturer for a new system designed to manufacture disks capable of perpendicular recording.

We believe we can also apply our expertise in complex manufacturing systems to develop additional equipment for the hard disk drive industry and other technology based industries.

## **Imaging Business**

Our Imaging business develops and manufactures electro-optical sensors, cameras and systems used for extreme low light imaging. We develop products for military and commercial applications. To date, our revenues have been primarily derived from research and development contracts funded by the U.S. government. Our proprietary cameras and sensors are designed as extreme low light solutions that are cost-effective, portable, high resolution, long-range and easily integrated with other digital technologies. Our extreme low light imaging products include our LIVAR target identification system and our NightVista line of extreme low light cameras. LIVAR is designed to positively identify targets, at distances of up to 20 kilometers, that have been detected but not identified by other systems. We are developing our LIVAR products in conjunction with leading organizations such as the Air Force Research Laboratory, Lockheed Martin, the Los Alamos National Laboratory, Northrop Grumman, and the U.S. Army Night Vision Laboratory. Forecast International estimated the military market for legacy night vision systems and research programs to be \$347 million in 2003. We expect to begin volume production of LIVAR systems in 2006. Our extreme low light NightVista cameras are well suited for portable, battery operated applications. We expect to begin volume production of our NightVista security camera in 2004.

We were incorporated in October 1990 in California and completed a leveraged buyout of a number of divisions of Varian Associates in February 1991. The technologies acquired from Varian formed the foundation for our Equipment and Imaging businesses. Our principal executive offices are located at 3560 Bassett Street, Santa Clara, California 95054, and our phone number is (408) 986-9888. Our Internet home page is located at www.intevac.com; however, the information in, or that can be accessed through, our home page is not part of this prospectus.

## The Offering

Common stock offered by Intevac 2,500,000 shares

Common stock offered by selling shareholder 1,500,000 shares

Common stock outstanding after this offering 19,453,464 shares

Use of proceeds We intend to use the proceeds of the shares sold by us in this offering for working capital,

repayment of debt, other general corporate purposes, and possibly acquisitions of businesses,

products or technologies. See "Use of Proceeds."

Nasdaq National Market symbol IVAC

Unless otherwise indicated, the number of shares of common stock outstanding after this offering is based on shares outstanding as of December 31, 2003 and assumes no exercise of the underwriters' over-allotment option. This number does not include:

• 1,426,285 shares of common stock issuable upon exercise of outstanding stock options, with a weighted average exercise price of approximately \$5.262 per share;

109,318 shares of common stock reserved for future option grants under our stock option plan; and

• 358,197 shares of common stock reserved for future issuance under our employee stock purchase plan.

# Summary Consolidated Financial Data (In thousands, except per share data)

The following table presents our summary consolidated financial data and should be read in conjunction with our audited consolidated financial statements, our unaudited consolidated financial statements, and the accompanying notes, included or incorporated by reference in this prospectus. You should also read "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

The summary consolidated statement of operations data for the years ended December 31, 2000, 2001 and 2002 has been derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statement of operations data for the years ended December 31, 1998 and 1999 have been derived from our audited financial statements not included or incorporated by reference in this prospectus. The summary consolidated balance sheet data at September 27, 2003 and the summary consolidated statement of operations data for the nine-month periods ended September 28, 2002 and September 27, 2003 have been derived from our unaudited consolidated financial data included elsewhere in this prospectus and, in the opinion of our management, contain all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of our financial position and results of operations at and for such periods. The results of operations for any interim period are not necessarily indicative of the results of operations to be expected for the full year. The summary consolidated balance sheet data has also been presented on a pro forma basis to reflect the conversion of all \$29,542,000 outstanding of our 6 1/2% Convertible Subordinated Notes due 2009 subsequent to September 27, 2003, and on a pro forma as adjusted basis to give effect to our receipt of the estimated net proceeds from the sale of 2,500,000 shares of common stock at the assumed public offering price of \$14.42 per share, after deducting the estimated underwriters' discounts and commissions and estimated offering expenses.

		Fiscal Y	Years Ended Dece	Nine Months Ended			
	1998	1999	2000	2001	2002	September 28, 2002	September 27, 2003
						(una	udited)
Consolidated Statement of Operations Data:							
Net revenues	\$95,975	\$ 42,962	\$ 36,049	\$ 51,484	\$ 33,784	\$21,792	\$ 24,218
Gross profit	24,258	2,552	1,990	9,755	7,309	4,308	5,159
Operating loss	(452)	(21,879)	(12,363)	(11,468)	(11,289)	(9,605)	(10,044)
Net income (loss)	\$ 424	\$ (9,770)	\$(12,324)	\$(16,936)	\$ 8,774	\$ (5,132)	\$(11,702)
Net income (loss) per share							
Basic	\$ 0.04	\$ (0.83)	\$ (1.04)	\$ (1.42)	\$ 0.73	\$ (0.42)	\$ (0.96)
Diluted	\$ 0.03	\$ (0.83)	\$ (1.04)	\$ (1.42)	\$ 0.66	\$ (0.42)	\$ (0.96)
Number of shares used in per share							
calculations							
Basic	12,052	11,777	11,803	11,955	12,077	12,065	12,206
Diluted	12,354	11,777	11,803	11,955	15,262	12,065	12,206

Actual	Pro Forma	Pro Forma As Adjusted
	(unaudited)	
\$21,148	\$21,148	\$54,670
19,833	19,972	53,494
47,366	46,866	80,388
29,542	_	_
(491)	28,690	62,212

As of September 27, 2003

### RISK FACTORS

You should carefully consider the risks described below before making an investment decision. The risks described below are not the only ones facing our company. Additional risks not currently known to us or that we currently believe are immaterial may also impair our business operations. Our business could be harmed by any of these risks. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. In assessing these risks, you should also refer to the other information contained or incorporated by reference in this prospectus, including our consolidated financial statements and related notes, before deciding to purchase any shares of our common stock.

We have a recent history of significant losses and may not regain profitability. If we do not establish profitable operations in the future, then our share price is likely to decline.

The majority of our revenues and gross profit has historically been derived from sales of disk sputtering equipment. Sales of our disk sputtering equipment have been severely depressed since the middle of 1998. Also, our Imaging business has yet to earn an annual profit. We have experienced an operating loss in each of the last five fiscal years. For the nine months ended September 27, 2003, our operating loss was \$10.0 million, and as of September 27, 2003, we had an accumulated deficit of \$20.7 million. To regain profitability, we will need to generate and sustain substantially higher revenue while maintaining reasonable cost and expense levels. We cannot assure you that we will regain profitability in the near future, or at all, and if we do regain profitability we cannot assure you that we will be able to sustain profitability on a going-forward basis. If we fail to regain profitability within the time frame expected by securities analysts or investors, then the market price of our common stock will likely decline.

If the projected growth in demand for hard disk drives does not materialize and our customers do not replace or upgrade their installed base of disk sputtering systems, then future sales of our disk sputtering systems will suffer.

Since the middle of 1998, there has been virtually no demand for new disk sputtering systems, as thin-film disk manufacturers have been burdened with overcapacity and have not been investing in new disk sputtering equipment. Recently, however, overcapacity has diminished, and three of our customers have announced plans for major capacity expansions. Sales of our equipment for capacity expansions are dependent on the capacity expansion plans of our customers and upon whether our customers select our equipment for their capacity expansions. We have no control over our customers' expansion plans, and we cannot assure you that they will select our equipment if they do expand their capacity. Our customers may not implement capacity expansion plans, or if we may fail to win orders for equipment for those capacity expansions, which could have a material adverse effect on our business and our operating results. In addition, some manufacturers may choose to purchase used systems from other manufacturers rather than purchasing new systems from us. Furthermore, if hard disk drives were to be replaced by an alternative technology as a primary method of digital storage, demand for our products would decrease.

Sales of our new 200 Lean disk sputtering systems are also dependent on obsolescence and replacement of the installed base of disk sputtering equipment. If technological advancements are developed that extend the useful life of the installed base of systems, then any sales of our 200 Lean will be limited to the capacity expansion needs of our customers, which would have a material adverse effect on our operating results.

Our operating results fluctuate significantly from quarter to quarter, which may cause the price of our stock to decline.

Over the last 11 quarters, our revenues per quarter have fluctuated between \$23.6 million and \$4.6 million. Over the same period our operating loss as a percentage of revenues has fluctuated between

approximately 90% and 1% of revenues. We anticipate that our revenues and operating margins will continue to fluctuate. We expect this fluctuation to continue for a variety of reasons, including:

- changes in the demand, due to seasonality and other factors, for the computer systems, storage subsystems and consumer electronics that contain the thin-film disks that our customers produce using our systems;
- · delays or problems in the introduction of our new products; and
- announcements of new products, services or technological innovations by us or our competitors.

Additionally, because our systems are priced in the millions of dollars and we sell a relatively small number of systems, our business is inherently subject to fluctuations in revenue from quarter to quarter due to factors such as timing of orders, acceptance of new systems by our customers or cancellation of those orders. As a result, we believe that quarter-to-quarter comparisons of our revenues and operating results may not be meaningful and that these comparisons may not be an accurate indicator of our future performance. Our operating results in one or more future quarters may fail to meet the expectations of investment research analysts or investors, which could cause an immediate and significant decline in the trading price of our common shares.

## We sell our equipment products to a small number of large customers.

Historically, a significant portion of our revenue in any particular period has been attributable to sales to a limited number of customers. In 2002, three of our customers, in the aggregate, accounted for 74% of our revenues. In addition, our current backlog of 200 Lean systems is from a single customer. Orders from a relatively limited number of thin-film disk manufacturers have accounted for, and likely will continue to account for, a substantial portion of our revenues. The loss of, or delays in purchasing by, any one of our large customers would significantly reduce potential future revenues. Furthermore, the concentration of our customer base may lead customers to demand pricing and other terms unfavorable to us.

### We operate in an intensely competitive marketplace, and our competitors have greater resources than we do.

In the market for our disk sputtering systems, we have experienced competition from competitors such as Anelva Corporation, a subsidiary of NEC Corporation, Ulvac Technologies, Inc. and Unaxis Holdings, Ltd, each of which has sold substantial numbers of systems worldwide. In the market for our imaging products, we experience competition from companies such as ITT Industries, Inc. and Northrop Grumman Corporation, the primary U.S. manufacturers of Generation-III night vision devices and their derivative products. Our competitors have substantially greater financial, technical, marketing, manufacturing and other resources than we do. We cannot assure you that our competitors will not develop enhancements to, or future generations of, competitive products that will offer superior price or performance features. Likewise, we cannot assure you that new competitors will not enter our markets and develop such enhanced products. Accordingly, competition for our customers is intense, and our competitors have historically offered substantial pricing concessions and incentives to attract our customers or retain their existing customers.

## The majority of our future revenues is dependent on new products. If these new products are not successful, then our results of operations will be adversely affected.

Our success in developing and selling new products depends upon a variety of factors, including our ability to predict future customer requirements accurately, technological advances, total cost of ownership of our systems, our introduction of new products on schedule, our ability to manufacture our systems cost-effectively and the performance of our systems in the field. Our new product decisions and development commitments must anticipate continuously evolving industry requirements significantly in advance of sales. We have invested heavily, and continue to invest, in the development of new products. Our 200 Lean disk sputtering system is designed to address the demand for increased areal density in hard disk drives and our

customers' concurrent need to produce more complex thin-film disks. Our future revenues depend on the industry recognizing the need for improved recording methodologies and the need for disk sputtering systems that facilitate manufacturing of advanced media with technologies such as perpendicular recording. Our future revenues also depend significantly on the market acceptance of our 200 Lean disk sputtering system, which we have only recently introduced and which competes against a product that has been on the market longer. Our new products will typically bear higher production and warranty costs in comparison to our more established product lines. Additionally, our gross margins on our new products may be lower and more difficult to predict. We continue to invest heavily to develop products for the thin-film disk manufacturing industry. In addition, our LIVAR target identification and low light level camera technologies are designed to offer significantly improved capability to military customers. We are also developing commercial products based on the technology we have developed in our Imaging business. None of our imaging products is currently being manufactured in commercial volumes or available for general sale, and we may encounter unforeseen difficulties when we commence general production of these products. Our Imaging business will require substantial further investment in sales and marketing, in product development and in additional production facilities, and in particular we need to acquire sensor fabrication facilities in order to expand our operations. We cannot assure you that we will succeed in these activities or generate significant sales of new products. Failure of any of these products to perform as intended, or failure to penetrate their markets and develop into profitable product lines, would have a material adverse effect on our business.

## Demand for capital equipment is cyclical, which subjects our business to long periods of depressed revenues interspersed with periods of unusually high revenues.

Our Equipment business sells equipment to capital intensive industries, which sell commodity products such as disk drives. When demand for these commodity products exceeds capacity, demand for new capital equipment such as ours tends to be amplified. Conversely, when supply of these commodity products exceeds demand, the demand for new capital equipment such as ours tends to be depressed. The hard disk drive industry has historically been subject to multi-year cycles because of the long lead times and high costs involved in adding capacity.

The cyclical nature of the capital equipment industry means that in some years we will have unusually high sales of new systems, and that in other years our sales of new systems will be severely depressed. The timing, length and volatility of these cycles are difficult to predict. These changes have affected the timing and amounts of our customers' capital equipment purchases and investments in new technology. For example, sales of systems for thin-film disk production have been severely depressed since the middle of 1998. In addition, our thin-film disk manufacturing customers are generally more sensitive to the cyclical nature of the hard disk drive industry, because many of their customers have internal thin-film disk manufacturing operations and will cut back their purchases of disks from outside suppliers first in an industry downturn. If we fail to anticipate or respond quickly to the industry business cycle, it could have a material adverse effect on our business.

## Our sales cycle is long and unpredictable, which requires us to incur high sales and marketing expenses with no assurance that a sale will result.

The sales cycle for our equipment systems can be a year or longer, involving individuals from many different areas of our company and numerous product presentations and demonstrations for our prospective customers. Our sales process for these systems also includes the production of samples and customization of products for our prospective customers. Additionally, our Imaging business is subject to long sales cycles as a result of government procurement cycles. As a result, we may not recognize revenue from efforts to sell particular products for extended periods of time, during which we may expend substantial funds and management time and effort with no assurance that a sale will result.

## Our products are complex, constantly evolving and often must be customized to individual customer requirements.

The systems we manufacture and sell in our Equipment business have a large number of components and are highly complex, which require us to make substantial investments in research and development. If we were to fail to develop, manufacture and market new systems or to enhance existing systems, that failure would have an adverse effect on our business. We may experience delays and technical and manufacturing difficulties in future introduction or volume production of new systems or enhancements. In addition, some of the systems that we manufacture must be customized to meet individual customer site or operating requirements. In some cases, we market and commit to deliver new systems, modules and components with advanced features and capabilities that we are still in the process of designing. We have limited manufacturing capacity and engineering resources and may be unable to complete the development, manufacture and shipment of these products, or to meet the required technical specifications for these products, in a timely manner. Failure to deliver these products on time, or failure to deliver products that perform to all contractually committed specifications, could have adverse effects on our business, including rescheduling of backlog, failure to achieve customer acceptance as anticipated, unanticipated rework and warranty costs, penalties for non-performance, cancellation of orders, or return of products for credit. In addition, we may incur substantial unanticipated costs early in a product's life cycle, such as increased engineering, manufacturing, installation and support costs, that we may be unable to pass on to the customer. Sometimes we work closely with our customers to develop new features and products. In connection with these transactions, we sometimes offer a period of exclusivity to these customers. Any of these factors could have a material adverse effect on our business.

Our Imaging business depends heavily on government contracts, which are subject to immediate termination and funded in increments. The termination of or failure to fund one or more of these contracts could have a negative impact on our operations.

We sell our products directly to the U.S. government, as well as to prime contractors for various U.S. government programs. Generally, government contracts are subject to oversight audits by government representatives and contain provisions permitting termination, in whole or in part, without prior notice at the government's convenience upon the payment of compensation only for work done and commitments made at the time of termination. We cannot assure you that one or more of the government contracts under which we or our customers operate will not be terminated under these circumstances. Also, we cannot assure you that we or our customers would be able to procure new government contracts to offset the revenues lost as a result of any termination of existing contracts, nor can we assure you that we or our customers will continue to remain in good standing as federal contractors. The loss of one or more government contracts by us or our customers could have a material adverse effects on our operating results.

Furthermore, the funding of multi-year government programs is subject to congressional appropriations, and there is no guarantee that Congress will make further appropriations. The loss of funding for a government program would result in a loss of anticipated future revenues attributable to that program. That could increase our overall costs of doing business and have a material adverse effects on our operating results.

In addition, sales to the U.S. government and its prime contractors may be affected by changes in procurement policies, budget considerations and political developments in the United States or abroad. The influence of any of these factors, which are beyond our control, could also negatively impact our financial condition. We also may experience problems associated with advanced designs required by the government which may result in unforeseen technological difficulties and cost overruns. Failure to overcome these technological difficulties and the occurrence of cost overruns would have a material adverse effect on our business.

Our sales of disk sputtering systems are dependent on substantial capital investment by our customers, far in excess of the cost of our products.

Our customers must make extremely large capital expenditures in order to purchase our systems and other related equipment and facilities. These costs are far in excess of the cost of our systems alone. The magnitude of such capital expenditures requires that our customers have access to large amounts of capital and that they be willing to invest that capital over long periods of time to be able to purchase our equipment. The thin-film disk manufacturing industry has not made significant additions to its production capacity until recently. Some of our potential customers may not be willing or able to make the magnitude of capital investment required, especially during a downturn in either the overall economy or the hard disk drive industry.

## Our stock price is volatile, and you may not be able to resell your shares at or above the offering price.

The market price and trading volume of our common stock has been subject to significant volatility, and this trend may continue. In particular, our historical trading volume has been low, and the market price of our common stock has increased dramatically in recent months. Over the past 12 months, the closing price of our common stock, as traded on The Nasdaq National Market, has fluctuated from a low of \$3.52 to a high of \$17.35 per share. Our stock price is currently trading at or near its seven-year high. The value of our common stock may decline regardless of our operating performance or prospects. Factors affecting our market price include:

- our perceived prospects;
- variations in our operating results and whether we achieve our key business targets;
- the limited number of shares of our common stock available for purchase or sale in the public markets;
- sales or purchases of large blocks of our stock;
- changes in, or our failure to meet, our earnings estimates;
- changes in securities analysts' buy or sell recommendations;
- differences between our reported results and those expected by investors and securities analysts;
- announcements of new contracts, products or technological innovations by us or our competitors;
- market reaction to any acquisitions, joint ventures or strategic investments announced by us or our competitors;
- our high fixed operating expenses, including research and development expenses;
- developments in the financial markets; and
- general economic, political or stock market conditions in the United States and other major regions in which we do business.

Recent events have caused stock prices for many companies, including ours, to fluctuate in ways unrelated or disproportionate to their operating performance. The general economic, political and stock market conditions that may affect the market price of our common stock are beyond our control. The market price of our common stock at any particular time may not remain the market price in the future. In the past, securities class action litigation has been instituted against companies following periods of volatility in the market price of their securities. Any such litigation, if instituted against us, could result in substantial costs and a diversion of management's attention and resources.

Our dependence on suppliers for certain parts, some of them sole-sourced, makes us vulnerable to manufacturing interruptions and delays, which could affect our ability to meet customer demand.

We are a manufacturing business. Purchased parts constitute the largest component of our product cost. Our ability to manufacture depends on the timely delivery of parts, components, and subassemblies from suppliers. We obtain some of the key components and sub-assemblies used in our products from a single supplier or a limited group of suppliers. If any of our suppliers fail to deliver quality parts on a timely basis, we may experience delays in manufacturing, which could result in delayed product deliveries or increased costs to expedite deliveries or develop alternative suppliers. Development of alternative suppliers could require redesign of our products. Any or all of these factors could have a material adverse effect on our business and operating results.

## Our business depends on the integrity of our intellectual property rights.

The success of our business depends upon integrity of our intellectual property rights and we cannot assure you that:

- any of our pending or future patent applications will be allowed or that any of the allowed applications will be issued as patents;
- any of our patents will not be invalidated, deemed unenforceable, circumvented or challenged;
- the rights granted under our patents will provide competitive advantages to us;
- any of our pending or future patent applications will issue with claims of the scope that we sought, if at all;
- other parties will not develop similar products, duplicate our products or design around our patents; or
- our patent rights, intellectual property laws or our agreements will adequately protect our intellectual property or competitive position.

Failure to protect our intellectual property rights adequately could have a material adverse effect on our business.

We provide products that are expected to have long useful lives and that are critical to our customers' operations. From time to time, as part of business agreements, we place portions of our intellectual property into escrow to provide assurance to our customers that our technology will be available to them in the event that we are unable to support them at some point in the future.

From time to time, we have received claims that we are infringing third parties' intellectual property rights. We cannot assure you that third parties will not in the future claim that we have infringed current or future patents, trademarks or other proprietary rights relating to our products. Any claims, with or without merit, could be time-consuming, result in costly litigation, cause product shipment delays or require us to enter into royalty or licensing agreements. Such royalty or licensing agreements, if required, may not be available on terms acceptable to us. Any of the foregoing could have a material adverse effect on our business.

## Our business is based in Northern California, where operating costs are high and competition for employees is intense.

Our U.S. operations are located in Santa Clara, California, where the cost of doing business is extremely high. Failure to manage these costs well could have a material adverse effect on our operating results. Additionally, our operating results depend, in part, upon our ability to retain and attract qualified management, engineering, marketing, manufacturing, customer support, sales and administrative personnel. The cost of living in Northern California is also extremely high, which increases the cost and difficulty of recruiting new employees. Furthermore, we compete with various similar industries, such as the

semiconductor industry, for the same pool of skilled employees. Failure to attract and retain qualified personnel could have a material adverse effect on our business.

## Business interruptions, such as earthquakes or other natural or man-made disasters, could disrupt our operations and adversely affect our business.

Our U.S. facilities are located in an area of California that has experienced power outages and earthquakes and is considered seismically active. Our operations are vulnerable to interruption by fire, earthquake, power loss, telecommunications failure, unauthorized intrusion and other catastrophic events beyond our control. Our contingency plans for addressing these kinds of events may not be sufficient to prevent system failures and other interruptions in our operations that have a material adverse effect on our business. Additionally, our suppliers' suffering similar business interruptions could have an adverse effect on our manufacturing ability. If any natural or man-made disasters do occur, our operations could be disrupted for prolonged periods, which could have a material adverse effect on our business.

## Changes in demand caused by fluctuations in interest and currency exchange rates may reduce our international sales.

Sales and operating activities outside of the United States are subject to inherent risks, including fluctuations in the value of the U.S. dollar relative to foreign currencies, tariffs, quotas, taxes and other market barriers, political and economic instability, restrictions on the export or import of technology, potentially limited intellectual property protection, difficulties in staffing and managing international operations and potentially adverse tax consequences. We earn a significant portion of our revenue from international sales, and there can be no assurance that any of these factors will not have an adverse effect on our ability to sell our products or operate outside the United States.

We currently quote and sell the majority of our products in U.S. dollars. From time to time, we may enter into foreign currency contracts in an effort to reduce the overall risk of currency fluctuations to our business. However, there can be no assurance that the offer and sale of products denominated in foreign currencies, and the related foreign currency hedging activities, will not adversely affect our business.

Our principal competitor for disk sputtering equipment is based in Japan and has a cost structure based on the Japanese yen. Accordingly, currency fluctuations could cause the price of our products to be more or less competitive than our principal competitor's products. Currency fluctuations will decrease or increase our cost structure relative to those of our competitors, which could lessen the demand for our products and affect our competitive position.

### We routinely evaluate acquisition candidates and other diversification strategies.

We have completed a number of acquisitions as part of our efforts to expand and diversify our business. For example, our business was initially acquired from Varian Associates in 1991. We acquired our gravity lubrication and rapid thermal processing product lines in two acquisitions. We sold the rapid thermal processing product line in November 2002. We also acquired our RPC electron beam processing business in late 1997, and subsequently closed this business. We intend to continue to evaluate new acquisition candidates, divestiture and diversification strategies. Any acquisition involves numerous risks, including difficulties in the assimilation of the acquired company's employees, operations and products, uncertainties associated with operating in new markets and working with new customers, and the potential loss of the acquired company's key employees. Additionally, unanticipated expenses, difficulties and consequences may be incurred relating to the integration of technologies, research and development, and administrative and other functions. Any future acquisitions may also result in potentially dilutive issuance of equity securities, acquisition- or divestiture-related write-offs or the assumption of debt and contingent liabilities. Any of the above factors could have a material adverse effect on our business.

## We use hazardous materials and are subject to risks of non-compliance with environmental and safety regulations.

We are subject to a variety of governmental regulations relating to the use, storage, discharge, handling, emission, generation, manufacture, treatment and disposal of toxic or otherwise hazardous substances, chemicals, materials or waste. If we fail to comply with current or future regulations, such failure could result in suspension of our operations, alteration of our manufacturing process, or substantial civil penalties or criminal fines against us or our officers, directors or employees. Additionally, these regulations could require us to acquire expensive remediation or abatement equipment or to incur substantial expenses to comply with them. Failure to properly manage the use, disposal or storage of, or adequately restrict the release of, hazardous or toxic substances could subject us to significant liabilities.

## Investors in this offering will experience immediate and substantial dilution.

The offering price per share is substantially higher than the book value per share of our common stock. Investors purchasing common stock in this offering will, therefore, incur immediate dilution of \$11.152 in net tangible book value per share, based on an assumed offering price of \$14.42 per share. Investors will incur additional dilution upon the exercise of outstanding stock options.

## Our directors, executive officers and affiliates control a significant portion of our outstanding common stock.

Based on the shares outstanding on December 31, 2003, our current directors, executive officers and affiliates, in the aggregate, beneficially owned 41.2% of our outstanding shares of common stock (28.5% after this offering). These shareholders, acting together, are able to exert significant control on matters requiring approval by our shareholders, including the election of directors and approval of significant corporate transactions.

## Future sales of shares of our common stock by our officers, directors and affiliates could cause our stock price to decline.

Substantially all of our common stock may be sold without restriction in the public markets, subject only in the case of shares held by our directors, executive officers and affiliates to volume and manner of sale restrictions, other than Foster City LLC, the selling shareholder participating in this offering, and as otherwise described in the following sentence. We have an agreement with Foster City LLC and Redemco, LLC, that gives Foster City LLC and Redemco, LLC the right to require us, after the end of the 180-day period following the date of this prospectus, to file a registration statement on Form S-3, registering the resale of all shares of our common stock held by Foster City LLC not sold in this offering and all 3,255,969 shares held by Redemco.

Sales of a substantial number of shares of common stock in the public market after the offering described in this prospectus or the perception that these sales could occur could materially and adversely affect our stock price and make it more difficult for us to sell equity securities in the future at a time and price we deem appropriate. Upon completion of this offering, we will have outstanding 19,449,798 shares of common stock, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options after December 11, 2003.

Our officers and directors and their direct affiliates and our shareholders who hold more than 10% of our outstanding common stock have agreed that they will not, without the prior written consent of Needham & Company, Inc., sell or otherwise dispose of any shares of our common stock or options to acquire shares of our common stock or securities exchangeable for or convertible into shares of our common stock owned by them during the 90-day period, or 180-day period in the case of the selling shareholder, following the date of this prospectus, subject to certain exceptions. Once these contractual restrictions lapse, they will be able to sell shares of our common stock subject to certain restrictions under the Securities Act. See "Principal and Selling Shareholders." If a significant number of shares of our common stock are sold in a short period of time, the market price of our common stock could decline.

Anti-takeover provisions in our charter documents and under California law could prevent or delay a change in control, which could negatively impact the value of our common stock by discouraging a favorable merger or acquisition of us.

Our articles of incorporation authorize our board of directors to issue up to 10,000,000 shares of preferred stock and to determine the powers, preferences, privileges, rights, including voting rights, qualifications, limitations and restrictions of those shares, without any further vote or action by the shareholders. The rights of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that we may issue in the future. The issuance of preferred stock could have the effect of delaying, deterring or preventing a change in control and could adversely affect the voting power of your shares. In addition, provisions of California law could make it more difficult for a third party to acquire a majority of our outstanding voting stock by discouraging a hostile bid, or delaying or deterring a merger, acquisition or tender offer in which our shareholders could receive a premium for their shares or a proxy contest for control of our company or other changes in our management.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements under the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and elsewhere in this prospectus, and in the documents incorporated by reference in this prospectus, constitute forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "intend," "forecast," "anticipate," "believe," "estimate," "predict," "potential," "continue" or the negative of these terms or other comparable terminology. The forward-looking statements contained in this prospectus involve known and unknown risks, uncertainties and situations that may cause our or our industry's actual results, level of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. You should not place undue reliance on any of our forward-looking statements.

### **USE OF PROCEEDS**

We estimate that the net proceeds to us from the sale of 2,500,000 shares of common stock offered by us will be approximately \$33.5 million, assuming a public offering price of \$14.42 per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any of the proceeds from the sale of 1,500,000 shares by the selling shareholder.

We intend to use \$1.0 million of the net proceeds of this offering to repay our outstanding 6 1/2% Convertible Subordinated Notes due 2004 on or before their maturity in March 2004 and the remainder of the net proceeds primarily for general corporate purposes, including working capital and capital expenditures, and possible acquisitions or investments in complementary businesses or products or to obtain the right to use complementary technologies. However, we currently have no agreements or commitments with respect to any material acquisitions or investments. We cannot specify with certainty the particular uses for the net proceeds from this offering. Accordingly, our management team will have broad discretion in applying the net proceeds. Pending such uses, we intend to invest the net proceeds of this offering in short-term, interest-bearing, investment grade obligations or government securities.

#### DIVIDEND POLICY

We currently anticipate that we will retain our earnings, if any, for use in the operation of our business and do not expect to pay cash dividends on our capital stock in the foreseeable future.

### PRICE RANGE OF COMMON STOCK

Our common stock is listed on The Nasdaq National Market under the symbol "IVAC." The table below sets forth the high and the low closing sales prices per share as reported on The Nasdaq National Market for the periods indicated.

	High	Low
Year Ended December 31, 2001:		
First Quarter	\$ 5.89	\$ 3.50
Second Quarter	5.95	4.40
Third Quarter	4.98	1.95
Fourth Quarter	4.24	2.38
Year Ended December 31, 2002:		
First Quarter	\$ 4.39	\$ 2.38
Second Quarter	5.11	2.50
Third Quarter	4.25	2.06
Fourth Quarter	4.00	3.49
Year Ended December 31, 2003:		
First Quarter	\$ 5.07	\$ 3.52
Second Quarter	6.87	3.75
Third Quarter	9.95	6.72
Fourth Quarter	17.35	9.70
Year Ending December 31, 2004:		
First Quarter (through January 5, 2004)	\$14.42	\$14.10

On January 5, 2004, the last reported sale price of our common stock as reported on The Nasdaq National Market was \$14.42 per share. As of December 11, 2003, there were approximately 117 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of shareholders, we are unable to estimate the total number of shareholders represented by these record holders.

## **CAPITALIZATION**

The following table sets forth our cash and cash equivalents, short-term debt and capitalization as of September 27, 2003:

- on an actual basis;
- on a pro forma basis to reflect the conversion of all \$29,542,000 outstanding of our 6 1/2% Convertible Subordinated Notes due 2009 into 4,220,283 shares of common stock subsequent to September 27, 2003; and
- on a pro forma as adjusted basis to give effect to the sale of the 2,500,000 shares of common stock we offer under this prospectus at an assumed public offering price of \$14.42 per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us and the application of the estimated net proceeds from the offering. See "Use of Proceeds."

	September 27, 2003				
	Actual	Pro Forma	Pro Forma As Adjusted		
	(in	thousands, except share ir	nformation)		
Cash and cash equivalents	\$ 21,148	\$ 21,148	\$ 54,670		
6 1/2% Convertible Subordinated Notes due 2004	\$ 1,025	\$ 1,025	\$ 1,025		
6 1/2% Convertible Subordinated Notes due 2009	\$ 29,542	\$	\$		
Shareholders' equity: Preferred stock, no par value, 10,000,000 authorized and no					
shares outstanding Common stock, no par value, 50,000,000 authorized, 12,315,834 shares outstanding, actual; 16,536,117 shares outstanding, pro forma; 19,036,117 shares outstanding, pro	_	_	_		
forma as adjusted	20,034	49,215	82,737		
Accumulated other comprehensive income	210	210	210		
Accumulated deficit	(20,735)	(20,735)	(20,735)		
Total shareholders' equity (deficit)	(491)	28,690	62,212		
Total capitalization	\$ 29,051	\$ 28,690	\$ 62,212		

## SELECTED CONSOLIDATED FINANCIAL DATA (In thousands, except per share data)

The following table presents our selected consolidated financial data and should be read in conjunction with our audited consolidated financial statements, our unaudited consolidated financial statements and the accompanying notes, included or incorporated by reference in this prospectus. You should also read "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

The following table presents selected consolidated balance sheet and statement of operations data as of and for the fiscal years ended December 31, 1998 through 2002 and for the nine month periods ended September 28, 2002 and September 27, 2003. The consolidated balance sheet data as of December 31, 2001 and 2002 and the consolidated statement of operations data for the fiscal years ended December 31, 2000, 2001 and 2002 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The consolidated balance sheet data as of December 31, 1998, 1999 and 2000 and the consolidated statement of operations data for the fiscal years ended December 31, 1998 and 1999 have been derived from our audited consolidated financial statements not included or incorporated by reference in this prospectus. The consolidated balance sheet data as of September 27, 2003 and the consolidated statement of operations data for the ninemonth periods ended September 28, 2002 and September 27, 2003 are based upon our unaudited quarterly consolidated financial statements included in this prospectus. The information as of and for the nine month periods is unaudited and has been prepared on the same basis as our annual consolidated financial statements. In the opinion of management, this quarterly information reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the information for the periods presented. The results of operations for the nine month period ended September 27, 2003 are not necessarily indicative of the results that may be expected for the full year ending December 31, 2003 or any future period.

	Fiscal Year Ended December 31,					Nine Months Ended		
	1998	1999	2000	2001	2002	September 28, 2002	September 27, 2003	
<b>Consolidated Statement of Operations</b>								
Data:								
Net revenues:	Φοο οοσ	Ф 25 005	Φ 20 07.4	ф. <b>42.</b> 500	Φ 27 625	<b>4.16700</b>	ф. 10. <b>27</b> 0	
Systems and components Technology development	\$90,085 5,890	\$ 35,895 7,067	\$ 30,074 5,975	\$ 43,599 7,885		\$ 16,790 5,002	\$ 18,278 5,940	
Total net revenues Cost of net revenues:	95,975	42,962	36,049	51,484	33,784	21,792	24,218	
Systems and components Technology development	64,481 4,709	32,511 5,907	20,658 6,022	30,025 7,988		12,630 4,176	13,745 4,372	
Goodwill write-off Inventory provisions	2,527	1,992	1,056 6,323	3,716		678	942	
m . 1	71.717	40,410	24.050	41.720	26.475	17.404	10.050	
Total cost of net revenues Gross profit Operating expenses:	71,717 24,258	40,410 2,552	34,059 1,990	41,729 9,755		17,484 4,308	19,059 5,159	
Research and development	12,473	14,136	10,576	14,478	10,846	8,391	8,916	
Selling, general and administrative	10,879	7,226	4,415	6,745		5,522	6,287	
Restructuring and other	1,088	3,069	(638)			, <u> </u>	, <u> </u>	
Total operating expenses	24,710	24,431	14,353	21,223	18,598	13,913	15,203	
Operating loss	(452)	(21,879)	(12,363)	(11,468	(11,289)	(9,605)	(10,044)	
Interest expense	(4,187)	(3,711)	(3,033)			(2,445)	(1,547)	
Interest income and other income, net	3,176	9,831	3,072	2,473	16,452	549	(111)	
Income (loss) from continuing operations	(1.452)	(15.550)	(10.004)	44.00	0.100	(11.701)	(11.700)	
before income taxes Provision for (benefit from) income taxes	(1,463) (882)	(15,759) (5,989)	(12,324)	) (11,907 5,029		(11,501) (6,369)	(11,702)	
Provision for (benefit from) income taxes	(002)	(3,767)		3,029	(0,392)	(0,309)		
Income (loss) from continuing operations Income from discontinued operations, net	(581) 1,005	(9,770) —	(12,324)	(16,936	8,774	(5,132)	(11,702)	
Net income (loss)	\$ 424	\$ (9,770)	\$(12,324)	\$(16,936	\$ 8,774	\$ (5,132)	\$(11,702)	
Basic earnings per share:								
Income (loss) from continuing operations	\$ (0.05)	\$ (0.83)	\$ (1.04)	\$ (1.42		\$ (0.42)	\$ (0.96)	
Net income (loss)	\$ 0.04	\$ (0.83)	\$ (1.04)		,	\$ (0.42)	\$ (0.96)	
Shares used in per share calculations Diluted earnings per share:	12,052	11,777	11,803	11,955	12,077	12,065	12,206	
Income (loss) from continuing operations	\$ (0.05)	\$ (0.83)	\$ (1.04)	\$ (1.42	2) \$ 0.66	\$ (0.42)	\$ (0.96)	
Net income (loss)	\$ 0.03	\$ (0.83)	\$ (1.04)			\$ (0.42)	\$ (0.96)	
Shares used in per share calculations	12,354	11,777	11,803	11,955	15,262	12,065	12,206	
		_			As of September 27,			
			1998	1999	2000 20	01 2002	2003	
<b>Balance Sheet Data:</b>		_						
Cash and cash equivalents		\$ (	60,916 \$	40,895 \$	38,403 \$18,		\$21,148	
Working capital						160 31,309	19,833	
Total assets						165 60,298	47,366	
Long-term debt						545 30,568 408 10.545	29,542	
Total shareholders' equity (deficit)		2	40,436	29,623	17,804 1,	408 10,545	(491)	
			17					

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

#### Overview

Our operations include two businesses, an Equipment business and an Imaging business. Our Equipment business consists of the Equipment Products Division, which we refer to as EPD, and our Imaging business consists of two divisions, the Photonics Technology Division, which we refer to as PTD, and the Commercial Imaging Division, which we refer to as CID. The Equipment Products Division designs, manufactures, markets and services complex capital equipment that deposits highly engineered thin films of material onto disks used in hard disk drives; the Photonics Technology Division is developing extreme low light sensors, cameras and systems for sale to military and government markets; and the Commercial Imaging Division is developing commercial extreme low light sensors and cameras based on our technology.

## **Equipment Business**

In the early 1990s we developed a system to deposit magnetic films and protective overcoats onto thin-film disks used in hard disk drives. This system gained wide acceptance and by the late 1990s was being used to manufacture approximately half of the thin-film disks used in hard disk drives worldwide. We believe that there are approximately 90 Intevac systems currently in use in production and research and development applications. Also in the late 1990s, the hard disk drive industry went through significant consolidation, and there are now only eight significant manufacturers of thin-film disks, some of whom also manufacture hard disk drives. As a result of an increasingly smaller number of customers and the high average selling price of our products, our equipment revenues tend to be volatile from quarter to quarter. In addition, our Equipment business has historically been subject to capital spending cycles. For example, in the period from 1995 through the middle of 1998, we sold \$300 million of disk manufacturing equipment. Since then, our disk equipment revenues have averaged approximately \$20 million per year and have consisted primarily of the sale of research and development systems, technology upgrades, parts and service for the installed base of our systems.

We believe the majority of thin-film disk manufacturers are now utilizing most of their capacity. During 2003, three of these manufacturers announced plans for major thin-film disk manufacturing capacity expansions. Also during 2003, we received orders from one customer for ten of our 200 Lean disk sputtering system. We believe that the expected introduction in 2005 of high density thin-film disks based on perpendicular recording techniques will also require thin-film disk manufacturers to significantly upgrade the technical capability of their installed base of manufacturing equipment to accommodate the additional number of process steps predicted to be required by perpendicular recording technology roadmaps.

We have also manufactured both deposition and rapid thermal processing equipment used in the manufacture of flat panel displays. Since 2000, revenues from sales of flat panel display manufacturing systems totaled \$36.5 million. In late 2002 we sold our rapid thermal processing product line to Photon Dynamics of San Jose, California. Since then, we have focused our sputtering equipment efforts on disk manufacturing and have not taken orders for any new flat panel display manufacturing systems.

## **Imaging Business**

Our Imaging business develops and manufactures electro-optical sensors, cameras and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing imaging in extreme low light situations. The majority of the funding for our Photonics Technology Division's activities has come from research and development contracts with the United States Government and its contractors, with the balance being funded internally. Our military products include LIVAR systems for positive target identification at long range and extreme low light sensors and cameras for use in short- to medium-range military applications.

Developing advanced products for the military involves long development cycles, as products move through successive multi-year stages of technology demonstration, engineering and manufacturing product development, prototype production and then product deployment. Each stage in this process requires ongoing government funding. To date, the majority of our Imaging business revenues has been derived from contract research and development, rather than product sales. In July 2002, in order to shorten the time to market and to increase the number of markets for our imaging products, we began to develop imaging products for commercial markets. We have developed a NightVista security camera and are planning to develop and introduce products that address other commercial markets. Revenues from these activities have not yet been material, and we have funded the development of the products in our Commercial Imaging Division internally.

## **Critical Accounting Policies and Estimates**

Management's discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States ("US GAAP"). We review the accounting policies we use in reporting our financial results on a regular basis. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, accounts receivable, inventories, income taxes, warranty obligations, long-lived assets, contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for our judgments about the carrying value of assets and liabilities. Results may differ from these estimates due to actual outcomes being different from those on which we based our assumptions. Significant estimates and judgments are reviewed by the audit committee and discussed with our auditors at the end of each quarter prior to the public release of our financial results.

Our significant accounting policies are described in Note 2 to the consolidated financial statements included elsewhere in this prospectus. We believe the following critical accounting policies affect the more significant judgments and estimates we make in preparing our consolidated financial statements.

### Revenue Recognition

We recognize revenue using guidance from SEC Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements." Our policy allows revenue recognition when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable, and collectibility is reasonably assured. On January 1, 2003, we changed our revenue recognition policy for system orders received after December 31, 2002.

System Revenue Recognition for Orders Received After December 31, 2002. Certain of our system sales with customer acceptance provisions are accounted for as multiple-element arrangements. If we have previously met defined customer acceptance levels with the specific type of system, then we recognize revenue for the fair market value of the system upon shipment and transfer of title, and recognize revenue for the fair market value of installation and acceptance services when those services are completed. For systems that have generally not been demonstrated to meet product specifications prior to shipment, revenue recognition is usually deferred until customer acceptance. In the event that our customer chooses not to complete installation and acceptance, and our obligations under the contract to complete installation, acceptance or any other tasks, with the exception of warranty obligations, have been fully discharged, then we recognize any remaining revenue to the extent that collectibility under the contract is reasonably assured.

The revenue recognition policy outlined above and implemented for system orders received after December 31, 2002 was adopted to better conform our revenue recognition policies to industry accounting practice for companies selling similar equipment. The effect of adopting this policy in years prior to 2003

would have been no change in 2002 revenues, a decrease in 2001 revenues of \$1.5 million, and an increase of 2000 revenues of \$1.5 million. The effect on net income of adopting this policy in years prior to 2003 would have been no effect on 2002 net income, an increase in 2001 net loss of \$33,000, and a decrease in 2000 net loss of \$33,000. There would have been no effect on earnings per share in any of the three years. The adoption of this policy had no effect on revenues or net income for the period ended September 27, 2003.

System Revenue Recognition for Orders Received Before December 31, 2002. Revenues for systems that were ordered prior to December 31, 2002 are recognized upon customer acceptance. For memory and flat panel systems shipped through a distributor, revenue is typically recognized after the distributor has accepted the system at our factory and the system has been shipped. For memory and flat panel systems sold directly to end customers, revenue is recognized after installation and acceptance of the system at the customer site. When we believe that there may be higher than normal end user installation and acceptance issues for systems shipped through a distributor, such as when the first unit of a newly designed system is delivered, we defer revenue recognition until the distributor's customer has also accepted the system.

Accounting Treatment for Systems. For periods both before and after December 31, 2002, during the period that a system is undergoing customer acceptance (either distributor or end user), the value of the system remains in inventory, and any payments received, or amounts invoiced, related to the system are included in customer advances. When revenue is recognized on the system, the inventory is charged to cost of net revenues, the customer advance is liquidated, and the customer is billed for the unpaid balance of the system revenue.

Other Systems and Non-System Revenue Recognition. Revenues for systems without installation and acceptance provisions, as well as revenues from technology upgrades, spare parts, consumables and prototype products built by PTD and CID are generally recognized upon shipment. Service and maintenance contract revenue, which to date has been insignificant, is recognized ratably over applicable contract periods or as the service is performed.

Obligations After Shipment. Our shipping terms are generally FOB shipping point, but in some cases are FOB destination. For systems sold directly to the end user, our obligations remaining after shipment typically include installation, end user factory acceptance and warranty. For systems sold to distributors, typically the distributor assumes responsibility for installation and end user customer acceptance. In some cases, the distributor will assume some or all of the warranty liability. For products other than systems and system upgrades, warranty is the only obligation we have after shipment.

Technology Development Revenue Recognition. We perform best efforts research and development work under various government-sponsored research contracts. Typically, for each contract, we commit to perform certain research and development efforts up to an agreed upon amount. In connection with these contracts, we receive funding on an incremental basis up to a ceiling. Some of these contracts are cost sharing in nature, where we are reimbursed for a portion of the total costs expended. Revenue on these contracts is recognized in accordance with contract terms, typically as costs are incurred. In the event that total cost incurred under a particular contract over-runs its agreed upon amount, we may be liable for the additional costs.

These contracts are accounted for under ARB No. 43, Chapter 11, Section A, which addresses Cost-Plus-Fixed-Fee Contracts. The contracts are all cost-type, with financial terms that are a mixture of fixed fee, no fee and cost sharing. The deliverables under each contract range from providing reports to providing prototype hardware. In none of the contracts is there an obligation for either party to continue the program once the funds have been expended. The efforts can be terminated at any time for convenience, in which case we would be reimbursed for our actual incurred costs, plus fee, if applicable, for the completed effort. We own the entire right, title and interest to each invention discovered under the contract, unless we specifically give up that right. The U.S. Government has a paid-up license to use any invention/intellectual property developed under these contracts for government purposes only. In addition, we have, from time to time, negotiated with third parties to fund a portion of our costs in return for granting them a joint interest in the technology rights developed pursuant to the contract.

#### **Inventories**

We make provisions for potentially excess and obsolete inventory based on backlog and forecasted demand. However, order backlog is subject to revisions, cancellations and rescheduling. Actual demand will inevitably differ from forecasted demand due to a number of factors. For example, disk industry consolidation has led to the availability of some used equipment that competes at very low prices with our products. Financial stress and consolidation in our customer base can also lead to the cancellation of orders for products after we have incurred substantial costs related to those orders. Such problems have resulted, and may continue to result, in excess and obsolete inventory and the creation of related reserves.

## Warranty

Our typical warranty is 12 months from customer acceptance. In some cases we market extended warranty periods beyond 12 months to our customers. The warranty period on used systems is generally shorter than 12 months. During this warranty period any necessary non-consumable parts are supplied and installed. The warranty period on consumable parts is limited to their reasonable usable life. A provision for the estimated warranty cost is recorded at the time revenue is recognized.

## Valuation of Long-Lived and Intangible Assets and Goodwill

We assess the impairment of identifiable intangibles, long-lived assets and goodwill annually and whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important that could trigger an impairment review include the following:

- significant under-performance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of the assets or the strategy for our overall business;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period; and
- our market capitalization relative to net book value.

When we determine that the carrying value of long-lived assets, intangibles or goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on a projected discounted cash flow method, using a discount rate determined by our management to be commensurate with the risk inherent in our current business model.

## Prototype Costs

Prototype product costs that are not paid for under research and development contracts and are in excess of fair market value are charged to research and development expense.

## **Results of Operations**

## Three Months Ended September 27, 2003 and September 28, 2002.

*Net revenues*. Net revenues consist primarily of sales of equipment used to manufacture thin-film disks, equipment used to manufacture flat panel displays, related equipment and system components and contract research and development related to the development of electro-optical devices and systems. Net revenues increased 13% to \$7.6 million for the three months ended September 27, 2003 from \$6.7 million for the three months ended September 28, 2002.

Equipment Products Division revenues increased to \$5.0 million for the three months ended September 27, 2003 from \$4.8 million for the three months ended September 28, 2002. The increase in EPD revenue was the result of an increase in shipments of disk technology upgrades partially offset by a decrease in revenue from flat panel manufacturing systems and from spare parts. Net revenues for the three months ended September 28, 2002 included \$2.5 million of sales of rapid thermal processing

equipment, a product line we sold in November 2002. Net revenues from the Photonics Technology Division increased to \$2.7 million for the three months ended September 27, 2003 from \$2.0 million for the three months ended September 28, 2002 as a result of increased revenue from contract research and development. We expect that PTD revenues will increase in the fourth quarter of 2003 relative to the third quarter of 2003 as a result of increased shipments of LIVAR cameras for development applications.

International sales increased 6% to \$4.4 million for the three months ended September 27, 2003 from \$4.1 million for the three months ended September 28, 2002. The increase in international sales was primarily due to an increase in net revenues from disk technology upgrades partially offset by a decrease in revenue from flat panel manufacturing systems. International sales constituted 58% of net revenues for the three months ended September 27, 2003 and 61% of net revenues for the three months ended September 28, 2002.

*Backlog*. Our backlog of orders for our products was \$24.1 million at September 27, 2003 and \$30.3 million at September 28, 2002. The reduction was due to a decrease in the number of flat panel manufacturing systems on order and the sale of the rapid thermal processing product line in November 2002 partially offset by an increase in the number of disk manufacturing systems on order. During the three months ended September 27, 2003 we received orders for two 200 Lean and two MDP-250 disk sputtering systems. We include in backlog the value of purchase orders for our products that have scheduled delivery dates. Following the end of the quarter, we received orders for eight additional 200 Lean disk sputtering systems, which are not included in the \$24.1 million of reported backlog at September 27, 2003.

*Gross margin.* Cost of net revenues consists primarily of purchased materials, fabrication, assembly, test and installation labor and overhead, customer-specific engineering costs, warranty costs, royalties, provisions for inventory reserves, scrap and costs attributable to contract research and development. Gross margin was 38% for the three months ended September 27, 2003 as compared to 20% for the three months ended September 28, 2002.

Gross margin in EPD increased to 45% in the three months ended September 27, 2003 from 19% in the three months ended September 28, 2002. EPD margins in the third quarter of 2003 were favorably impacted by the mix of revenue that was heavily weighted with disk technology upgrades and by improved absorption of overhead due to increased manufacturing activity as compared to the third quarter of 2002. Of EPD's backlog at September 27, 2003, \$3.7 million relates to our D-STAR flat panel display products that will not generate any significant gross margin. Our goal is to achieve gross margins in EPD of 35% or greater in fiscal 2004. However, EPD gross margin will vary depending on a number of factors, including, factory utilization, success of our cost reduction programs, achievement of aggressive cost targets on our new 200 Lean system, the relative proportion of revenue derived from system sales versus upgrade and spares sales, and the relative proportion of revenue derived from low margin flat panel display manufacturing equipment and pricing achieved on future orders.

PTD gross margins increased to 24% during the three months ended September 27, 2003 from 23% during the three months ended September 28, 2002. PTD gross margins were favorably impacted by the mix of revenues derived from prototype products and fully funded research and development contracts versus cost-shared research and development contracts. We expect that PTD gross margins for the fourth quarter of 2003 will continue to improve based on the majority of revenues being derived from fully funded research and development contracts and from prototype products.

Research and development. Research and development expense consists primarily of prototype materials, salaries and related costs of employees engaged in ongoing research, design and development activities for disk manufacturing equipment, flat panel manufacturing equipment, imaging products and company funded research performed by PTD. Research and development expense increased to \$3.2 million for the three months ended September 27, 2003 from \$2.3 million for the three months ended September 28, 2002, representing 42% and 34%, respectively, of net revenue. The increase was primarily the result of spending incurred for the development of the 200 Lean disk sputtering system and

commercial imaging products, partially offset by reduced spending for development of flat panel manufacturing equipment.

Research and development expenses do not include costs of \$1.8 million and \$1.4 million, respectively for the three-month periods ended September 27, 2003 and September 28, 2002 related to contract research and development performed by the Photonics Technology Division. These expenses are included in cost of net revenues.

Research and development expenses also do not include costs of \$25,000 and \$84,000 in the three-month periods ended September 27, 2003 and September 28, 2002, respectively, reimbursed under the terms of various research and development cost sharing agreements.

Selling, general and administrative. Selling, general and administrative expense consists primarily of selling, marketing, customer support, production of customer samples, financial, travel, management, liability insurance, legal and professional services, and bad debt expense. All domestic sales and international sales of disk manufacturing systems in Singapore, Malaysia and Taiwan are made by our direct sales force, whereas other international sales of disk manufacturing products and other products are made by distributors and representatives that provide services such as sales, installation, warranty and customer support. We also have a subsidiary in Singapore to support disk equipment customers in Southeast Asia. We are increasing staff at our Singapore subsidiary during the second half of 2003 to provide an improved level of customer service and support to our Southeast Asian customers.

Selling, general and administrative expense increased to \$2.2 million for the three months ended September 27, 2003 from \$2.0 million for the three months ended September 28, 2002, representing 29% of net revenue in each period. The increase was the result of \$275,000 of surplus facility costs being recorded in selling, general and administrative expense partially offset by a reduction in commissions paid to manufacturer's representatives.

Interest expense. Interest expense consists primarily of interest on our convertible notes. Interest expense decreased to \$522,000 in the three months ended September 27, 2003 from \$1.1 million in the three months ended September 28, 2002. Interest expense in 2002 included the write-off of \$368,000 of the debt issuance costs related to our convertible notes due in 2004 and the write-off of \$140,000 of the offering costs related to the convertible note exchange.

Interest income and other, net. Interest income and other, net totaled \$132,000 and \$194,000 for the three months ended September 27, 2003 and September 28, 2002, respectively. Interest income and other, net in both 2003 and 2002 consisted primarily of interest and dividend income on investments. Interest income declined in 2003 due to lower interest rates earned on our invested funds.

*Provision for (benefit from) income taxes.* For both the three-month periods ended September 27, 2003 and September 28, 2002, we did not accrue a tax benefit due to the inability to realize additional refunds from loss carry-backs. Our \$16.2 million deferred tax asset is fully offset by a \$16.2 million valuation allowance, resulting in a net deferred tax asset of zero at September 27, 2003.

### Nine Months Ended September 27, 2003 and September 28, 2002.

Net revenues. Net revenues increased 11% to \$24.2 million for the nine months ended September 27, 2003 from \$21.8 million for the nine months ended September 28, 2002. EPD revenues increased to \$17.8 million for the nine months ended September 27, 2003 from \$16.3 million for the nine months ended September 28, 2002. The increase in EPD revenues was due primarily to increases in revenues from flat panel manufacturing systems and from technology upgrades and spare parts, partially offset by a decrease in revenues from disk manufacturing systems. Net revenues for the nine months ended September 28, 2002 included \$5.0 million of sales of rapid thermal processing equipment, a product line we sold in November 2002. PTD revenues increased to \$6.4 million for the nine months ended September 27, 2003 from \$5.5 million for the nine months ended September 28, 2002. The increase in PTD sales was due to increased revenue from contract research and development.

International sales increased 32% to \$16.4 million for the nine months ended September 27, 2003 from \$12.4 million for the nine months ended September 28, 2002. The increase in international sales during nine months ended September 27, 2003 was primarily due to increases in revenues from flat panel manufacturing systems and from technology upgrades and spare parts. International sales constituted 68% of net revenues for the nine months ended September 27, 2003 and 57% of net revenues for the nine months ended September 28, 2002.

*Gross margin.* Gross margin was 21% for the nine months ended September 27, 2003 as compared to 20% for the nine months ended September 28, 2002. EPD gross margin was 21% and 22% for the nine months ended September 27, 2003 and September 28, 2002, respectively. The decrease in EPD gross margin was primarily due to \$7.3 million of flat panel system revenue contributing minimal gross margin and to the establishment in 2003 of \$0.8 million of inventory reserves. PTD gross margin increased to 22% for the nine months ended September 27, 2003 from 14% for the nine months ended September 28, 2002. PTD gross margins were favorably impacted by the mix of sales derived from prototype products and from fully funded research and development contracts versus cost-shared research and development contracts.

Research and development. Company funded research and development expense increased 6% to \$8.9 million for the nine months ended September 27, 2003 from \$8.4 million for the nine months ended September 28, 2002, representing 37% and 39%, respectively, of net revenue. The increase was primarily the result of higher spending for the development of disk manufacturing equipment and for commercial imaging products partially offset by decreases in spending for the development of flat panel manufacturing equipment.

Research and development expenses do not include costs of \$4.4 million and \$4.2 million, respectively, for the nine-month periods ended September 27, 2003 and September 28, 2002 related to contract research and development performed by PTD. These expenses are included in cost of net revenues.

Research and development expenses also do not include costs of \$99,000 and \$285,000, respectively, in the nine-month periods ended September 27, 2003 and September 28, 2002, reimbursed under the terms of various research and development cost sharing agreements.

Selling, general and administrative. Selling, general and administrative expense increased to \$6.3 million for the nine months ended September 27, 2003 from \$5.5 million for the nine months ended September 28, 2002, representing 26% and 25%, respectively, of net revenue. The increase was primarily the result of \$907,000 of surplus facility costs being recorded in selling, general and administrative expense.

Interest expense. Interest expense decreased to \$1.5 million for the nine months ended September 27, 2003 from \$2.4 million for the nine months ended September 28, 2002. The decrease in interest expense was due to 2002 including the write-off of \$368,000 of the debt issuance costs related to our convertible notes due in 2004 and the write-off of \$140,000 of the offering costs related to the convertible note exchange and to a reduction in convertible notes outstanding as a result of the exchange offer.

Interest income and other, net. Interest income and other, net totaled (\$111,000) and \$549,000 for the nine months ended September 27, 2003 and September 28, 2002, respectively. Interest income and other, net in 2003 consisted primarily of \$497,000 of interest and dividend income on investments offset by the establishment of a \$638,000 reserve related to the disposition of fixed assets. Interest income and other, net in 2002 consisted primarily of interest and dividend income on investments.

*Provision for (benefit from) income taxes.* For the nine months ended September 27, 2003, we did not accrue a tax benefit due to the inability to realize additional refunds from loss carry-backs. We accrued a tax benefit of \$6.4 million for the nine-month period ended September 28, 2002.

## Fiscal Years Ended December 31, 2003, December 31, 2002 and December 31, 2000

*Net revenues.* Net revenues consist primarily of sales of equipment used to manufacture thin-film disks, equipment used to manufacture flat panel displays, related equipment and system components, and

contract research and development related to the development of electro-optical devices and systems. Net revenues totaled \$33.8 million, \$51.5 million and \$36.0 million in 2002, 2001 and 2000, respectively.

Equipment Products Division revenues totaled \$27.1 million, \$42.7 million and \$28.8 million in 2002, 2001 and 2000, respectively. EPD revenues decreased in 2002 due to a decrease in sales of flat panel manufacturing systems and disk system upgrades and components, partially offset by an increase in sales of disk manufacturing systems. EPD revenues increased in 2001 from 2000 due to an increase in sales of flat panel manufacturing systems, partially offset by a decrease in sales of disk manufacturing systems, disk systems upgrades and components. We delivered, and recognized revenue on, five of our D-STAR deposition systems during 2001. During 2002 EPD delivered upgrades to the five systems and one new D-STAR system. Revenue recognition on the five upgrades and one new system was pending final customer acceptance at December 31, 2002. Net revenues for 2002 and 2001 include \$7.1 million and \$6.8 million, respectively, of sales of rapid thermal processing equipment, a product line the Company sold in November 2002. There were no sales of rapid thermal processing equipment in 2000. EPD's fabrication center, which manufactured machined parts, contributed sales to outside customers of \$0.6 million, \$1.8 million and \$5.0 million in 2002, 2001 and 2000, respectively. The fabrication center was closed in September 2002. EPD plans to replace the fabrication center with a smaller model shop during 2003. The model shop will manufacture engineering prototypes and parts for use in our products.

The thin-film disk manufacturing industry has now consolidated into a small number of large manufacturers. We believe that the majority of our active customers now utilize most of their capacity and that there is significant potential for these customers to both resume adding capacity and to upgrade the technical capability of their installed base to permit production of high density disks for perpendicular recording rather than the current longitudinal technology. However, we are not able to accurately predict when our customers will begin placing significant equipment orders again, or if they will place those orders with us, and this subjects us to a high degree of uncertainty in projecting our 2003 revenue.

Photonics Technology Division revenues totaled \$6.6 million, \$8.8 million and \$7.2 million in 2002, 2001 and 2000, respectively. PTD revenues decreased in 2002 as a result of a decrease in revenues from contract research and development. PTD revenues increased in 2001 over 2000 as the result of increased revenues from contract research and development. PTD revenues in 2003 are expected to be primarily derived from contract research and development, but with some increase in revenue from LIVAR target identification systems. Substantial growth in future PTD revenues is dependent on PTD proliferating its technology into major military weapons programs and obtaining production subcontracts for these programs.

The Commercial Imaging Division was formed in July 2002 with the charter of developing commercial products based on PTD technology. CID also assumed responsibility from PTD for activities related to the development of photodiodes for use in high-speed fiber optic systems. CID's 2002 revenues totaled \$43,000 related to the sale of sample photodiodes. Further development of these photodiodes was suspended at the end of 2002 due to weak market conditions in the telecommunications industry. CID expects to initiate the sale of commercial products based on PTD's LIVAR and low light level technology during 2003, but does not expect to realize significant revenues from these products in 2003.

Our backlog of orders at December 31, 2002 was \$18.2 million, as compared to a December 31, 2001 backlog of \$30.6 million. The \$18.2 million of backlog at December 31, 2002 consisted of \$15.0 million of EPD backlog and \$3.2 million of PTD backlog. The \$30.6 million of backlog at December 31, 2001 consisted of \$26.5 million of EPD backlog and \$4.1 million of PTD backlog. The reduction in EPD backlog was primarily due to a reduction in the number of rapid thermal processing systems and disk manufacturing systems on order. Most of our backlog at December 31, 2002 is scheduled for either customer acceptance or delivery during the first half of 2003. We need to book substantial orders in 2003 in order for 2003 sales to meet or exceed 2002 sales.

Significant portions of our revenues in any particular period have been attributable to sales to a limited number of customers. In 2002, Seagate, Toppoly and the U.S. Army Communications-Electronics Command each accounted for more than 10% of our consolidated net revenues and in aggregate accounted

for 74% of consolidated net revenues. In 2001, equipment sales through Matsubo, our Japanese distributor, accounted for 49% of consolidated net revenues. In 2000, MMC Technology, Matsubo, Seagate and Westt each accounted for more than 10% of our consolidated net revenues and in aggregate accounted for 56% of consolidated net revenues. Our largest customers tend to change from period to period.

International sales totaled \$17.5 million, \$37.3 million and \$9.6 million in 2002, 2001 and 2000, respectively, accounting for 52%, 73% and 27% of net revenues. The decrease in international sales in 2002 compared to 2001 was primarily due to a decrease in net revenues from flat panel manufacturing systems, and to a lesser extent, to a decrease in net revenues from disk system upgrades and components. The increase in international sales in 2001 over 2000 was primarily due to an increase in net revenues from flat panel manufacturing systems. Substantially all of our international sales are to customers in the Far East.

*Gross margin.* Cost of net revenues consists primarily of purchased materials, fabrication, assembly, test and installation labor and overhead, customer-specific engineering costs, warranty costs, royalties, provisions for inventory reserves, scrap and costs attributable to contract research and development. Gross margin was 22%, 19% and 6% in 2002, 2001 and 2000, respectively.

Gross margin in EPD was 25%, 23% and 12% in 2002, 2001 and 2000, respectively. EPD gross margin in 2002 improved slightly over 2001 due primarily to lower production costs and by a reduction in inventory provisions, partially offset by the under-absorption of manufacturing overhead due to low manufacturing volume. EPD gross margin improved from 2000 to 2001, but was tempered by high initial costs to manufacture our redesigned flat panel manufacturing systems and establishment of \$2.4 million of inventory reserves related to a cancelled order for a custom flat panel system. 2001 EPD gross margin excluding the effect of the inventory reserve would have been 29%. EPD gross margin in 2000 was negatively impacted by establishment of \$5.1 million of reserves related to slow moving equipment inventory and an \$0.8 million write-off of goodwill related to electronically swept source technology, which was acquired in 1996 and subsequently abandoned. 2000 Equipment gross margin excluding the effect of these two items would have been 32%. \$11.1 million of EPD's backlog at December 31, 2002 relates to D-STAR products that will not generate any significant gross margin. We are not able to accurately project the 2003 gross margin for the balance of the equipment business as it will vary depending on a number of factors, including, factory utilization and pricing achieved on future orders.

Gross margin in PTD was 10%, (2%) and (8%) in 2002, 2001 and 2000, respectively. PTD gross margins improved in 2002 due to a higher portion of the revenue being derived from fully funded research and development contracts. PTD gross margins in 2001 and 2000 were negatively impacted by a significant portion of revenue being derived from cost-sharing research and development contracts versus fully funded research and development contracts. We expect that 2003 PTD gross margins will improve based on the majority of revenues being derived from fully funded research and development contracts and from prototype products.

Research and development. Research and development expense consists primarily of prototype materials, salaries and related costs of employees engaged in ongoing research, design and development activities for disk manufacturing equipment, flat panel manufacturing equipment, imaging products and company funded research performed by PTD. Research and development expense totaled \$10.8 million, \$14.5 million and \$10.6 million in 2002, 2001 and 2000, respectively, representing 32%, 28% and 29% of net revenue. The dollar decrease from 2001 to 2002 was the result of the completion during 2001 of the design activities related to development of the D-STAR, RTP and MDP-200 platforms, partially offset by increased expenses related to the development of CID products and PTD technology and products. The dollar increase from 2000 to 2001 was primarily the result of increased expenses related to the development and redesign of flat panel manufacturing equipment and, to a lesser extent, the development of PTD technology and products. We expect that research and development expenses in 2003 will be slightly lower than in 2002 as a result of the sale of the rapid thermal processing product line, partially offset by projected increases in CID and in PTD.

Research and development expenses do not include costs of \$5.2 million, \$8.0 million and \$6.0 million in 2002, 2001 and 2000, respectively, related to PTD contract research and development, which are

included in cost of net revenues. Research and development expenses also do not include costs of \$0.3 million, \$0.5 million and \$0.7 million incurred by us in 2002, 2001 and 2000, respectively, and reimbursed under the terms of research and development cost sharing agreements related to development of disk and flat panel manufacturing equipment.

Selling, general and administrative. Selling, general and administrative expense consists primarily of selling, marketing, customer support, production of customer samples, financial, travel, management, liability insurance, legal and professional services and bad debt expense. Domestic sales and international sales of disk manufacturing products in Singapore, Malaysia and Taiwan are made by our direct sales force, whereas other international sales of disk manufacturing and other products are made by distributors and representatives that provide services such as sales, installation, warranty and customer support. We also have a subsidiary in Singapore to support customers in Southeast Asia. Through the second quarter of 2000, we marketed our flat panel manufacturing equipment to the Far East through our Japanese joint venture, IMAT. During the third quarter of 2000 we and our joint venture partner, Matsubo, transferred IMAT's activities and employees to Matsubo, which became a distributor of our flat panel products, and shut down the operations of IMAT.

Selling, general and administrative expense totaled \$7.8 million, \$6.7 million and \$4.4 million in 2002, 2001, and 2000, respectively, representing 23%, 13% and 12% of net revenue. The increase in 2002 over 2001 was primarily the result of representative commissions paid on the sale of flat panel manufacturing systems, an increase in selling, general and administrative personnel in PTD and an increase in corporate general and administrative expenses. The increase from 2000 to 2001 was primarily due to a \$1.5 million credit to bad debt expense recognized in 2000. We expect that selling, general and administrative expenses will increase in 2003 over 2002 due to an increase in marketing resources, the charge for underutilized space and higher charges for directors and officers insurance.

Restructuring and other. Restructuring and other was a gain of \$0.6 million in 2000. During the third quarter of 1999, we adopted an expense reduction plan that included closing one of the buildings at our Santa Clara facility and a reduction in force of 7 employees. We incurred a charge of \$2.2 million in 1999 related to the expense reduction plan. In the fourth quarter of 1999, \$0.1 million of the restructuring reserve was reversed due to lower than expected costs on the closure of the facility. During the first quarter of 2000, we vacated the building and negotiated a lease termination for that space with our landlord, which released us from the obligation to pay any rent after April 30, 2000. As a result, we reversed \$0.6 million of the restructuring reserve during the first quarter of 2000. During the third quarter of 2000, we completed all activities related to closing the vacated portion of the building and reversed the remaining \$23,000 of the restructuring reserve.

Interest expense. Interest expense consists primarily of interest on the convertible notes, amortization of debt issuance costs, and, to a lesser extent in 2000, interest on approximately \$2.0 million of long-term debt related to the purchase of Cathode Technology in 1996. Interest expense totaled \$3.0 million, \$2.9 million and \$3.0 million in 2002, 2001 and 2000, respectively. The increase in interest expense in 2002 over 2001 was due primarily to the write-off of \$0.5 million of debt offering costs from the original convertible note offering in 1997 as a result of the exchange of these notes for new convertible notes in July 2002. The decline in interest expense in 2001 from 2000 was primarily the result of our repurchase of \$3.7 million of the convertible notes during 2001, and, to a lesser extent, the repayment of the Cathode Technology debt in January 2001. Interest expense on our outstanding convertible notes is expected to be \$2.1 million in 2003.

Interest income and other, net. Interest income and other, net totaled \$16.5 million, \$2.5 million and \$3.1 million in 2002, 2001 and 2000, respectively. Interest income and other, net in 2002 consisted of \$0.3 million of interest income on investments, a \$15.4 million gain on the sale of the rapid thermal processing product line, a \$0.3 million gain on the sale of fixed assets, \$0.4 million of dividends from 601 California Avenue LLC and \$0.1 million of early payment discounts and other income. Interest income and other, net in 2001 consisted of \$1.2 million of interest income on investments, a \$1.4 million gain from the repurchase of our convertible notes, \$0.4 million of dividends from 601 California Avenue LLC, a

\$0.8 million loss on the disposition of Pacific Gas and Electric commercial paper and \$0.3 million of early payment discounts and other income. Interest income and other, net in 2000 consisted of \$2.3 million of interest income on investments, \$0.4 million of dividends from in 601 California Avenue LLC, \$0.2 million of gains on foreign currency forward contracts and \$0.2 million of early payment discounts and other income.

Provision for (benefit from) income taxes. In 2002, we recorded an income tax benefit of \$6.6 million. This resulted from the enactment of the Job Creation and Worker Assistance Act of 2002 which increased the length of time, from two years to five years, over which losses incurred in 2001 and 2002 could be carried back against taxes paid in prior years. We paid federal income taxes of approximately \$5.2 million for 1996, \$0.9 million for 1997 and \$0.5 million for 1998. Our federal tax returns, and any refunds resulting from them, are subject to audit for three years from the date filed. Our net deferred tax asset totaled zero at December 31, 2002, net of a \$12.1 million valuation allowance. We have substantial net operating loss carry-forwards which can be used to limit the taxes paid in the future and to reduce our effective tax rate to less than the statutory income tax rates in effect.

In 2001, we recorded \$5.0 million of income tax expense to provide additional valuation allowance against deferred tax assets. Our net deferred tax assets totaled zero at December 31, 2001, net of a \$19.2 million valuation allowance established due to the uncertainty of realizing certain tax credits, loss carry-forwards and other deferred tax assets.

Our estimated effective tax rate for 2000 was 0%. We did not accrue a tax benefit during 2000 due to the inability to realize additional refunds from loss carry-backs.

## **Liquidity and Capital Resources**

Our operating activities used cash of \$6.0 million for the nine months ended September 27, 2003. The cash used was due primarily to the net loss incurred and the semi-annual interest payments on our convertible notes, which was partially offset by reductions in inventory and by depreciation and amortization. In the nine months ended September 28, 2002, our operating activities provided cash of \$4.5 million due primarily to increases in customer advances and to non-cash charges for depreciation and amortization, which were partially offset by the net loss incurred.

Our investing activities used cash of \$2.0 million and \$1.1 million for the nine months ended September 27, 2003 and September 28, 2002, respectively, for the purchase of fixed assets.

Our financing activities provided cash of \$644,000 for the nine months ended September 27, 2003 as a result of the sale of our common stock to our employees through our employee benefit plans. In the nine-month period ended September 28, 2002, our financing activities used cash of \$7.2 million, primarily as a result of the exchange of most of our convertible notes due 2004 for new notes due 2009 and cash.

At September 27, 2003, we had \$21.1 million of cash and cash equivalents. We expect to consume a significant portion of that cash over the next two quarters as we increase production of our 200 Lean disk sputtering system. After the initial production buildup, we expect to begin generating cash from 200 Lean shipments, and we believe our existing cash and cash equivalent balances will be sufficient to meet our cash requirements for the next twelve months.

We have incurred operating losses each year since 1998 and cannot predict with certainty when we will return to operating profitability. We believe a cyclical upturn in demand for the type of disk manufacturing equipment we produce is occurring, and we have received orders for twelve disk manufacturing systems in the last few months with the revenue from those orders expected mostly in the first half of next year. The receipt of these orders leads us to believe that our financial results in the first half of 2004 will be significantly improved.

Subsequent to September 27, 2003, we converted our outstanding Convertible Subordinated Notes due 2009 into 4,220,283 shares of our common stock. The effect of this conversion on our balance sheet was to eliminate \$29.5 million of long-term debt and replace it with \$29.0 million of equity. Offering costs

of \$500,000 related to the notes and carried on the balance sheet were written off as part of the transaction.

## Quantitative and Qualitative Disclosures About Market Risk

*Interest rate risk.* The table below presents principal amounts and related weighted-average interest rates by year of maturity for our debt obligations as of September 27, 2003.

	2003	2004	2005	2006	2007	Beyond	Total	Fair Value
					(In thousan	ds)		
Short-term debt Fixed rate	_	\$1,025		_	_	_	\$ 1,025	\$ 923
Average rate Long-term debt	6.50%	6.50%	_	_	_	_		
Fixed rate Average rate	— 6.50%	 6.50%	 6.50%	 6.50%	— 6.50%	\$29,542 6.50%	\$29,542	\$29,542

Subsequent to September 27, 2003, the long-term debt converted into equity.

Foreign exchange risk. From time to time, we enter into foreign currency forward exchange contracts to economically hedge certain of our anticipated foreign currency transaction, translation and re-measurement exposures. The objective of these contracts is to minimize the impact of foreign currency exchange rate movements on our operating results. At September 27, 2003, we had no foreign currency forward exchange contracts.

#### **BUSINESS**

#### Overview

We are the world's leading provider of thin-film disk sputtering equipment for the thin-film disk industry and a developer of leading technology for extreme low light imaging devices and systems. We operate two businesses: Equipment and Imaging.

Our Equipment business designs, manufactures, markets and services complex capital equipment which deposits, or sputters, highly engineered thin-films onto disks used in hard disk drives. We believe we are the leading provider of disk sputtering systems. Our systems represent approximately half of the installed base of disk sputtering systems and produced approximately half of all thin-film disks made in 2003. Our customers include the world's leading thin-film disk manufacturers, such as Hitachi Global Storage Technologies, or HGST, Komag, Maxtor and Seagate Technology. We believe the rapid growth of digital data, the proliferation of new security applications and the growth of new consumer applications, such as personal video recorders, video game consoles and MP3 players, along with new technology advances in the industry, will provide us with a significant growth opportunity.

Our Imaging business develops and manufactures electro-optical sensors, cameras, and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing vision in extreme low light situations. We currently develop night-vision technology and equipment for military and commercial applications. To date, our revenues have been derived primarily from research and development contracts funded by the U.S. government. Applications for our imaging technology include systems for positive identification of targets at long range and sensors and cameras for use in extreme low light situations. More recently, we began developing products for use in the commercial sector, specifically the security, life science and physical science markets.

Intevac was formed in 1990 and completed a leveraged buyout of a number of divisions of Varian Associates in February 1991. The technologies acquired from Varian formed the foundation for our Equipment and Imaging businesses.

#### **Equipment Business**

Our Equipment business designs, manufactures, markets and services complex capital equipment used in the sputtering, or deposition, of highly engineered thin-films of material onto thin-film disks which are used in hard disk drives. Hard disk drives are the primary storage medium for digital data and function by magnetically storing data on thin-film disks. These thin-film disks are created in a sophisticated manufacturing process involving a variation of many steps, including plating, annealing, polishing, texturing, sputtering and lubrication.

#### Storage Market Growth Drivers

Data storage requirements have rapidly increased from kilobytes for documents, to megabytes for audio and still images, to gigabytes for video. Hard disk drives are the primary devices used for storing and retrieving digital data. According to IDC, the total storage capacity of hard disk drives shipped grew from 5.2 billion gigabytes in 2001 to 8.8 billion gigabytes in 2002. Additionally, capacity is expected to grow at a 45.1% compounded annual growth rate from 2002 to 2007. We believe there are a number of emerging trends and applications that exploit these reduced storage costs and that require storage intensive solutions.

- New consumer electronics applications, such as digital video and audio recorders, video game platforms, emerging HDTV applications and streaming video require significant digital data storage capability.
- Personal computers have evolved from devices operating simple applications such as word processing, to powerful machines that are
  capable of playing, recording and creating multimedia content, such as images, audio and video. These capabilities have driven the
  demand for new

personal computers and increasing requirements for data storage. IDC estimates personal computer growth of over 10.2% in 2004.

- Enterprise data storage requirements are increasing, as regulations and other business factors require companies to archive more information, such as documents and email. Additionally, companies are transitioning from paper-based storage to digital data-based storage and digital backup.
- Certain traditional analog storage applications are transitioning to digital hard disk-based storage. For example, the video surveillance
  industry, including home security, law enforcement, private security services, retail, transportation and government agencies, is
  transitioning from analog video tapes to digital hard disk storage.

As a result of these and other storage applications, IDC expects the total number of units of all hard disk drives to be shipped between 2002 and 2007 to grow at a compounded annual rate of approximately 10.7% from 219 million units to 365 million units.

#### Hard Disk Drive Market Dynamics

Areal Density Increasing. Areal density, the density of information stored on thin-film disks, continues to increase. Areal density is a function of how closely spaced the information bits are on the thin-film disk. Higher areal density means more information can be stored on a thin-film disk of the same size. Thin-film disk manufacturers compete by increasing the areal density of a hard disk, which enables them to provide more data storage capacity at a lower cost per gigabyte. As areal densities have increased, hard disk drive manufacturers have been able to reduce costs by reducing the number of disks per drive. In 2003, desktop personal computers included an average of 1.1 thin-film disks per drive whereas in 1998 there was an average of 2.2 thin-film disks per drive.

Transition from Longitudinal to Perpendicular Recording. Historically, thin-film disk manufacturers have been able to increase the areal density of a thin-film disk by improving existing longitudinal recording processes, a storage method where magnetized data bits lie flat on the thin-film disk. However, the rate of increase in areal density has slowed, as the magnetized data bits are packed closer and closer together, which increases instability. In order to increase the rate of areal density expansion, we believe the thin-film disk industry will transition to perpendicular recording. Perpendicular recording, as the name implies, results in the data bits lying perpendicular to the plane of the thin-film disk and also enables bits to be recorded at a higher density than longitudinal recording.

New Equipment Required for Perpendicular Recording. The equipment that thin-film disk manufacturers purchased in the mid to late 1990s could generally accommodate up to 12 process steps, which has been sufficient to enable improvements in areal density using longitudinal recording. However, producing thin-film disks capable of perpendicular recording may require up to 18 to 24 process steps. As a result, in order to transition to perpendicular recording, thin-film disk manufacturers will most likely need to replace or retool their existing thin-film disk manufacturing equipment.

Consolidation of Equipment Suppliers. The supplier base of disk sputtering equipment has consolidated. Beginning in 1995, many thin-film disk manufacturers undertook aggressive expansion plans. The reduction in thin-film disks per drive combined with these capacity expansions resulted in substantial excess disk production capacity in the late 1990s through 2002. As a result, even as total storage capacity of all hard disk drives shipped increased dramatically from 1997 to 2002, thin-film disk manufacturers did not make significant investments in new disk sputtering equipment. In fact, of the four leading providers of disk sputtering equipment, only two have announced new equipment platforms capable of perpendicular recording.

*Industry Consolidation.* Two types of companies purchase disk sputtering equipment. Vertically integrated companies manufacture both thin-film disks and the drives that use the disks. Thin-film disk manufacturing companies manufacture only thin-film disks and sell them to hard disk drive manufacturers. These companies were also adversely affected by the overcapacity of 1997 through 2002, and as a result,

the industry underwent significant consolidation. For instance, in 2001 Maxtor acquired Quantum's hard disk drive operations, and IBM sold its hard disk drive business to Hitachi in 2002. In 2001, Fujitsu ceased manufacturing hard disk drives for the personal storage market. This consolidation has reduced the number of thin-film hard disk manufacturers able to respond to any increasing demand for digital data storage.

*Return to Industry Growth.* According to IDC, hard disk drive demand will reach 365 million units by 2007. In 2003, hard disk drive manufacturers are expected to produce approximately 232 million units, according to IDC. Recently, HGST, Maxtor and Seagate, have announced significant thin-film disk manufacturing capacity expansions.

To meet increasing demands, thin-film disk manufacturers are beginning to invest in new disk sputtering equipment that can accommodate the additional process steps required for perpendicular recording. To evaluate the performance of competing disk sputtering equipment, thin-film disk manufacturers consider the following criteria:

- Cost of Ownership. The factors that affect the cost of ownership of disk sputtering equipment include purchase price, yield, throughput, factory floor footprint, uptime and material utilization efficiency. A lower cost of ownership for disk sputtering equipment is a key factor in lowering the manufacturer's product cost.
- Extendibility and Flexibility. We believe thin-film disk manufacturers need disk sputtering equipment that can address the needs of their evolving technology roadmaps. This equipment must be capable of incorporating new process steps and technical capabilities, including the processes needed for producing thin-film disks capable of perpendicular recording. Additionally, these manufacturers are improving longitudinal processes and further developing the processes necessary for perpendicular recording, and as a result, they demand a modular, flexible system that supports process reconfigurations and expansions with a minimum of effort.
- Compatibility with Existing Equipment. We believe thin-film disk manufacturers prefer to standardize their processes around one or two disk sputtering equipment suppliers. Once a thin-film disk manufacturer has selected a particular supplier's equipment, that manufacturer generally relies upon that supplier's equipment for much of its production capacity and frequently will continue to purchase any additional equipment from the same supplier. There are significant economies of scale related to the use of a single platform in product design, product qualification, manufacturing and support.
- Long-term Commitment of Supplier. We believe thin-film disk manufacturers need disk sputtering equipment providers that are committed to meeting current and future technology requirements and to supporting this equipment throughout its useful life. As a result, thin-film disk manufacturers increasingly demand a supplier with the stability and capability to be a long-term technology partner.

#### **Our Competitive Strengths**

We are the leading provider of sputtering equipment to thin-film disk manufacturers. We believe that our industry leadership is the result of the following key competitive strengths:

• Broad Installed Base with Industry Leading Customers. Our MDP-250 disk sputtering system gained wide acceptance in the thin-film disk manufacturing industry and by the late 1990s was being used in the manufacture of approximately half of the thin-film disks used in hard disk drives worldwide. We believe that there are approximately 90 MDP-250s currently in use in production and research and development applications by customers such as HGST, Komag, Maxtor, Seagate and Showa Denko. We believe the majority of our active customers are now utilizing most of their capacity and that there is significant potential for these customers to both resume adding capacity and to upgrade the technical capability of their installed base to permit production of higher density disks capable of perpendicular recording. During 2003, we have received orders for ten of

our 200 Lean disk sputtering systems, which are currently scheduled to be delivered from late 2003 through the first half of 2004, and delivered our first system in December 2003. We believe this is the first production order from a major hard disk drive manufacturer for a new equipment platform capable of perpendicular recording.

- Technology Leadership with Modular Next Generation Advanced Platform. In 2003, we introduced our latest-generation disk sputtering system, the 200 Lean, which provides significantly enhanced capabilities relative to our installed base of MDP-250 systems. The 200 Lean provides higher throughput from a smaller footprint, which enables more thin-film disks to be manufactured per square-foot of factory. The flexible design of the 200 Lean allows rapid reconfiguration to accommodate product changeovers and new thin-film disk technology. The modular design of the 200 Lean also allows thin-film disk manufacturers to add additional process steps, as advanced thin-film disk technologies, such as perpendicular recording, are introduced.
- Long-Term Commitment to Hard Disk Drive Industry. We have been a hard disk drive equipment provider since 1991. We are one of only two companies that have announced next-generation disk sputtering equipment that can support perpendicular recording. We have continued to develop new technologies and have introduced the 200 Lean disk sputtering system to meet the needs for additional process steps needed to produce thin-film disks capable of perpendicular recording. In addition, our headquarters are strategically located in close proximity to our customers' hard disk drive development centers, and we are expanding our support center in Singapore to provide greater service to our customers' manufacturing facilities located in Southeast Asia.

Based on these competitive strengths, we believe that we are well positioned to maintain and enhance our market leading position in the disk sputtering equipment market.

#### Our Equipment Strategy

We believe we can leverage our leadership position in disk sputtering equipment to increase our sales to thin-film disk manufacturers and apply our technology to new markets. The key elements of our strategy are as follows:

- Become Preferred Solutions Provider in the Thin-Film Disk Industry. Our goal is to become a preferred solutions provider to thin-film disk manufacturers. We believe that our 200 Lean provides our customers with an advanced modular platform that can address their future disk sputtering needs. By working in close partnership with our customers, we believe we are well positioned to provide new manufacturing solutions for other hard disk drive components. We believe we can integrate additional capabilities into the 200 Lean, enabling our customers to eliminate other stand-alone disk manufacturing equipment and reduce thin-film disk production time. We also believe we have an opportunity to develop and supply other equipment related to the manufacture of hard disk drives.
- Deliver Highest Customer Value Proposition. Our goal is to maintain our leadership in advanced disk sputtering equipment by providing equipment with the lowest cost of ownership. The 200 Lean's modular design provides customers the ability to reconfigure their disk manufacturing systems for rapid technology shifts and evolving technology roadmaps.
- Expand Consumables, Spare Parts and Service Offerings. We plan to increase the sale of disk sputtering equipment consumables, spare parts and service in order to increase our revenue opportunity per customer. In addition, growing these offerings will enable us to deepen and enhance our customer relationships. We believe the expected revenue from these offerings will help mitigate the impact of cyclical downturns in the disk sputtering equipment business. We believe that the close proximity of our service center in Singapore to a large number of hard disk drive manufacturers' facilities gives us a competitive advantage.

• Leverage Existing Technology into New Markets. In addition to expansion within our existing customer base, we intend to target other markets where we can apply our expertise in complex manufacturing equipment.

#### **Our Equipment Products**

200 Lean Disk Sputtering System

The 200 Lean is our latest generation disk sputtering system. The 200 Lean provides significantly enhanced capabilities relative to the installed base of approximately 90 MDP-250 systems. The 200 Lean provides higher throughput from a smaller footprint in a flexible modular system, which enables more thin-film disks to be manufactured per square-foot of factory floor space and is designed to lower overall cost of ownership.

#### **Intevac 200 Lean Disk Sputtering System**



The key features of the 200 Lean include:

- Modular Design. The 200 Lean's modular design allows our customers to accommodate any number of thin-film disk manufacturing process steps required by their evolving technology roadmaps. The 200 Lean consists of a front-end robotic module that loads and unloads thin-film disks from the system, combined with any number of four-station process modules. Typical configurations of the 200 Lean have from three to six process modules, which results in systems capable of 12 to 24 process steps. Additional process modules can be easily added to already installed systems. For example, a customer could buy a 12-station 200 Lean to manufacture of longitudinal media and at a later date upgrade the system to a 24-station system to manufacture perpendicular media.
- Easy to Reconfigure. Thin-film disk manufacturers produce many different designs that have short product life cycles, leading to frequent reconfiguration of disk sputtering equipment. The mechanical design and software control system of the 200 Lean allows rapid reconfiguration of systems by our customers. The 200 Lean is also easily reconfigured to process thin-film disks with glass or aluminum substrates of varying diameters and thicknesses.
- *Higher Throughput with Smaller Footprint*. The 200 Lean offers higher throughput (over 700 thin-film disks per hour) and more process stations in a more compact package than our industry-leading MDP-250 system. We believe that the 200 Lean has the highest disk throughput per square foot of factory space for a system capable of manufacturing perpendicular media.
- High Availability. The 200 Lean is designed to operate seven days a week, 24 hours a day with 95% availability.

- Single Disk Processing. The 200 Lean processes each disk sequentially through a series of single-disk process chambers. This eliminates interactions between adjacent process stations, providing a higher level of process control and thin-film uniformity.
- *High-Vacuum Capability*. The 200 Lean operates at ten times the vacuum level of the installed base of MDP-250s. Higher vacuum levels lead to lower contamination and higher coating efficiency, as required to manufacture of advanced media.
- Suite of Process Station Options. The 200 Lean offers a wide range of process stations, providing capabilities such as metal deposition, heating, cooling and carbon overcoating.

MDP-250 Disk Sputtering System

We believe that the MDP-250 is used to manufacture approximately half the thin-film disks used worldwide to manufacture hard disk drives. The MDP-250 has twelve process stations that are separately vacuum pumped and vacuum isolated. The MDP-250 has a number of process station options, including multiple options for the sputtering of thin-films and carbon overcoats, heating stations, cooling stations and cleaning stations. Furthermore, the MDP-250's 12 process stations can be reconfigured to accommodate process changes.

#### **Equipment Business Sales and Marketing**

Our Equipment business sales are made primarily through our direct sales force, although in Japan, we sell our products through a distributor, Matsubo. The selling process for our equipment products is a multi-level and long-term process, involving individuals from marketing, engineering, operations, customer service and senior management. The process involves making samples for the prospective customer and responding to their needs for moderate levels of machine customization. Installing and integrating new equipment requires a substantial investment by a customer. Sales of our systems depend, in significant part, upon the decision of a prospective customer to replace obsolete equipment or to increase manufacturing capacity by upgrading or expanding existing manufacturing facilities or by constructing new manufacturing facilities, all of which typically involve a significant capital commitment. Therefore, customers often require a significant number of product presentations and demonstrations before making a purchasing decision. Accordingly, our systems typically have a lengthy sales cycle, during which we may expend substantial funds and management time and effort with no assurance that a sale will result.

The production of large complex systems requires us to make significant investments in inventory both to fulfill customer orders and to maintain adequate supplies of spare parts to service previously shipped systems. We also maintain an inventory of spare parts at our Singapore subsidiary to support our customers in Singapore and Malaysia. We typically require our customers to pay for systems in three installments, with a portion of the system price billed upon receipt of an order, a portion of the system price billed upon shipment, and the balance of the system price and any sales tax due upon completing installation and acceptance of the system at the customer's factory. All customer product payments are recorded as customer advances pending revenue recognition.

#### **Equipment Business Customers**

Our disk sputtering equipment customers include thin-film disk manufacturers, such as Fuji Electric, Komag, Showa Denko and Trace Storage Technology, and vertically integrated hard disk drive manufacturers, such as HGST, Maxtor and Seagate. The majority of our customers' product development programs are located in the United States. Our customers' manufacturing facilities are located in California, Singapore, Malaysia, Japan and Taiwan. In addition, HGST is developing a new media facility in China.

#### **Equipment Business Customer Support**

We provide process and applications support, customer training, installation, start-up assistance and emergency service support to our equipment customers. Process and applications support is provided by our equipment process engineers, who also visit customers at their plants to assist in process development projects. We conduct training classes for our customers' process engineers, machine operators and machine service personnel. Additional training is also given to our customers during the machine installation. We have a subsidiary in Singapore to support our customers in Southeast Asia.

We generally provide a warranty of at least one year on our equipment. During this warranty period any necessary non-consumable parts are supplied and installed without charge. Our employees provide field service support primarily in the United States, Singapore and Malaysia. In Japan, field service support is provided by our distributor, Matsubo, supplemented by our factory support. We and Matsubo stock consumables and spare parts to support the installed base of systems. These parts are generally available on a 24-hour per day basis.

#### **Equipment Business Competition**

The principal competitive factors affecting the markets for our equipment products include price, product performance and functionality, integration and manageability of products, customer support and service, reputation and reliability. We have historically experienced intense competition worldwide from competitors including Anelva Corporation, Ulvac and Unaxis Holdings, Ltd., each of which has sold substantial numbers of systems worldwide. Anelva, Ulvac and Unaxis all have substantially greater financial, technical, marketing, manufacturing and other resources than we do. Currently Anelva and Intevac are the only companies that are offering products that address the sputtering requirements of advanced perpendicular recording. However, there can be no assurance that any of our competitors will not develop enhancements to, or future generations of, competitive products that offer superior price or performance features or that new competitors will not enter our markets and develop such enhanced products.

Given the lengthy sales cycle and the significant investment required to integrate equipment into the manufacturing process, we believe that once a thin-film disk manufacturer has selected a particular supplier's equipment for a specific application, that manufacturer generally relies upon that supplier's equipment and frequently will continue to purchase any additional equipment for that application from the same supplier. Accordingly, competition for customers in the equipment industry is intense, and suppliers of equipment may offer substantial pricing concessions and incentives to attract new customers or retain existing customers.

#### **Imaging Business**

Our Imaging business develops and manufactures electro-optical sensors, cameras, and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing vision in extreme low light situations.

#### **Imaging Industry Overview**

Imaging is the capture and display of light or heat, which is infrared radiation, emitted or reflected from an object. A segment of the imaging market has evolved into specialized technology for the capture of low light images. Low light imaging involves the capture and display of light at intensities of approximately one millionth, or less of, daytime light levels.

The U.S. military has determined that low light imaging technology that provides superiority in nighttime combat creates a significant strategic advantage. Accordingly, the U.S. military has funded the development of night vision technology, which has evolved through three generations to today's widely deployed "Generation-III" night vision tubes. Typically, Generation-III night vision tubes are placed in front of a user's eyes, like a pair of binoculars, and produce a direct-view, "green glow" image. However,

the military is now funding the development of next generation extreme low light imaging technology that provides digital video output and is more cost-effective and portable.

The commercial sector has taken a different approach to extreme low light imaging than the military. The initial extreme low light cameras for the commercial sector were based on charged coupled device, or CCD, technology, which is able to produce a digital output. CCD technology relies on long exposure times for its sensitivity, and as a result the initial cameras were used for static applications, like astronomy. Other commercial markets, such as metrology, life sciences and industrial process monitoring, adopted CCD technology. However, cameras for these new markets compromised sensitivity for dynamic applications with motion or short measurement times.

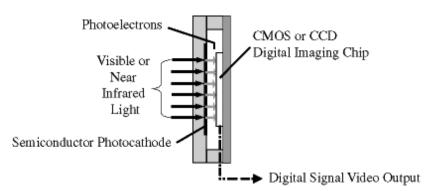
As a result, two distinct forms of low light level imaging have evolved: the Generation-III night vision tube technology developed by the military, which provides direct-view analog imagery; and CCD technology, which can provide digital imagery, but is not well suited to dynamic applications.

#### **Our Imaging Solution**

We have developed imaging technology that combines the low light capability of Generation-III with silicon-based digital video technology that we believe will enable us to provide a family of portable, cost-effective low light sensors and cameras. Our solution integrates three key elements into a compact sensor:

- a semiconductor photocathode, which converts incoming light into electrons,
- · acceleration of those elections into a digital imaging chip, and
- conversion of those electrons into a digital signal.

#### **Our Sensor Technology**



When light photons strike the photocathode, electrons are emitted. High voltage between the photocathode and imaging chip accelerates the electrons across a vacuum gap onto the imaging chip, which then produces an amplified digital signal.

Elements of our proprietary solutions include:

Advanced Photocathode Technology — A photocathode is a semiconductor compound with the ability to convert light into electrons. We are developing a family of photocathodes that are engineered to optimize sensitivity at specific wavelengths ranging from the visible (0.40 microns) to the near infrared (1.65 microns). Our photocathodes have high quantum efficiencies, the efficiency with which incoming light photons are converted to electrons, and are extremely sensitive to incoming light. Some of our detectors, incorporating such photocathodes, can detect incoming light at levels as low as a single photon, which is the ultimate level of sensitivity.

*Use of Low Power CMOS Imaging Chips* — Historically, CCD sensors were the primary technology used in digital imaging. Recently, Complementary Metal Oxide Semiconductor, or CMOS sensors, which are generally lower cost and require less power than comparable CCD sensors, have been developed for consumer imaging applications. CMOS imaging chips are rapidly improving in power consumption, resolution and dynamic range. We have developed proprietary technologies and capabilities to incorporate CMOS sensors into our products to take advantage of these improvements. As a result, we believe we will be able to offer low cost, low power, extreme low light imaging sensors for portable applications in price sensitive markets.

Increased Silicon Sensor Sensitivity — We have developed proprietary technology to enable CMOS and CCD sensors to capture the accelerated electrons emitted from the photocathode more efficiently. Increasing the electron capture efficiency directly increases extreme low light imaging performance.

Compact Ultra-High Vacuum Sensor Packaging — Our compact ultra-high vacuum sensor package enables us to combine a megapixel imaging chip with our photocathodes in a package approximately one inch square and one quarter inch thick. Our proprietary design maintains close spacing between the photocathode and the silicon sensor to further enhance resolution. Our small package is particularly well suited for portable applications where size and weight are critical.

#### Low Light Imaging Market Opportunity

We are designing our imaging solutions to address next generation military requirements and the dynamic applications of the commercial markets. Forecast International estimated the military market for legacy night vision systems and research programs to be \$347 million in 2003.

Military Long Range Target Identification — Current long-range nighttime surveillance systems are based on expensive thermal imaging camera systems, which image the thermal profile of a target. Thermal imaging systems become larger with increased range, which is problematic for aircraft and portable applications. Additionally, these systems only measure emitted heat and as a result produce relatively poor resolution images. Moreover, long range infrared imaging systems deployed by the U.S. military are not significantly superior to infrared imaging systems available to potential adversaries. The rules of engagement for U.S. military forces require positive identification prior to attack. This puts U.S. forces at a disadvantage to adversaries who are willing to attack targets that have been detected, but not positively identified. Accordingly, there is a need for a cost effective, compact, long-range imaging solution for target identification.

Head Mounted Night Vision Systems — Generation-III based night vision goggles, which have excellent extreme low light imaging performance, were widely deployed by the U.S. military for use by soldiers during the 1990's. However, these goggles are relatively large, heavy and lack video output. Additionally, potential adversaries are now deploying Generation-III+ goggles manufactured outside the United States with performance levels approaching that of Generation-III. Accordingly, the U.S. Army has developed a roadmap to maintain extreme low light imaging dominance for the individual soldier. A key element of this roadmap includes a transition from bulky direct-view night vision goggles to a miniature head mounted imaging system, including an extreme low light camera and video display. This approach addresses size and weight issues and enables connectivity to a wireless network for distribution of the imagery and other information. These improvements need to be realized while minimizing the cost of each soldier's system. The U.S. Army plans to begin deployment of this type of system by 2006.

Security Cameras — The world is becoming more security-conscious and increasingly relies on cameras for surveillance. The majority of the security market is served by closed circuit television cameras, which work well when sufficient light is available. However, extreme low light cameras are needed when sufficient light is not available, when it is not economical to provide lighting or when stealth is required. Markets for this capability include surveillance of international borders, airport perimeters, military bases, pipelines and nuclear power plants.

Physical Sciences — Companies in the physical sciences use extreme low light imaging to investigate the chemistry and physics of a wide variety of substances such as foods, medicines, materials and biological compounds. They need high sensitivity and increased speed and resolution to increase the accuracy of their measurements and the productivity of their measurement tools. For example, defects on semiconductor wafers are getting increasingly smaller and require improved measurement accuracy. An example in the pharmaceutical industry is the growing need for near infrared spectrometer imaging to determine the composition of medicines in real time.

Life Sciences — The life sciences market focuses on increasing the understanding of biology at the cellular level to improve health and quality of life. To image single living cells this market needs extreme low light cameras that operate at speeds significantly higher than cameras that are available today. Extreme low light cameras are required, because light can change the cells that are being imaged. High speed cameras are required, because changes happen very rapidly at the cellular level. Medical labs, hospitals and health research institutes also utilize these cameras for applications ranging from routine lab tests to advanced research.

#### **Our Imaging Strategy**

Collaborate with Leading Development Organizations — We collaborate with, and receive significant funding from, leading government research organizations on the development of our extreme low light technology. These organizations strongly influence development and procurement of advanced technologies by the U.S. military. For example, we have collaborated with the U.S. Army Night Vision Labs, the world leader in night vision technology, to facilitate the development and adoption of our night vision technology. We initially developed some of our sensors under a cost sharing agreement with the National Institute of Standards and Technology. More recently, we began working on a program with The Los Alamos National Laboratory to develop three-dimensional sensor technology.

Become Leading Provider of Extreme Low Light Imaging Technology for the Military — We are actively marketing our extreme low light imaging technology to the military. Our technology has been incorporated into weapons development programs such as the Airborne Laser (ABL), the Cost Effective Targeting System (CETS), and the Long-Range Identification System (LRID) programs. Our objective is for our LIVAR technology to become the standard for long-range target identification and for our extreme low light sensors to become the standard for head-mounted displays.

Leverage Proprietary Sensor Technology to Address Emerging Commercial Markets — We are using our extreme low light imaging expertise to develop products for commercial markets. For example, in 2003 we completed development of our NightVista camera to address the security market. We believe the modular design of our NightVista platform, coupled with our use of standard silicon chips in our configurable sensors, will help to decrease our development time and cost to enter the physical and life sciences markets.

Lower Manufacturing Costs — The market for our cameras and sensors is price elastic, and low cost manufacturing will be critical to the rapid proliferation of our products. Our use of commercially available sensors and development of wafer die level manufacturing, as opposed to single die level manufacturing, are elements of our strategy to reduce product cost. Additionally, we have developed proprietary ultra-high vacuum assembly equipment to automate the assembly of the photocathode and the imaging chip. In developing this system, we utilized our expertise in the design and manufacture of complex, high throughput production equipment. This system is designed to decrease unit costs by increasing throughput and improving process controls and yields.

Build Relationships with Strategic Sales Partners to Accelerate Access to End Markets — We are focusing on the development and manufacture of extreme low light sensors and cameras. Our products are designed to be enabling technology for larger systems. As a result, we are developing relationships with leading systems manufacturers such as Boeing, Lockheed Martin Corporation and Northrop Grumman Corporation, in the military market, to provide us with the scale and scope necessary to become a leading provider of imaging solutions in our target markets.

#### **Our Imaging Products**

LIVAR Camera and System Products — Our Laser Illuminated Viewing and Ranging, or LIVAR, target identification system consists of a near infrared extreme low light camera integrated with an eye-safe laser illuminator. LIVAR uses a laser to illuminate a target and a camera to capture the reflected light and display an image. Currently the military uses systems such as forward-looking infrared systems and radar to detect targets. While these systems can detect targets at relatively long ranges, the resolution is relatively poor, and positive identification is often difficult or impossible. Our LIVAR system is designed to identify targets initially detected by forward-looking infrared or radar technology. Depending on the application, LIVAR can be used to identify targets at distances of up to 20 kilometers. We anticipate offering our LIVAR cameras and systems at prices that range from approximately \$50,000 to \$400,000. We do not expect significant revenues from deployment of LIVAR systems until 2006.

#### Current LIVAR programs and products include:

Cost Effective Targeting System — We are working under subcontract to DRS Sensor Systems to develop a LIVAR system for use on an unmanned surveillance vehicle being developed for the U.S. Army.

Airborne Laser — LIVAR cameras are an enabling technology for the laser targeting in Lockheed Martin's Airborne Laser program, in which a jumbo jet will use high-powered lasers to destroy ballistic missiles in flight.

Classified Program — The first weapons platform slated for deployment of LIVAR is nearing the end of its product development. We expect prototypes to be fielded in 2004 and volume production to follow approximately two years later.

*SALSA Program* — In the Systems for Airborne Laser Sensing and Analysis, or SALSA, program, we are working with the Air Force Research Laboratory and Kirkland Air Force Base to develop wafer level manufacturing to enable lower cost LIVAR sensors.

Long Range Identification — We are working with Northrop Grumman to integrate a LIVAR camera into an existing laser illuminator used by Special Operations Forces to designate targets for laser-guided bombs. The integration of LIVAR into this system is designed to allow the Special Operations Forces to complete their missions at much longer range from the target.

LIVAR 2200 Portable System — The LIVAR 2200 is a prototype portable target identification system we developed for military use.

LIVAR 120 Camera — The model 120 is a standalone LIVAR camera that we sell to developers of long-range imaging systems.

NightVista Cameras — The NightVista camera is an extreme low light CMOS-based day/night video camera for security applications that currently offers up to 1.3 mega-pixel resolution. Its camera body is small enough to fit into a two-inch cube, and its power consumption is less than 1500 milliwatts. As a result the NightVista is well suited for portable battery-powered applications. The NightVista outputs digital video in several standard formats and is easily integrated with other digital technologies. The NightVista reprocesses and optimizes extreme low light images and is configurable to end user requirements. We offer the NightVista at a list price of \$5,000, less than the price of a Generation-III based security camera. We expect volume production to commence in 2004.

Our Imaging business generally invoices its research and development customers either as costs are incurred, or as program milestones are achieved, depending upon the particular contract terms. As a government contractor, we invoice customers using estimated annual rates approved by the Defense Contracts Audit Agency ("DCAA"). A majority of our contracts are Cost Plus Fixed Fee ("CPFF") contracts. On any CPFF contract, 15% of the fee is withheld pending completion of the program and DCAA's annual audit of our actual rates. The withheld portion of the fee is included in accounts receivable until paid.

#### **Our Imaging Competition**

The principal competitive factors affecting our products include price, extreme low light sensitivity, signal to noise ratio, power consumption, resolution, size, integratability, reliability, reputation and customer support and service. We face substantial competition for our imaging products and many of our competitors have greater resources than we do.

In the military market, ITT Industries and Northrop Grumman, who are large and well-established defense contractors, are the primary U.S. manufacturers of image intensifier tubes used in Generation-III night vision devices and their derivative products. Our extreme low light cameras are intended to displace Generation-III night vision based products and we expect that ITT and Northrop Grumman will continue to enhance the performance of their products and aggressively promote their sales. Furthermore, CMC Electronics, DRS, FLIR Systems and Raytheon manufacture cooled infrared sensors and cameras which are presently used in long-range target identification systems, with which our LIVAR target identification sensors and cameras compete.

In the security market, we face competition from companies such as ElectroPhysics, ITT and Texas Instruments. These competitors' products are based on image intensifier tubes manufactured by ITT and Northrop Grumman and by foreign suppliers. Electron multiplying CCDs manufactured by Texas Instruments and E2V also are used in cameras that compete with our low light level security products. In the physical and life sciences market, companies such as Andor, E2V, Hamamatsu and Roper Scientific offer competitive products. In the security product area, competitive products to our NightVista camera based on electron multiplying CCDs and image intensifier tubes are offered by a number of companies.

#### Manufacturing

We conduct all of our Equipment business manufacturing at our facility in Santa Clara, California. Our equipment manufacturing operations include electromechanical assembly, mechanical and vacuum assembly, fabrication of sputter sources, and system assembly, alignment and testing. We make extensive use of the local supplier infrastructure serving the semiconductor equipment business. We purchase vacuum pumps, valves, instrumentation and fittings, power supplies, printed wiring board assemblies, computers and control circuitry, and custom mechanical parts made by forging, machining and welding. We also have our own small fabrication center that supports our engineering departments and makes some of the machined parts used in our products.

Our Imaging business manufacturing includes the manufacture of advanced photocathodes and sensors, lasers, cameras and integrated camera systems. We make extensive use of advanced manufacturing techniques and equipment, and our operations include vacuum, electromechanical and optical system assembly. As with our Equipment business, we make use of the supplier infrastructure serving the semiconductor, camera and optics manufacturing industries for our Imaging business. In manufacturing our sensors, we purchase wafers, components, processing supplies and chemicals. In manufacturing our camera systems, we purchase printed circuit boards, electromechanical components and assemblies, mechanical components and enclosures, optical components and computers.

#### **Intellectual Property**

We currently hold 28 patents issued in the United States and 34 patents issued in foreign countries, and have patent applications pending in the United States and foreign countries. Of the 28 U.S. patents, 15 relate to disk and flat panel equipment, and 13 relate to our Imaging business. Of the foreign patents, 13 relate to disk equipment and flat panel equipment, and 21 relate to our Imaging business. In addition, we have the right to utilize certain patents under licensing arrangements with Litton Industries, Stanford University and Alum Rock Technology. We hold substantial trade secrets in the imaging area related to photocathode fabrication and processing and to silicon chip packaging for vacuum compatibility and high electron sensitivity. We also have significant process integration intellectual property related to vacuum packaging of a photocathode and a silicon semiconductor chip.

We have executed a strategy to protect our intellectual property investment by using internal company funds for development of new concepts and inventions. This minimizes customer ownership of new

intellectual property that we develop. This is particularly important due to the large amount of government-funded research and development in our Imaging business.

#### **Customer Concentration**

Historically, a significant portion of our revenue in any particular period has been attributable to sales to a limited number of customers. In 2002, Seagate, Toppoly and the U.S. Army Communications-Electronics Command each accounted for more than 10% of our revenues, and in aggregate accounted for 74% of revenues. In 2001, equipment sales through Matsubo, our Japanese distributor, accounted for 49% of revenues. In 2000, MMC Technology, Matsubo, Seagate and Westt each accounted for more than 10% of our revenues, and in aggregate accounted for 56% of revenues. Our largest customers change from period to period, and it is expected that sales of our products to relatively few customers will continue to account for a high percentage of our revenues in the foreseeable future.

Foreign sales accounted for 52% of revenues in 2002, 73% of revenues in 2001, and 27% of revenues in 2000. The majority of our foreign sales are to companies in the Far East, and we anticipate that sales to customers in the Far East will continue to be a significant portion of our equipment revenues.

#### **Employees**

At September 27, 2003, we had 164 employees, including 23 contract employees. Of these 80 employees were in research and development, 48 in manufacturing, and 36 in administration, customer support and marketing. Of the 164 employees, 92 were in the Equipment business, 48 were in the Imaging business, and 24 were in corporate.

#### **Compliance with Environmental Regulations**

We are subject to a variety of governmental regulations relating to the use, storage, discharge, handling, emission, generation, manufacture, treatment and disposal of toxic or otherwise hazardous substances, chemicals, materials or waste. We treat the cost of complying with government regulations and operating a safe workplace as a normal cost of business and allocate the cost of these activities to all functions, except where the cost of those activities can be isolated and charged to a specific function. The environmental standards and regulations promulgated by government agencies in Santa Clara, California are rigorous and set a high standard of compliance. We believe our costs of compliance with these regulations and standards are comparable to other companies operating similar facilities in Santa Clara, California.

#### **Legal Proceedings**

From time to time we are involved in litigation incidental to the conduct of our business. We are not party to any lawsuit or proceeding that, in our opinion, is likely to seriously harm our business.

#### **Properties**

We lease a 119,583 square foot facility in Santa Clara, California. The two-story facility includes offices, manufacturing, engineering labs and clean rooms. All of our operations, with the exception of our Singapore customer support office, are housed at the Santa Clara facility. The lease for the Santa Clara facility expires in March 2007. We have an option to extend the lease for an additional five-year period, with a monthly base rent to be negotiated between us and the lessor. If we and the lessor are unable to reach agreement with respect to that monthly base rent, an appraisal process set forth in the lease will determine the monthly base rent for the extension. We also lease a facility of approximately 2,400 square feet in Singapore to house the Singapore customer support organization. This lease expires in December 2003. Although we believe that our current facilities are suitable and adequate for our current operations, we plan to acquire additional sensor fabrication facilities and larger facilities in Singapore. We operate with one full manufacturing shift and one partial manufacturing shift. We believe that we have sufficient productive capacity to meet our current needs.

#### MANAGEMENT

#### **Executive Officers and Directors**

Our executive officers and directors, and their ages and positions, as of December 31, 2003 are as follows:

Name	Age	Position
Norman H. Pond	65	Chairman of the Board
Kevin Fairbairn	50	President, Chief Executive Officer and Director
Verle Aebi	49	President of Photonics Technology Division
Charles B. Eddy III	53	Vice President, Finance and Administration, Chief Financial
•		Officer, Treasurer and Secretary
David Dury	55	Director
David N. Lambeth	56	Director
Robert Lemos	62	Director
Arthur L. Money	63	Director

*Mr. Pond* is a founder of Intevac and has served as Chairman of the Board since February 1991. Mr. Pond served as President and Chief Executive Officer from February 1991 until July 2000 and again from September 2001 through January 2002. Mr. Pond holds a BS in physics from the University of Missouri at Rolla and an MS in physics from the University of California at Los Angeles.

*Mr. Fairbairn* joined Intevac as President and Chief Executive Officer in January 2002 and was appointed a director in February 2002. Before joining Intevac, Mr. Fairbairn was employed by Applied Materials from July 1985 to January 2002, most recently as Vice-President and General Manager of the Conductor Etch Organization with responsibility for the Silicon and Metal Etch Divisions. From 1996 to 1999, Mr. Fairbairn was General Manager of Applied's Plasma Enhanced Chemical Vapor Deposition Business Unit and from 1993 to 1996, he was General Manager of Applied's Plasma Silane CVD Product Business Unit. Mr. Fairbairn holds an MA in Engineering Sciences from Cambridge University.

*Mr. Aebi* has served as President of the Photonics Division since July 2000. Mr. Aebi served as General Manager of the Photonics Division since May 1995 and was elected as a Vice President of the Company in September 1995. From 1988 through 1994, Mr. Aebi was the Engineering Manager of our night vision business, where he was responsible for new product development in the areas of advanced photocathodes and image intensifiers. Mr. Aebi holds a BS in physics and an MS in electrical engineering from Stanford University.

*Mr. Eddy* has served as Vice President, Finance and Administration, Chief Financial Officer, Treasurer and Secretary of Intevac since April 1991. Mr. Eddy holds a BS in engineering science from the University of Virginia and an MBA from Dartmouth College.

*Mr. Dury* has served as a director of Intevac since July 2002. Mr. Dury is a co-founder of Mentor Capital Group, a venture capital firm. From 1996 to 2000, Mr. Dury served as Senior Vice-President and Chief Financial Officer of Aspect Development, a software development firm. Mr. Dury holds a BA in psychology from Duke University and an MBA from Cornell University. He is also a director of Phoenix Technologies Ltd.

*Dr. Lambeth* has served as a director of Intevac since May 1996. Dr. Lambeth has been Professor of both Electrical and Computer Engineering and Material Science Engineering at Carnegie Mellon University since 1989. Dr. Lambeth was Associate Director of the Data Storage Systems at Carnegie Mellon University from 1989 to 1999. Since 1988, Dr. Lambeth has been the owner of Lambeth Systems, an engineering consulting and research firm. Dr. Lambeth holds a BS in electrical engineering from the University of Missouri and a Ph.D. in physics from the Massachusetts Institute of Technology.

*Mr. Lemos* has served as a director of Intevac since August 2002. Mr. Lemos retired from Varian Associates, Inc. in 1999 after 23 years, including serving as Vice-President and Chief Financial Officer from 1988 to 1999. Mr. Lemos has a BS in Business from the University of San Francisco, a JD in law from Hastings College and an LLM in law from New York University.

*Mr. Money* has served as a director of Intevac since October 2003. Mr. Money served as the Assistant Secretary of Defense for Command, Control, Communication and Intelligence (C3I) from October 1999 to April 2001. Prior to his Senate confirmation in that role, he was the Senior Civilian Official, Office of the ASD (C3I) from February 1998. Mr. Money also served as the Chief Information Officer for the Department of Defense from 1998 to 2001. From 1996 to 1998, he served as Assistant Secretary of the Air Force for Research, Development and Acquisition. Prior to his government service, Mr. Money held senior management positions with ESL Inc., a subsidiary of TRW, and the TRW Avionics and Surveillance Group. He is also a director of CACI International, Essex Corporation, Intelli-Check, Rainbow Technologies, Inc., Silicon Graphics, Inc. and Terremark Worldwide, Inc. Mr. Money holds an MS in Mechanical Engineering from the University of Santa Clara and a BS in Mechanical Engineering from San Jose State University.

#### PRINCIPAL AND SELLING SHAREHOLDERS

The following table sets forth certain information known to us regarding the ownership of our common stock as of December 31, 2003, and as adjusted to reflect the sale of 4,000,000 shares of common stock in the offering by Intevac and the selling shareholder, by each of our directors and by our Chief Executive Officer and each of our three other executive officers; our directors and executive officers as a group; and each person or group known by us to own beneficially more than 5% of our outstanding common stock based upon a review of our internal records or filings made pursuant to Sections 13(d), 13(f) and 13(g) with the Securities and Exchange Commission. Except as otherwise noted, the address of each person listed on the following table is c/o Intevac, Inc., 3560 Bassett Street, Santa Clara, CA 95054.

Shares Beneficially  Owned Before Offering (1)  N		Number of Shares	Shares Beneficially Owned After Offering (1)(2)		
Name and Address of Beneficial Owner			Number	Percent	
Redemco, LLC <sup>(4)</sup> 395 Mill Creek Circle Vail, CO 81657	3,255,969	19.2%	_	3,255,969	16.7%
Foster City LLC <sup>(4)(5)</sup> 395 Mill Creek Circle Vail, CO 81657	2,344,031	13.8%	1,500,000	844,031	4.3%
Zazove Associates, LLC 944 Southwood Incline Village, NV 89451	1,457,384	8.6%	_	1,457,384	7.5%
Norman H. Pond <sup>(6)</sup>	1,060,575	6.2%	_	1,060,575	5.4%
Kern Capital Management, LLC <sup>(7)</sup> 114 West 47 <sup>th</sup> Street, Suite 1926 New York, NY 10036	977,900	5.8%	_	977,900	5.0%
State of Wisconsin Investment Board P.O. Box 7842 Madison, WI 53707	947,100	5.6%	_	947,100	4.9%
Royce & Associates LLC 1414 Avenue of the Americas New York, NY 10019	865,300	5.1%	_	865,300	4.4%
Kevin Fairbairn (8)	117,916	*	_	117,916	*
Charles B. Eddy <sup>(9)</sup>	138,353	*	_	138,353	*
Verle Aebi (10)	78,997	*	_	78,997	*
David S. Dury (11)	35,000	*	_	35,000	*
David N. Lambeth <sup>(12)</sup>	55,000	*	_	55,000	*
Robert Lemos (13)	38,000	*	_	38,000	*
Arthur L. Money <sup>(14)</sup> All directors and executive officers as a	30,000	*	_	30,000	*
group (8 persons) (15)	1,553,841	8.9%	_	1,553,841	7.8%

<sup>\*</sup> Less than 1%

<sup>(1)</sup> Except as indicated in the footnotes to this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock. The number of shares beneficially owned includes common stock of which such individual has the right to acquire beneficial ownership either currently or within 60 days after December 31, 2003, such as upon the exercise of an option.

<sup>(2)</sup> Assumes no exercise of the underwriters' over-allotment option.

- (3) Percentage of beneficial ownership is based upon 16,953,464 shares of common stock that were outstanding December 31, 2003. For each individual, this percentage includes common stock of which such individual has the right to acquire beneficial ownership either currently or within 60 days of December 31, 2003, including, but not limited to, upon the exercise of an option or conversion of convertible debt; however, such common stock is not considered outstanding for the purpose of computing the percentage owned by any other individual as required by Rule 13d-3(d)(1)(i) under the Securities Exchange Act of 1934.
- (4) H. J. Smead was a director of Intevac and a managing member of Redemco, LLC and Foster City LLC until his death in December 2003. Redemco and Foster City, along with H. J. Smead and Edward Durbin, have filed Schedule 13D's as a "group" as that term is used in Schedule 13(d)(3) of the Exchange Act.
- (5) Foster City LLC has granted the underwriters an option to purchase up to an additional 600,000 shares of common stock to cover overallotment options. If that option is exercised in full, Foster City LLC will hold 244,031 shares, or 1.3% of the outstanding shares, after the offering.
- (6) Includes 776,528 shares held by the Norman Hugh Pond and Natalie Pond Trust DTD 12/23/80; 182,357 shares held by the Pond 1996 Charitable Remainder Unitrust, both of whose trustees are Norman Hugh Pond and Natalie Pond; options exercisable for 63,333 shares of common stock outstanding under the 1995 Stock option/ Stock Issuance Plan (the "1995 Option Plan").
- (7) Includes 977,900 shares over which Robert E. Kern, Jr. and David G. Kern share voting power and 160,000 shares over which Redpoint Partners LP share voting power.
- (8) Includes options exercisable for 104,166 shares of common stock under the 1995 Option Plan.
- (9) Includes 83,155 shares held by the Eddy Family Trust DTD 02/09/00, whose trustees are Charles Brown Eddy III and Melissa White Eddy and options exercisable for 48,433 shares of common stock under the 1995 Option Plan.
- (10) Includes options exercisable for 42,666 shares of common stock under the 1995 Option Plan.
- (11) Includes options exercisable for 35,000 shares of common stock under the 1995 Option Plan.
- (12) Includes options exercisable for 55,000 shares of common stock under the 1995 Option Plan.
- (13) Includes options exercisable for 35,000 shares of common stock under the 1995 Option Plan.
- (14) Includes options exercisable for 30,000 shares of common stock under the 1995 Option Plan.
- (15) Includes options exercisable for 413,598 shares of common stock under the 1995 Option Plan.

#### **UNDERWRITING**

#### General

We and the selling shareholder intend to enter into an underwriting agreement with the underwriters named below on the terms described below. The underwriters' obligations are several, which means that each underwriter is required to purchase a specific number of shares, but is not responsible for the commitment of any other underwriter to purchase shares. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us and the selling shareholder the number of shares of common stock set forth opposite its name below:

Underwriters	Number of Shares
Needham & Company, Inc. Piper Jaffray & Co. Thomas Weisel Partners LLC	
Total	_

The underwriting agreement provides that the obligations of the underwriters to purchase the shares of common stock offered hereby are subject to certain conditions precedent and that the underwriters will purchase all shares of the common stock offered hereby, other than those covered by the over-allotment option described above, if any of these shares are purchased.

The underwriters are offering the shares of our common stock, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

#### **Over-Allotment Option**

The selling shareholder has granted to the underwriters an option to purchase up to 600,000 additional shares of common stock at the public offering price per share, less the underwriting discount, set forth on the cover page of this prospectus. This option is exercisable during the 30-day period after the date of this prospectus. The underwriters may exercise this option only to cover over-allotments, which are discussed below, made in connection with this offering. If the underwriters exercise this option, each of the underwriters will be obligated to purchase approximately the same percentage of the additional shares as the number of shares of common stock to be purchased by that underwriter, as shown in the table above, bears to the total number of shares shown.

#### Commissions and Discounts

The underwriters have advised us and the selling shareholder that the underwriters propose to offer the shares of common stock to the public at the public offering price per share set forth on the cover page of this prospectus. The underwriters may offer shares to securities dealers, who may include the underwriters, at that public offering price less a concession of up to \$ per share. The underwriters may allow, and these dealers may re-allow, a concession to other securities dealers of up to \$ per share. After the offering to the public, the underwriters may change the offering price and other selling terms.

The underwriting discount is equal to the public offering price per share of common stock less the amount paid by the underwriters to us and the selling stockholder per share of common stock. The underwriting discount is currently expected to be % of the public offering price. The following table shows the per share and total underwriting discount to be paid to the underwriters by us and the selling

shareholder. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Sha	Per Share		nl .
	Without Over- Allotment	With Over- Allotment	Without Over- Allotment	With Over- Allotment
Paid by Intevac, Inc. Paid by the Selling Shareholder	\$	\$	\$	\$

#### **Indemnification of Underwriters**

The underwriting agreement provides that we and the selling shareholder will indemnify the underwriters against certain liabilities that may be incurred in connection with this offering, including liabilities under the Securities Act, or to contribute to payments that the underwriters may be required to make in respect thereof.

#### No Sales of Similar Securities

We have agreed not to offer, sell, contract to sell, grant options to purchase, or otherwise dispose of any shares of our common stock or securities exchangeable for or convertible into our common stock for a period of 90 days after the date of this prospectus without the prior written consent of Needham & Company, Inc. This agreement does not apply to the issuance of additional options or shares under any existing employee benefit plans. Our directors, officers and our shareholders who hold more than 10% of our outstanding common stock have agreed, subject to certain exceptions, not to, directly or indirectly, sell, hedge, or otherwise dispose of any shares of common stock, options to acquire shares of common stock or securities exchangeable for or convertible into shares of common stock, for a period of 180 days after the date of this prospectus without the prior written consent of Needham & Company, Inc. Needham & Company, Inc. may, in its sole discretion and at any time without notice, release all or any portion of the securities subject to these lock-up agreements.

#### **Nasdaq National Market Listing**

Our common stock is quoted on The Nasdaq National Market under the symbol "IVAC."

#### **Discretionary Accounts**

The underwriters do not expect sales of shares of common stock offered by this prospectus to any accounts over which they exercise discretionary authority to exceed five percent of the shares offered.

#### Short Sales, Stabilizing Transactions and Penalty Bids

In connection with this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock, in accordance with Regulation M under the Securities Exchange Act of 1934. Specifically, the underwriters may over-allot shares of our common stock in connection with this offering by selling more shares than are set forth on the cover page of this prospectus. This creates a short position in our common stock for their own account. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase under the over-allotment option. To close out a short position, the underwriters may bid for, and purchase, common stock in the open market. The underwriters may also elect to reduce any short position by exercising all or part of the over-allotment option. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. A naked short position is created if the underwriters sell more shares than could be covered by the over-allotment option. The underwriters must close out any naked short positions by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that

there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase shares in the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter or dealer repays selling concessions allowed to it for distributing our common stock in this offering because the underwriters repurchase that stock in stabilizing or short covering transactions.

Finally, the underwriters and selling group members, if any, or their affiliates may engage in passive market making transactions in our common stock on The Nasdaq National Market immediately prior to the commencement of sales in this offering, in accordance with Rule 103 of Regulation M under the Securities Exchange Act of 1934. Rule 103 generally provides that:

- a passive market maker may not effect transactions or display bids for our common stock in excess of the highest independent bid price by persons who are not passive market makers;
- net purchases by a passive market maker on each day are generally limited to 30% of the passive market maker's average daily trading volume in our common stock during a specified two-month prior period or 200 shares, whichever is greater, and must be discontinued when that limit is reached; and
- passive market making bids must be identified as such.

Any of these activities may stabilize or maintain the market price of our common stock at a price that is higher than the price that might otherwise exist in the absence of these activities or may prevent or retard a decline in the market price of our stock. The underwriters are not required to engage in these activities, and may discontinue any of these activities at any time without notice. These transactions may be effected on The Nasdaq National Market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters make any representation that the underwriters will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

#### **LEGAL MATTERS**

The validity of the shares of common stock offered by this prospectus will be passed upon for us and the selling shareholder by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Certain legal matters in connection with this offering will be passed upon for the underwriters by Gray Cary Ware & Freidenrich LLP.

#### **EXPERTS**

The consolidated financial statements as of December 31, 2001 and 2002 and for each of the years in the three-year period ended December 31, 2002 included in this prospectus have been so included in reliance on the report of Grant Thornton LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

#### WHERE YOU CAN FIND MORE INFORMATION

• GOVERNMENT FILINGS. We file annual, quarterly and special reports and other information with the Securities and Exchange Commission. You may read and copy any document that we file at the SEC's public reference rooms at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to you free of charge at the SEC's web site at http://www.sec.gov.

• STOCK MARKET. Our common stock is traded on the Nasdaq National Market. Material that we file with Nasdaq can be inspected at the offices of the National Association of Securities Dealers, Inc., Reports Section, 1735 K Street, N.W., Washington, D.C. 20006.

#### INCORPORATION BY REFERENCE

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

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2002;
- Our Quarterly Report on Form 10-Q for the quarter ended March 29, 2003;
- Our Quarterly Report on Form 10-Q for the quarter ended June 28, 2003;
- Our Quarterly Report on Form 10-Q for the quarter ended September 27, 2003;
- Our Current Report on Form 8-K filed on December 23, 2003; and
- The description of our common stock contained in the our Registration Statement on Form 8-A dated October 5, 1995, filed with the Commission pursuant to Section 12(g) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

Any statement contained in a document that is incorporated by reference is modified or superseded for all purposes to the extent that a statement contained in this prospectus (or in any other document that is subsequently filed with the Commission and incorporated by reference) modifies or is contrary to that previous statement. Any statement so modified or superseded is not deemed a part of this prospectus, except as so modified or superseded.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address: Investor Relations, Intevac, Inc., 3560 Bassett Street, Santa Clara, California 95054, (408) 986-9888.

### INDEX TO FINANCIAL STATEMENTS

# CONDENSED CONSOLIDATED BALANCE SHEETS (In thousands)

	September 27, 2003	December 31, 2002
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 21,148	\$28,457
Accounts receivable, net of allowances of \$59 and \$269 at September 27,		
2003 and December 21, 2002, respectively	6,529	4,991
Income taxes recoverable	_	214
Inventories	9,864	15,871
Prepaid expenses and other current assets	607	961
Total current assets	38,148	50,494
Property, plant and equipment, net	6,281	6,793
Investment in 601 California Avenue LLC	2,431	2,431
Debt issuance costs and other long-term assets	506	580
Total assets	\$ 47,366	\$60,298
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Convertible notes	\$ 1,025	\$ —
Accounts payable	3,006	1,739
Accounts payable Accrued payroll and related liabilities	1,488	1,379
Other accrued liabilities	3,244	3,723
Customer advances	9,552	12,344
Customer advances	9,332	12,544
Total current liabilities	18,315	19,185
Convertible notes	29,542	30,568
Shareholders' equity (deficit):	,	,
Common stock, no par value	20,034	19,389
Accumulated other comprehensive income	210	189
Accumulated deficit	(20,735)	(9,033)
Total shareholders' equity (deficit)	(491)	10,545
1 / /		
Total liabilities and shareholders' equity (deficit)	\$ 47,366	\$60,298

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (In thousands, except per share amounts) (Unaudited)

	Three Mo	Three Months Ended		<b>Nine Months Ended</b>		
	Sept. 27, 2003	Sept. 28, 2002	Sept. 27, 2003	Sept. 28, 2002		
Net revenues:						
Systems and components Technology development	\$ 5,037 2,579	\$ 4,948 1,789	\$ 18,278 5,940	\$ 16,790 5,002		
Total net revenues	7,616	6,737	24,218	21,792		
Cost of net revenues:						
Systems and components	2,713	4,002	13,745	12,630		
Technology development	1,813	1,419	4,372	4,176		
Inventory provisions	210	(26)	942	678		
Total cost of net revenues	4,736	5,395	19,059	17,484		
Gross profit	2,880	1,342	5,159	4,308		
Operating expenses:	2,000	1,542	3,137	7,500		
Research and development	3,173	2,285	8,916	8,391		
Selling, general and administrative	2,216	1,976	6,287	5,522		
bennig, general and administrative				3,322		
Total operating expenses	5,389	4,261	15,203	13,913		
Operating loss	(2,509)	(2,919)	(10.044)	(9,605)		
Interest expense	(522)	(1,117)	(1,547)	(2,445)		
Interest income and other, net	132	194	(111)	549		
Loss before income taxes	(2,899)	(3,842)	(11,702)	(11,501)		
Benefit from income taxes	_	_	_	(6,369)		
Net income (loss)	\$ (2,899)	\$ (3,842)	\$(11,702)	\$ (5,132)		
Tet meome (1888)	Φ(2,033)	Ψ (5,612)	Φ(11,702)	Ψ (3,132)		
Other comprehensive income (loss):						
Foreign currency translation adjustment	17	(4)	21	16		
Total comprehensive income (loss)	\$ (2,882)	\$ (3,846)	\$(11,681)	\$ (5,116)		
Basic earnings per share:						
Net income (loss)	\$ (0.24)	\$ (0.32)	\$ (0.96)	\$ (0.42)		
Shares used in per share amounts	12,266	12,093	12,206	12,065		
Diluted earnings per share:						
Net income (loss)	\$ (0.24)	\$ (0.32)	\$ (0.96)	\$ (0.42)		
Shares used in per share amounts	12,266	12,093	12,206	12,065		

# CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands) (Unaudited)

	Nine Mont	hs Ended
	Sept. 27, 2003	Sept. 28, 2002
Operating activities		
Net loss	\$(11,702)	\$ (5,132)
Adjustments to reconcile net loss to net cash and cash equivalents provided by (used in) operating activities:		
Depreciation and amortization	1,508	2,849
Inventory provisions	942	678
Compensation expense in the form of common stock	_	4
Foreign currency (gain)/loss	_	1
Loss on disposal of equipment	644	_
Changes in operating assets and liabilities	2,607	6,055
Total adjustments	5,701	9,587
Net cash and cash equivalents provided by (used in) operating activities  Investing activities	(6,001)	4,455
Purchase of leasehold improvements and equipment	(1,951)	(1,123)
Net cash and cash equivalents used in investing activities  Financing activities	(1,951)	(1,123)
Proceeds from issuance of common stock	644	273
Exchange of Intevac convertible notes due 2004.	_	(7,483)
Net cash and cash equivalents provided by (used in) financing activities	644	(7,210)
Effect of exchange rate changes on cash	(1)	16
Net decrease in cash and cash equivalents	(7,309)	(3,862)
Cash and cash equivalents at beginning of period	28,457	18,157
Cash and cash equivalents at end of period	\$ 21,148	\$14,295
Supplemental Schedule of Cash Flow Information		
Cash paid (received) for:		
Interest	\$ 1,987	\$ 2,381
Income tax refund	(214)	(6,369)

#### NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Business Activities and Basis of Presentation

Intevac, Inc.'s businesses are the design, manufacture and sale of complex capital equipment used to manufacture products such as thin-film disks and flat panel displays (the "Equipment Products Division"), the development of highly sensitive electro-optical devices and systems for the US military and its allies (the "Photonics Technology Division") and the design, manufacture and sale of commercial products based on technology developed by the Photonics Technology Division (the "Commercial Imaging Division").

Systems sold by the Equipment Products Division are used to deposit highly engineered thin-films of material on a substrate. These systems generally utilize proprietary manufacturing techniques and processes, operate under high levels of vacuum, are designed for high-volume continuous operation and use precision robotics, computerized controls and complex software programs to fully automate and control the production process. Products manufactured with these systems include disks for computer hard disk drives and flat panel displays for use in consumer electronics products.

The Photonics Technology Division ("PTD") is developing electro-optical sensors and cameras that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum. This development work is aimed at creating new products for both military and industrial applications. Products include Laser Illuminated Viewing and Ranging ("LIVAR®") systems for positive target identification at long range and low-cost extreme low light level cameras for use in military applications.

The Commercial Imaging Division ("CID") was formed in July 2002 with the charter of developing products based on PTD technology for sale to commercial markets. CID is currently developing products for the surveillance, scientific and medical markets.

The financial information at September 27, 2003 and for the three- and nine-month periods ended September 27, 2003 and September 28, 2002 is unaudited, but includes all adjustments (consisting only of normal recurring accruals) that Intevac considers necessary for a fair presentation of the financial information set forth herein, in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information, the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, it does not include all of the information and footnotes required by U.S. GAAP for annual financial statements. For further information, refer to the Consolidated Financial Statements and footnotes thereto included in Intevac's Annual Report on Form 10-K for the fiscal year ended December 31, 2002.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenue and expenses during the reporting period. Actual results inevitably will differ from those estimates, and such differences may be material to the financial statements.

On January 1, 2003, in order to better conform its revenue recognition policies to those commonly used in the equipment industry, Intevac changed its revenue recognition policy for system orders received after December 31, 2002.

Intervac evaluates the collectibility of trade receivables on an ongoing basis and provides reserves against potential losses when collectibility is not reasonably assured.

The results for the three- and nine-month periods ended September 27, 2003 are not considered indicative of the results to be expected for any future period or for the entire year.

#### NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

#### 2. Inventories

The components of inventory consist of the following:

	September 27, 2003	2002
		(In thousands)
Raw materials	\$3,135	\$ 3,329
Work-in-progress	3,507	2,628
Finished goods	3,222	9,914
	\$9,864	\$15,871

Finished goods inventory consists solely of completed units, generally at customer sites, undergoing installation or acceptance testing.

Inventory reserves included in the above numbers were \$10.9 million and \$9.6 million at September 27, 2003 and December 31, 2002, respectively. Each quarter, we analyze our inventory (raw materials, WIP and finished goods) against the forecast demand for the next 12 months. Parts with no forecast requirements are considered excess and inventory provisions are established to write those parts down to zero net book value. During this process, some inventory is identified as having no future use or value to us and is disposed of against the reserves. During the nine months ended September 27, 2003, \$0.9 million was added to inventory reserves based on the quarterly analysis and \$74,000 of inventory was disposed of and charged to the reserve.

#### 3. Employee Stock Plans

At September 27, 2003, Intevac had two stock-based employee compensation plans. We account for those plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees", and related Interpretations. No stock-based employee compensation cost is reflected in net income, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. Intevac does not have any plans to adopt the fair value requirements of SFAS 123 for recognition purposes.

The following table illustrates the effects on net income (loss) and earnings (loss) per share if Intevac had applied the fair value-recognition provisions of FASB Statement No. 123, "Accounting for Stock-Based Compensation", to stock-based employee compensation.

	Three Months Ended		Nine Mon	ths Ended
	Sept 27, 2003	Sept 28, 2002	Sept 27, 2003	Sept 28, 2002
	(I)		ousands)	
Net loss, as reported	\$(2,899)	\$(3,842)	\$(11,702)	\$(5,132)
Deduct: Total stock-based employee compensation expense				
determined under fair value based method for all awards, net	(120)	(206)	(406)	(157)
of related tax effects	(139)	(206)	(406)	(157)
Pro forma net loss	\$(3,038)	\$(4,048)	\$(12,108)	\$(5,289)
110 10111111 11011	ψ(ε,σεσ)	Ψ(1,010)	ψ(1 <b>2</b> ,100)	Ψ(ε,2σ)
Basic and diluted earnings per share				
As reported	\$ (0.24)	\$ (0.32)	\$ (0.96)	\$ (0.42)
Pro forma	\$ (0.25)	\$ (0.33)	\$ (0.99)	\$ (0.44)

#### NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

#### 4. Warranty

Intevac's typical warranty is 12 months from customer acceptance. In some cases extended warranty periods beyond 12 months are marketed to our customers. The warranty period on used systems is generally shorter than 12 months. The warranty period on consumable parts is limited to their reasonable usable life. A provision for the estimated warranty cost is recorded when revenue is recognized.

The following table displays the activity in the warranty provision account, which is included in other accrued liabilities on the Company's balance sheet, for the three and nine-month periods ending September 27, 2003 and September 28, 2002:

	Three Months Ended		Nine Mon	ths Ended
	Sept 27, 2003	Sept 28, 2002	Sept 27, 2003	Sept 28, 2002
	(In thou		sands)	
Beginning balance	\$ 664	\$ 573	\$ 845	\$ 906
Expenditures incurred under warranties	(239)	(199)	(846)	(584)
Accruals for product warranties issued during the reporting period	50	67	241	272
Adjustments to previously existing warranty accruals	_	501	235	348
Ending balance	\$ 475	\$ 942	\$ 475	\$ 942
	_			

#### 5. Net Income (Loss) Per Share

The following table sets forth the computation of basic and diluted earnings per share:

	Three Months Ended		Nine Mon	ths Ended
	Sept. 27, 2003	Sept. 28, 2002	Sept. 27, 2003	Sept. 28, 2002
		(In the	ousands)	
Numerator:				
Numerator for basic earnings per share — loss available to				
common shareholders	\$ (2,899)	\$ (3,842)	\$(11,702)	\$ (5,132)
Effect of dilutive securities:				
6 1/2% convertible notes (1)	_	_	_	_
Numerator for diluted earnings per share — loss available				
to common shareholders after assumed conversions	\$ (2,899)	\$ (3,842)	\$(11,702)	\$ (5,132)
Denominator:				
Denominator for basic earnings per share — weighted-				
average shares	12,266	12,093	12,206	12,065
Effect of dilutive securities:				
Employee stock options (2)	_	_	_	_
6 1/2% convertible notes (1)	_	_		
Dilutive potential common shares		_		_
•				
Denominator for diluted earnings per share — adjusted				
weighted-average shares and assumed conversions	12,266	12,093	12,206	12,065

#### NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

- (1) Diluted EPS for the three- and nine-month periods ended September 27, 2003 and September 28, 2002 excludes "as converted" treatment of the convertible notes as their inclusion would be anti-dilutive. The number of "as converted" shares excluded for the three- and nine-month periods ended September 27, 2003 was 4,269,983, and the number of "as converted" shares excluded for the three- and nine-month periods ended September 28, 2002 was 4,282,247 and 2,640,992, respectively.
- (2) Potentially dilutive securities, consisting of shares issuable upon exercise of stock options, are excluded from the calculation of diluted EPS, as their effect would be anti-dilutive. The weighted average number of employee stock options excluded for the three-month periods ended September 27, 2003 and September 28, 2002 was 1,785,904 and 1,903,170, respectively, and the number of employee stock options excluded for the nine-month periods ended September 27, 2003 and September 28, 2002 was 1,790,007 and 1,876,543, respectively.

#### 6. Segment Reporting

Segment Description

Intevac, Inc. has three reportable operating segments: Equipment Products, Photonics Technology and Commercial Imaging. Our Equipment Products Division sells complex capital equipment used in the manufacturing of thin-film disks and flat panel displays. Our Photonics Technology Division ("PTD") is developing sensors and cameras that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum. Intevac's technology development revenues are generated within the PTD segment. Our Commercial Imaging Division is developing commercial products based on technology developed by PTD.

Included in corporate activities are general corporate expenses less an allocation of corporate expenses to operating units equal to 3% and 1% of net revenues in 2003 and 2002, respectively. The cost of excess facility space not used by the operating divisions is also included in corporate activities and was \$275,000 and \$907,000, respectively, for the three and nine months ended September 27, 2003.

#### **Business Segment Net Revenues**

Three Months Ended		Nine Months Ended	
Sept. 27, 2003	Sept. 28, 2002	Sept. 27, 2003	Sept. 28, 2002
	(In th	nousands)	
\$4,963	\$4,759	\$17,776	\$16,276
2,653	1,970	6,436	5,479
, <u> </u>	8	6	37
\$7,616	\$6,737	\$24,218	\$21,792
_			

#### NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

#### Business Segment Profit & Loss and Reconciliation to Consolidated Pre-tax Profit (Loss)

	Three Months Ended		Nine Months Ended	
	Sept. 27, 2003	Sept. 28, 2002	Sept. 27, 2003	Sept. 28, 2002
Equipment Products	\$ (969)	\$(1,651)	\$ (4,126)	\$ (5,950)
Photonics Technology Division	(176)	(167)	(1,401)	(1,071)
Commercial Imaging	(736)	(567)	(2,532)	(970)
Corporate activities	(628)	(534)	(1,985)	(1,614)
•				
Operating loss	(2,509)	(2,919)	(10,044)	(9,605)
Interest expense	(522)	(1,117)	(1,547)	(2,445)
Interest income	39	59	204	199
Other income and expense, net	93	135	(315)	350
Loss from continuing operations before income taxes	\$(2,899)	\$(3,842)	\$(11,702)	\$(11,501)

#### **Geographic Area Net Trade Revenues**

Three Mo	nths Ended	Nine Mo	nths Ended
Sept. 27, 2003	Sept. 28, 2002	Sept. 27, 2003	Sept. 28, 2002
	(In thousands)		
\$3,238	\$2,619	\$ 7,846	\$ 9,386
4,378	4,117	16,366	12,105
<u> </u>	1	_	300
_	_	6	1
\$7,616	\$6,737	\$24,218	\$21,792
_			

#### 7. Income Taxes

For the three- and nine-month periods ended September 27, 2003, Intevac did not accrue a tax benefit due to the inability to realize additional refunds from loss carry-backs. Intevac accrued a tax benefit of \$6.4 million for the nine-month period ended September 28, 2002. This resulted from federal tax law changes that allow losses incurred in 2001 and 2002 to be carried back 5 years. The Company's \$16.2 million deferred tax asset is fully offset by a \$16.2 million valuation allowance, resulting in a net deferred tax asset of zero at September 27, 2003.

#### 8. Capital Transactions

During the nine-month period ending September 27, 2003, Intevac sold stock to its employees under the Company's Stock Option and Employee Stock Purchase Plans. A total of 190,650 shares were issued for which the Company received \$644,000.

#### 9. Financial Presentation

Certain prior year amounts in the Condensed Consolidated Financial Statements have been reclassified to conform to the 2003 presentation.

#### NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

#### 10. Subsequent Event

On October 31, 2003, Intevac issued a notice of automatic conversion of its 6 1/2% Convertible Subordinated Notes due 2009 pursuant to their terms. On November 7, 2003, \$20.1 million in aggregate principal amount of these notes which was previously outstanding, was converted into an aggregate of approximately 2,871,857 shares of Intevac common stock at a conversion price of \$7.00 per share. Prior to the issuance of the notice of automatic conversion, but subsequent to the three months ended September 27, 2003, \$9.4 million in aggregate principal amount of these notes had been tendered for conversion by the holders, resulting in the issuance of 1,348,426 shares of Intevac common stock.

#### REPORT OF GRANT THORNTON LLP, INDEPENDENT AUDITORS

The Board of Directors and Shareholders Intevac, Inc.

We have audited the accompanying consolidated balance sheets of Intevac, Inc. as of December 31, 2002 and 2001 and the related consolidated statements of operations and comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Intevac, Inc. at December 31, 2002 and 2001, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

Grant Thornton LLP

San Jose, California January 29, 2003

# CONSOLIDATED BALANCE SHEETS (In thousands)

	December 31,	
	2002	2001
ASSETS		
Current assets:	¢29.457	¢ 10 157
Cash and cash equivalents  Trade and other accounts receivable, net of allowances of \$269 and	\$28,457	\$ 18,157
\$225 at December 31, 2002 and 2001	4,991	8,046
Income taxes recoverable	214	_
Inventories, including \$9,914 and \$4,070 held at customer locations		
at December 31, 2002 and 2001	15,871	21,691
Prepaid expenses and other current assets	961	478
Total current assets	50,494	48,372
Property, plant and equipment, at cost:	,	,
Leasehold improvements	5,751	5,873
Machinery and equipment	16,216	21,096
	21.067	26,060
Loss accumulated depreciation and amortization	21,967 15,174	26,969
Less accumulated depreciation and amortization	13,174	18,105
	6,793	8,864
Investment in 601 California Avenue LLC	2,431	2,431
Debt issuance costs, net of amortization of \$2,482 and \$1,808 at		
December 31, 2002 and 2001	577	495
Other long term assets	3	3
Total assets	\$60,298	\$ 60,165
LIABILITIES AND SHAREHOLDERS' EQ	UITY	
Current liabilities:		
Book overdraft	\$ 459	\$ 242
Accounts payable	1,280	2,386
Accrued payroll and related liabilities	1,379	1,573
Other accrued liabilities	3,723	3,547
Customer advances	12,344	13,464
Total current liabilities	19,185	21,212
Convertible notes	30,568	37,545
Commitments		
Shareholders' equity:		
Undesignated preferred stock, no par value, 10,000 shares		
authorized, no shares issued and outstanding	_	_
Common stock, no par value:		
Authorized shares — 50,000		
Issued and outstanding shares — 12,125 and 12,004 at December 31, 2002 and 2001, respectively	19,389	19,093
Accumulated other comprehensive income	19,389	19,093
Accumulated officit	(9,033)	(17,807)
	(5,055)	(17,007)
Total shareholders' equity	10,545	1,408
Total liabilities and charabalders' equity	\$60.200	\$ 60 165
Total liabilities and shareholders' equity	\$60,298	\$ 60,165

# CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (In thousands, except per share amounts)

	Years Ended December 31,		
	2002	2001	2000
Net revenues: Systems and components Technology development	\$ 27,625	\$ 43,599	\$ 30,254
	6,159	7,885	5,795
Total net revenues Cost of net revenues:	33,784	51,484	36,049
Systems and components Technology development Goodwill write-off Inventory provisions	20,009	30,025	20,658
	5,150	7,988	6,022
	—	—	1,056
	1,316	3,716	6,323
Total cost of net revenues Gross profit Operating expenses:	26,475	41,729	34,059
	7,309	9,755	1,990
Research and development Selling, general and administrative Restructuring and other	10,846	14,478	10,576
	7,752	6,745	4,415
	—	—	(638)
Total operating expenses	18,598	21,223	14,353
Operating loss Interest expense Interest income Other income and expense, net	(11,289)	(11,468)	(12,363)
	(2,981)	(2,912)	(3,033)
	284	1,245	2,341
	16,168	1,228	731
Income (loss) before income taxes	2,182	(11,907)	(12,324)
Provision for (benefit from) income taxes	(6,592)	5,029	
Net income (loss)	\$ 8,774	\$(16,936)	\$(12,324)
Other comprehensive income: Foreign currency translation adjustments	67	122	_
Total adjustments	67	122	
Total comprehensive income (loss)	\$ 8,841	\$(16,814)	\$(12,324)
Basic income (loss) per share: Net income (loss) Shares used in per share amounts Diluted income (loss) per share:	\$ 0.73	\$ (1.42)	\$ (1.04)
	12,077	11,955	11,803
Net income (loss) Shares used in per share amounts	\$ 0.66	\$ (1.42)	\$ (1.04)
	15,262	11,955	11,803

# $\begin{array}{c} \textbf{CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY} \\ \textbf{(In thousands)} \end{array}$

	Common Stock		Accumulated Other	Retained Earnings (Accum.	Total Shareholders'
	Shares	Amount	Comprehensive Income	Deficit)	Equity
Balance at January 1, 2000 Shares issued in connection with:	11,715	\$18,170	\$ —	\$ 11,453	\$ 29,623
Exercise of stock options	20	58	_	_	58
Employee stock purchase plan Income tax benefits realized from activity in	109	418	_	_	418
employee stock plans	_	29		_	29
Net loss			_	(12,324)	(12,324)
Balance at December 31, 2000 Shares issued in connection with:	11,844	\$18,675	\$ —	\$ (871)	\$ 17,804
Exercise of stock options	41	13	_	_	13
Employee stock purchase plan	119	405		_	405
Foreign currency translation adjustment	_	_	122	_	122
Net loss			_	(16,936)	(16,936)
Balance at December 31, 2001 Shares issued in connection with:	12,004	\$19,093	\$122	\$(17,807)	\$ 1,408
Exercise of stock options	13	19	_	_	19
Employee stock purchase plan Compensation expense in the form of common	108	273	_	_	273
stock	_	4	_	_	4
Foreign currency translation adjustment	_	_	67	_	67
Net income			_	8,774	8,774
Balance at December 31, 2002	12,125	\$19,389	\$189	\$ (9,033)	\$ 10,545

# CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

	Years Ending December 31,		
	2002	2001	2000
Operating activities			
Net income (loss)	\$ 8,774	\$(16,936)	\$ (12,324)
Adjustments to reconcile net income (loss) to net cash and cash equivalents provided by (used in) operating activities:		,	
Depreciation	2,577	3,916	3,721
Deferred income taxes	_,-,-	4,988	2,734
Amortization of intangibles	_	7	1,042
Amortization of debt offering costs	672	244	244
Goodwill write-off	_		1,056
Inventory provisions	1,316	3,716	6,323
Gain on sale of Rapid Thermal Processing product line	(15,428)		
Gain on sale of equipment	(324)	_	_
Gain on purchase of convertible notes	(23)	(1,408)	_
Compensation expense in the form of common stock	4	_	_
Loss on IMAT investment	_	_	125
Restructuring and other charges — non-cash portion	_	_	856
Loss on disposal of investment	_	803	_
Loss on disposal of equipment	13	8	2
Changes in assets and liabilities:	_		
Accounts receivable	2,264	1,547	1,614
Inventory	3,359	(7,252)	(6,666)
Prepaid expenses and other assets	(492)	366	(332)
Accounts payable	(1,107)	443	929
Accrued payroll and other accrued liabilities	335	639	(5,768)
Customer advances	(1,120)	(2,853)	6,466
Total adjustments	(7,954)	5,164	12,346
Net cash and cash equivalents provided by (used in) operating			
activities	820	(11,772)	22
Investing activities		` , ,	
Purchase of investments	_	(5,463)	(116,271)
Proceeds from sales and maturities of investments	_	38,447	120,084
Net proceeds from sale of Rapid Thermal Processing product line	17,780	_	· —
Proceeds from sale of equipment	535	_	_
Purchase of equipment	(1,480)	(4,050)	(2,990)
Net cash and cash equivalents provided by investing activities	16,835	28,934	823
Financing activities			
Proceeds from issuance of common stock	292	418	476
Repurchase of Intevac convertible notes	(225)	(2,257)	_
Exchange of Intevac convertible notes due 2004	(7,483)		_
Repayment of notes payable		(1,904)	
Net cash and cash equivalents provided by (used in) financing			
activities	(7,416)	(3,743)	476
Effect of exchange rate changes on cash	61	122	_
	10.200	10.541	1 221
Net increase in cash and cash equivalents	10,300	13,541	1,321
Cash and cash equivalents at beginning of period	18,157	4,616	3,295
Cash and cash equivalents at end of period	\$ 28,457	\$ 18,157	\$ 4,616
Cash paid (received) for:			
Interest	\$ 2,456	\$ 2,715	\$ 2,789
Income taxes	2	2	2
Income tax refund	(6,369)	_	(5,803)

Other non-cash changes: Inventories transferred to (from) property, plant and equipment Exchange of \$36.3M of convertible notes due 2004 for \$29.5M of	\$ (514)	\$ (2,322)	\$ 304
convertible notes 2009 (exchange completed July 2002)		_	
Income tax benefit realized from activity in employee stock plans	_		29

See accompanying notes.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Business and Nature of Operations

Intevac, Inc.'s businesses are the design, manufacture and sale of complex capital equipment used to manufacture products such as thin-film disks and flat panel displays (the "Equipment Products Division"), the development of highly sensitive electro-optical devices and systems for the US military and its allies (the "Photonics Technology Division") and the design, manufacture and sale of commercial products based on technology developed by the Photonics Technology Division (the "Commercial Imaging Division").

Systems sold by the Equipment Products Division are used to deposit highly engineered thin-films of material on a substrate. These systems generally utilize proprietary manufacturing techniques and processes, operate under high levels of vacuum, are designed for high-volume continuous operation and use precision robotics, computerized controls and complex software programs to fully automate and control the production process. Products manufactured with these systems include disks for computer hard disk drives and flat panel displays for use in consumer electronics products.

The Photonics Technology Division is developing electro-optical sensors, cameras and systems that permit highly sensitive detection of photons in the visible and infrared portions of the spectrum. This development work is aimed at creating new products for both military and industrial applications. Products include Laser Illuminated Viewing and Ranging ("LIVAR®") systems for positive target identification at long range and low-cost extreme low light level cameras for use in military applications.

The Commercial Imaging Division was formed in July 2002 with the charter of developing products based on PTD technology for sale to commercial markets.

# 2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of Intevac and its wholly owned subsidiaries. All inter-company transactions and balances have been eliminated.

Revenue Recognition

We recognize revenue using guidance from SEC Staff Accounting Bulletin No. 101 "Revenue Recognition in Financial Statements." Our policy allows revenue recognition when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price is fixed or determinable, and collectibility is reasonably assured. On January 1, 2003, Intevac changed its revenue recognition policy for system orders received after 2002.

System Revenue Recognition for Orders Received Before 12/31/02

Revenues for systems are recognized upon customer acceptance. For large deposition and rapid thermal processing systems shipped through a distributor, revenue is typically recognized after the distributor has accepted the system at our factory and the system has been shipped. For large deposition and rapid thermal processing systems sold direct to end customers, revenue is recognized after installation and acceptance of the system at the customer site.

There is a written acceptance and test procedure ("ATP") for each system, which is specified in the customer purchase order. The ATP includes a detailed set of criteria that are required as a condition of customer acceptance. The ATP is typically conducted over one or more days during which the system is subjected to a number of tests to validate that the system is performing in a repeatable fashion, reliably and to specification. If material issues or problems are discovered during the ATP process, then they are corrected prior to customer acceptance.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In the case of a direct end user sale, there are typically two ATP's performed. The first ATP is performed at Intevac's factory and must be approved by the customer prior to shipment of the system. The second ATP is performed after the system has been installed at the customer's factory, again with the customer in attendance. Once the second ATP is approved by the customer, and the customer has accepted the system in writing and agreed to make any remaining payments due on the system, then the system is recognized as a sale and revenue for the entire system is recorded.

In the case of a shipment through a distributor, an ATP is performed at Intevac's factory. Upon completion of the ATP, and after the distributor has accepted the system in writing and agreed to make any remaining payments due on the system, then the system is shipped and revenue for the entire system is recorded. The distributor then completes customer factory installation and the ATP at its cost. When we believe that there may be higher than normal end-user installation and acceptance issues for systems shipped through a distributor, such as when a major new version of a product is delivered for the first time, then the acceptance and revenue recognition process follows the model described above for a direct end user sale. The primary difference in this case is that revenue recognition is dependent on the Company obtaining acceptance of the product by both its customer (the distributor) and its distributor's customer (the end user).

During the period that a system is undergoing customer acceptance (either distributor or end user), the value of the system remains in inventory and any payments received, or amounts invoiced, related to the system are included in customer advances. When revenue is recognized on the system, the inventory is charged to cost of net revenues, the customer advance is liquidated and the customer is billed for the unpaid balance of the system revenue.

As of December 31, 2002 the Company reported \$9.9 million of finished goods which consisted of five capacity upgrades to Flat Panel Display ("FPD") deposition systems undergoing final acceptance testing at the end user's facility and a FPD silicon deposition system undergoing final acceptance testing at the end user's facility. Taken as a whole, the above systems represent \$10.9 million of the Company's \$18.2 million order backlog, and \$9.8 million of the Company's \$12.3 million of customer advances.

System Revenue Recognition for Orders Received After 12/31/02

Certain of Intevac's product sales with customer acceptance provisions are accounted for as multiple-element arrangements. If the Company has met previously defined customer acceptance experience levels with the specific type of equipment, then Intevac recognizes revenue for the fair market value of the equipment upon shipment and transfer of title and recognizes revenue for the fair market value of installation and acceptance services when those services are completed. For products that have not been demonstrated to meet product specifications prior to shipment, revenue is recognized at customer acceptance. In the event that Intevac's customer chooses not to complete installation and acceptance, and Intevac's obligations under the contract to complete installation, acceptance or any other tasks (with the exception of warranty obligations) have been fully discharged, then Intevac recognizes any remainder revenue to the extent that collectibility under the contract is reasonably assured. For contracts with end user customer acceptance provisions established prior to 2003, Intevac has deferred all revenue recognition until completion of installation and customer acceptance. The revenue recognition policy outlined above and implemented for system orders received after December 31, 2002 was made to better conform Intevac's revenue recognition policies to industry accounting practice for companies selling similar equipment. The effect of adopting this policy in years prior to 2003 would have been no change in 2002 revenues, a decrease in 2001 revenues of \$1.5 million and an increase of 2000 revenues of \$1.5 million. The effect on net income of adopting this policy in years prior to 2003 would have been no effect in 2002 net income, a decrease in 2001 net income of \$33,000 and an increase in 2000 net income of \$33,000.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Other Systems and non-System Revenue Recognition

Revenues for systems without installation and acceptance provisions, technology upgrades, spare parts, consumables and prototype products built by PTD are generally recognized upon shipment. Service and maintenance contract revenue, which to date has been insignificant, is recognized ratably over applicable contract periods or as the service is performed.

Our shipping terms are customarily FOB shipping point. For systems sold directly to the end user, our obligations remaining after shipment typically include installation, end user factory acceptance and warranty. For systems sold to distributors, typically the distributor assumes responsibility for installation and end user customer acceptance. In some cases, the distributor will assume some or all of the warranty liability. For products other than systems and system upgrades, warranty is typically the only obligation we have after shipment.

Technology Development Revenue Recognition

We perform best efforts research and development work under various government-sponsored research contracts. Typically, for each contract, we commit to perform certain research and development efforts up to an agreed upon amount. In connection with these contracts, we receive funding on an incremental basis up to a ceiling. Some of these contracts are cost sharing in nature, where Intevac is reimbursed for a portion of the total costs expended. Revenue on these contracts is recognized in accordance with contract terms, typically as costs are incurred. In addition, we have, from time to time, negotiated with a third party to fund a portion of our costs in return for a joint interest to our rights at the end of the contract. In the event that a particular contract overruns its agreed upon amount, we may be liable for the additional costs.

These contracts are accounted for under ARB No. 43, Chapter 11, Section A, which addresses Cost-Plus-Fixed-Fee Contracts. The contracts are all cost-type, with financial terms that are a mixture of fixed fee, incentive fee, no fee and cost-sharing. The deliverables under each contract range from reports to prototype hardware. In none of the contracts is there an obligation for either party to continue the program once the funds have been expended. The efforts can be terminated at any time for convenience, in which case we would be reimbursed for our actual incurred costs, plus fee, if applicable, for the completed effort. We own the entire right, title and interest to each invention discovered under the contract, unless we specifically give up that right. The US Government has a paid-up license to use any invention/intellectual property for government purposes only.

Trade Receivables and Doubtful Accounts

The Company evaluates the collectibility of trade receivables on an ongoing basis and provides reserves against potential losses when appropriate.

Warranty

The Company's standard warranty is twelve months from customer acceptance. During this warranty period any necessary non-consumable parts are supplied and installed. A provision for the estimated warranty cost is recorded when revenue is recognized.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table displays the activity in the warranty provision account for 2002 and 2001:

	2002	2001	
	(In tho	usands)	
Beginning balance	\$ 906	\$ 745	
Expenditures incurred under warranties	(794)	(623)	
Accruals for product warranties issued during the reporting period	410	769	
Adjustments to previously existing warranty accruals	323	15	
	_		
Ending balance	\$ 845	\$ 906	

#### International Distribution Costs

The Company makes payments to agents and representatives under agreements related to international sales in return for obtaining orders and providing installation and warranty services. These payments to agents and representatives are included in selling, general and administrative expenses. These amounts totaled approximately \$300,000, \$141,000 and \$0 for the years ended December 31, 2002, 2001 and 2000, respectively.

#### Customer Advances

Customer advances generally represent nonrefundable deposits invoiced by the Company in connection with receiving customer purchase orders and other events preceding acceptance of systems. Customer advances related to products that have not been shipped to customers, and included in accounts receivable were \$0 and \$857,000 at December 31, 2002 and 2001, respectively.

Cash, Cash Equivalents and Short-term Investments

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Short-term investments consist principally of highly rated debt instruments with maturities generally between one and twelve months and are carried at fair value. These investments are typically short-term in nature and therefore bear minimal interest rate risk.

Management determines the appropriate classification of debt securities at the time of purchase and reevaluates such designation as of each balance sheet date. All debt securities are classified as available-for-sale under Statement of Financial Accounting Standards No. 115 "Accounting for Certain Investments in Debt and Equity Securities." Securities classified as available-for-sale are reported at fair market value with the related unrealized gains and losses included in retained earnings. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in other income and expenses. The cost of securities sold is based on the specific identification method.

Cash and cash equivalents represent cash accounts and money market funds.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Valuation of Long-lived and Intangible Assets and Goodwill

We assess the impairment of identifiable intangibles, long-lived assets and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important which could trigger an impairment review include the following:

- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period; and
- our market capitalization relative to net book value.

When we determine that the carrying value of long-lived assets, intangibles or goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk inherent in our current business model. In 2000, Intevac determined that the intangible assets related to the purchase of Cathode Technology Corporation and Lotus Technologies, Inc. had become impaired. This determination was based on a review of the future revenue expected from products based on these technologies. At December 31, 2000 the remaining goodwill related to those purchases, amounting to \$1,056,000, was written off. Of this write-off, \$818,000 is included in the Equipment Products business segment and \$238,000 is included in Corporate activities.

#### Foreign Exchange Contracts

Intevac may enter into foreign currency forward exchange contracts to hedge certain of its foreign currency transaction, translation and remeasurement exposures. Our accounting policies for some of these instruments are based on our designation of such instruments as hedging transactions. Instruments not designated as a hedge transaction will be "marked to market" at the end of each accounting period. The criteria we use for designating an instrument as a hedge include effectiveness in exposure reduction and one-to-one matching of the derivative financial instrument to the underlying transaction being hedged. Gains and losses on foreign currency forward exchange contracts that are designated and effective as hedges of existing transactions are recognized in income in the same period as losses and gains on the underlying transactions are recognized and generally offset.

During fiscal 2000 Intevac entered into yen denominated foreign currency forward exchange contracts to hedge anticipated yen denominated sales. We did not designate these foreign currency forward contracts as hedge transactions; therefore, the contracts were "marked to market." In fiscal 2000 we realized gains of \$111,000 related to foreign currency forward exchange contracts. As of December 31, 2002, Intevac had no foreign currency forward exchange contracts outstanding.

#### Financial Instruments

The carrying amount of the short-term financial instruments (cash and cash equivalents, short-term investments, accounts receivable and certain other liabilities) approximates fair value due to the short-term maturity of those instruments. Based on the quoted market prices for the same or similar issues or on the current rates offered for debt of the same remaining maturities, the fair value of the \$30.6 million of outstanding convertible notes as of December 31, 2002 is \$23.4 million.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Inventories

Inventories for systems and components are stated at the lower of cost or market. Inventories consist of the following:

Raw materials Work-in-progress Finished goods

December 31,					
2002	2001				
(In tho	usands)				
\$ 3,329	\$ 5,659				
2,628	11,962				
9,914	4,070				
****	***				
\$15,871	\$21,691				

Finished goods inventory consists solely of completed systems at customer sites that are undergoing installation and acceptance testing.

Inventory reserves included in the above numbers were \$9.6 million and \$12.7 million at December 31, 2002 and December 31, 2001, respectively. Each quarter, we analyze our inventory (raw materials, WIP and finished goods) against the forecast demand for the next 12 months. Parts with no forecast requirements in that period are considered excess and inventory provisions are established to write those parts down to zero net book value. During this process, some inventory is identified as having no future use or value to us and is disposed of against the reserves.

During the twelve months ended December 31, 2002, \$1.3 million was added to inventory reserves based on the quarterly analysis and \$4.2 million of inventory was disposed of and charged to the reserve. Most of the disposed inventory related to two MDP 250K Disk Sputtering systems that had been written down to estimated salvage value in 2000. Inventory reserves were further reduced by \$0.2 million due to the sale of the rapid thermal processing product line.

During the twelve months ended December 31, 2001, \$3.7 million was added to inventory reserves based on the quarterly analysis and \$0.7 million of inventory was disposed of and charged to the reserve. The major increase in inventory reserves was the establishment of a \$2.4 million reserve related to a cancelled order for a custom flat panel system. The system was written down to the value that was recoverable if the system could be reconfigured for a different customer. Inventory reserves increased by an additional \$0.9 million when a customer cancelled an order for a disk manufacturing system and forfeited its customer advance. The forfeited advance was applied to the inventory made excess by the cancelled order.

Property, Plant and Equipment

Equipment and leasehold improvements are carried at cost less allowances for accumulated depreciation and amortization. Gains and losses on dispositions are reflected in the consolidated statements of operations.

Depreciation for machinery and equipment is computed using the straight-line method over the estimated useful lives of the assets, which are generally three to seven years. Amortization of leasehold improvements is computed using the shorter of the remaining terms of the leases or the estimated economic useful lives of the improvements.

Intangible Assets

Intevac amortizes intangible assets on a straight-line basis over the estimated useful lives, which range from two to seven years.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

#### Comprehensive Income

SFAS No. 130, "Reporting Comprehensive Income" requires unrealized gains or losses on our available-for-sale securities and the foreign currency translation adjustments, which prior to the adoption were reported separately in shareholders' equity, to be included in other comprehensive income. As of December 31, 2002, the \$189,000 balance of accumulated other comprehensive income is comprised entirely of accumulated foreign currency translation adjustments.

Employee Stock Plans

At December 31, 2002, Intevac had two stock-based employee compensation plans, which are described more fully in Note 11. We account for those plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees", and related Interpretations. No stock-based employee compensation cost is reflected in net income, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. Intevac does not have any plans to adopt the fair value requirements of SFAS 123 for reporting purposes.

Pro forma information regarding net income and earnings per share is required by SFAS 123, which also requires that the information be determined as if we had accounted for our employee stock options granted subsequent to December 31, 1994 under the fair value method of this Statement. The fair value for these options was estimated at the date of grant using a Black-Scholes multiple option pricing model with the following weighted average assumptions for 2002, 2001 and 2000, respectively: risk-free interest rates of 1.64%, 3.03% and 5.17%; dividend yields of 0.0%, 0.0% and 0.0%; volatility factors of the expected market price of Intevac's common stock of 0.933, 0.946 and 0.936; and a weighted-average expected life of the option of 0.25, 0.25 and 0.25 years beyond each respective vesting period.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option models require the input of highly subjective assumptions including the expected stock price volatility. Because Intevac's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

Under the 1995 Employee Stock Purchase Plan, as amended in 1999, (the "ESPP"), Intevac is authorized to issue up to 1,000,000 shares of common stock to participating employees. Under the terms of the ESPP, employees can choose to have up to 10% of their annual base earnings withheld to purchase Intevac's common stock. The purchase price of the stock is 85% of the lower of the subscription date fair market value or the purchase date fair market value. Under the ESPP, we sold 108,020, 118,904 and 108,784 shares to employees in 2002, 2001 and 2000, respectively. As of December 31, 2002, 185,946 shares remained reserved for issuance under the ESPP. We do not recognize compensation cost related to employee purchase rights under the plan. To comply with the pro forma reporting requirements of SFAS 123, compensation cost is estimated for the fair value of the employees' purchase rights using the Black-Scholes model with the following assumptions for those rights granted in 2002, 2001 and 2000, respectively: risk-free interest rates of 1.12%, 1.93% and 5.36%; dividend yield of 0.0%, 0.0% and 0.0%; expected volatility of 0.933, 0.946 and 0.936; and an expected life of 1.50, 2.00 and 2.00 years (the offering period ends July 31, 2003 for the subscription period that began in February 2002). The weighted average fair value of those purchase rights granted in 2002, 2001 and 2000 1999 were \$1.71, \$2.47 and \$2.78, respectively per share.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table illustrates the effect on net income and earnings per share if Intevac had applied the fair value-recognition provisions of FASB Statement No. 123, "Accounting for Stock-Based Compensation", to stock-based employee compensation.

	2002	2001	2000
	(In thousands, except per share data)		
Net income (loss), as reported	\$8,774	\$(16,936)	\$(12,324)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(157)	(895)	(819)
Pro forma net income (loss)	\$8,617	\$(17,831)	\$(13,143)
Earnings per share			
Basic — as reported	\$ 0.73	\$ (1.42)	\$ (1.04)
Basic — pro forma	\$ 0.71	\$ (1.49)	\$ (1.11)
Diluted — as reported	\$ 0.66	\$ (1.42)	\$ (1.04)
Diluted — pro forma	\$ 0.65	\$ (1.49)	\$ (1.11)

Financial Presentation

Certain prior year amounts in the Consolidated Financial Statements have been reclassified to conform to 2002 presentation.

Net income (loss) per share

The following table sets forth the computation of basic and diluted loss per share:

	2002	2001	2000
		(In thousands)	
Numerator:			
Numerator for basic loss per share — income (loss) available to common stockholders	\$ 8,774	\$(16,936)	\$(12,324)
Effect of dilutive securities:			
6 1/2% convertible notes <sup>(1)</sup>	1,338	_	_
Numerator for diluted earnings per share — income (loss) available			
to common stockholders after assumed conversions	\$10,112	\$(16,936)	\$(12,324)
Denominator:			
Denominator for basic earnings per share — weighted-average shares Effect of dilutive securities:	12,077	11,955	11,803
Employee stock options (2)	137	_	
6 1/2% convertible notes (1)	3,048	_	_
Dilutive potential common shares	3,185	_	_
-			
Denominator for diluted earnings per share — adjusted weighted-			
average shares and assumed conversions	15,262	11,955	11,803

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

- (1) Diluted EPS for the twelve-month periods ended December 31, 2001 and 2000 excludes "as converted" treatment of the convertible notes, as their inclusion would be anti-dilutive. The number of "as converted" shares excluded from the twelve-month periods ended December 31, 2001 and 2000 was 1,954,910 and 1,999,758, respectively.
- (2) Potentially dilutive securities, consisting of shares issuable upon exercise of employee stock options, are excluded from the calculation of diluted EPS as their effect would be anti-dilutive. The weighted average number of employee stock options excluded from the twelve-month periods ended December 31, 2002, 2001 and 2000 was 1,328,278, 1,637,268, and 1,474,961, respectively.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results inevitably will differ from those estimates, and such differences may be material to the financial statements.

New Accounting Pronouncements

In June 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 143, "Accounting for Asset Retirement Obligations." SFAS 143 requires that asset retirement obligations that are identifiable upon acquisition and construction, and during the operating life of a long-lived asset be recorded as a liability using the present value of the estimated cash flows. A corresponding amount would be capitalized as part of the asset's carrying amount and amortized to expense over the asset's useful life. Intevac will adopt the provisions of SFAS 143 effective January 1, 2003. We do not expect the adoption of this statement to have a material impact on our financial statements.

In July 2002, FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" which supercedes EITF No. 94-3, "Liability Recognition for Certain Employment Termination Benefits and Other Costs to Exit an Activity." SFAS 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred, whereas EITF No. 94-3 had recognized the liability at the commitment date to an exit plan. Adoption of this standard is effective for exit or disposal activities that are initiated after December 31, 2002. We do not expect the impact of the adoption of this statement to have a material impact on our financial statements.

In November 2002, the Emerging Issues Task Force ("EITF") issued EITF 00-21 "Revenue Arrangements with Multiple Deliverables." EITF 00-21 prescribes a method to account for contracts that have multiple elements or deliverables. It provides guidance on how to allocate the value of a contract to its different deliverables, as well as guidance on when to recognize revenue allocated to each deliverable over its performance period. The provisions of EITF 00-21 will apply to revenue arrangements entered into in the fiscal periods beginning after June 15, 2003. We do not expect the adoption of EITF No. 00-21 to have a material impact on our financial statements.

#### 3. Concentrations

Credit Risk and Significant Customers

Financial instruments that potentially subject Intevac to significant concentrations of credit risk consist of cash equivalents, short-term investments, accounts receivable and foreign exchange forward contracts. We generally invests our excess cash in money market funds and in commercial paper, which have

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

contracted maturities generally within one year. By policy, our investments in commercial paper, certificates of deposit, Eurodollar time deposits, or banker's acceptances are rated A1/P1 or better. In 2001, Intevac recorded a loss of \$803,000 on its investment in commercial paper issued by Pacific Gas & Electric.

Our largest customers tend to change from period to period. Historically, a significant portion of Intevac's revenues in any particular period have been attributable to sales to a limited number of customers. In 2002, three customers accounted for 42%, 21%, and 11%, respectively, of our consolidated revenues and in aggregate accounted for 74% of net revenues. In 2001, one customer accounted for 49% of our consolidated net revenues. In 2000, four customers accounted for 17%, 16%, 12% and 11%, respectively, of our consolidated revenues and in aggregate accounted for 56% of net revenues. Intevac performs credit evaluations of its customers' financial conditions and requires deposits on system orders but does not generally require collateral or other security to support customer receivables.

#### Products

Disk manufacturing and flat panel manufacturing equipment together contributed a significant portion of our revenues in 2002 and 2001, while disk manufacturing equipment alone contributed a significant portion of our revenues in 2000. We expect that our ability to maintain or expand our current levels of revenues and to return to operating profitability in the future will depend upon our success in enhancing our existing systems and developing and manufacturing competitive disk manufacturing equipment and our success in developing both military and commercial products based on our LIVAR® and low light technology.

## 4. Sale of Rapid Thermal Processing Product Line

In the fourth quarter of 2002, Intevac sold its Rapid Thermal Processing product line to Photon Dynamics, Inc. ("PDI") for \$20 million cash and the assumption of certain liabilities. \$2 million of the cash payment will be held in escrow for one year, and is not included in total assets on the consolidated balance sheet as of December 31, 2002, due to the contingencies related to the release of these funds from escrow. Release of the escrow at the end of this period is subject to a number of conditions. In connection with this sale, we recorded a gain of \$15.4 million, which is included in other income and expense, net on the Consolidated Statement of Operations. The following table recaps the gain from the sale and the effect on Intevac's balance sheet (in thousands):

Cash received from PDI (excluding the \$2 million in escrow)	\$18,000
Less: Accounts receivable transferred to PDI	(594)
Inventory transferred to PDI	(1,911)
Warranty and retrofit liability transferred to PDI	163
Other assets and liabilities transferred to PDI	(10)
Expenses associated with the transaction	(220)
Net gain on sale	\$15,428

# 5. Equity Investments

601 California Avenue LLC

In 1995, Intevac entered into a Limited Liability Company Operating Agreement (the "Operating Agreement"), which expires December 31, 2015, with 601 California Avenue LLC (the "LLC"), a California limited liability company formed and owned by Intevac and certain shareholders of Intevac at that time. Under the Operating Agreement we transferred our leasehold interest in the site of our

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

discontinued night vision business (the "Site") in exchange for a preferred share in the LLC with a face value of \$3,900,000. We are accounting for the investment under the cost method and have recorded our investment in the LLC at \$2,431,000, which represents our historical carrying value of the leasehold interest in the Site. The preferred share in the LLC pays a 10% annual cumulative preferred dividend.

During 1996, the LLC formed a joint venture with Stanford University (the "Stanford JV"). The Stanford JV developed the property and fully leased it to a high quality tenant on a long-term lease. The LLC is a highly profitable enterprise whose primary asset is its interest in the Stanford JV. The Company received dividends of \$390,000 from the LLC in each of the last three years. As of December 31, 2002 all outstanding cumulative dividends on the preferred share had been paid. These dividends are included in other income and expense.

IMAT Inc.

On June 27, 1997, Intevac entered into an agreement with Matsubo to form a joint venture responsible for the sales and service of Intevac's flat panel display equipment in Japan and other Asian countries. We invested \$436,000 for 49% of the voting stock of the joint venture. The joint venture was accounted for by the equity method. Gains and losses related to our share of the joint venture were reflected in other income and expense, net on the consolidated statements of operations. Intevac's equity in the net income or (loss) of IMAT, Inc. was (\$125,000) in 2000. During the third quarter of 2000, Intevac and its joint venture partner, Matsubo, transferred IMAT's activities and employees to Matsubo and terminated the operations of IMAT.

#### 6. Commitments

We lease certain facilities under non-cancelable operating leases that expire at various times up to March 2007. The facility leases require Intevac to pay for all normal maintenance costs. The lease for the primary facility in Santa Clara includes an option to extend the lease for an additional five-year period.

Future minimum rental payments under these leases at December 31, 2002 are as follows (in thousands):

2003	\$ 2,971
2004	3,070
2005	3,192
2006	3,318
2007	838
Total	\$13,389

Gross rental expense was approximately \$2,873,000, \$2,993,000 and \$1,596,000 for the years ended December 31, 2002, 2001 and 2000, respectively. Offsetting rental expense for the year ending December 31, 2000 was sublease income of \$62,000.

# 7. Employee Benefit Plan

In 1991, Intevac established a defined contribution retirement plan with 401(k) plan features. The plan covers all United States employees eighteen years and older. Employees may make contributions by a percentage reduction in their salaries, not to exceed the statutorily prescribed annual limit. We made cash contributions of \$276,000, \$301,000 and \$123,000 for the years ended December 31, 2002, 2001 and 2000, respectively. Employees may choose among twelve investment options for their contributions and their share of Intevac's contributions, and they are able to move funds between investment options at any time.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Intevac's common stock is not one of the investment options. Administrative expenses relating to the plan are insignificant.

#### 8. Notes Payable

In 1996, Intevac issued notes related to the purchase of Cathode Technology Corporation. The notes bore interest at 5.58% compounded monthly and payable quarterly. The balance on the notes was paid in full in January 2001.

#### 9. Convertible Notes

During the first quarter of 1997, Intevac completed an offering of \$57.5 million of its 6 1/2% Convertible Subordinated Notes (the "2004 Notes"), which mature March 1, 2004. Interest is payable each March 1st and September 1st. The notes are convertible into shares of Intevac's common stock at \$20.625 per share. Expenses associated with the offering of approximately \$2.3 million were deferred. Such expenses are being amortized to interest expense over the term of the notes.

On July 12, 2002 we completed the exchange of \$36.3 million in aggregate principal amount of our 2004 Notes for \$29.5 million of our new 6 1/2% Convertible Subordinated Notes due 2009 (the "2009 Notes") and \$7.6 million in cash, including \$0.9 million for accrued interest. The 2009 Notes are convertible, at the holders' option, into Intevac common shares at a conversion price of \$7.00 per share. \$1.3 million in aggregate principal amount of the 2004 Notes remained outstanding after the closing of the exchange offer.

In accounting for the exchange of the convertible notes, we wrote off \$0.4 million of debt issuance costs related to the 2004 Notes, reflecting the portion of such costs attributable to the convertible notes exchanged. The remaining debt issuance costs will be amortized to interest expense over the remaining life of the 2004 Notes. In connection with the exchange offer, Intevac incurred \$0.8 million of offering costs. Of this amount, \$0.2 million represented the cash portion of the exchange offer and was expensed during the 3 months ended September 28, 2002. The \$0.6 million balance of the exchange offering costs will be amortized to interest expense over the term of the 2009 Notes. There was no gain or loss associated with this transaction as \$36.3 million of 2004 Notes were exchanged for \$36.3 million of cash and new securities.

During 2002, in addition to the note exchange described above, Intevac repurchased \$0.3 million, face value, of its 2004 Notes. The repurchase resulted in a gain of \$23,000. During 2001, Intevac repurchased \$3.7 million, face value, of its 2004 Notes. The repurchase resulted in a gain of \$1.4 million. In accordance with adoption of SFAS 145, the gain on the note repurchase is included in Other income and expense, net on the consolidated statements of operations.

# 10. Segment Reporting

Segment Description

Intevac, Inc. has three reportable operating segments: Equipment Products, Photonics Technology and Commercial Imaging. Our Equipment Products Division sells complex capital equipment used in the manufacturing of thin-film disks and flat panel displays. Our Photonics Technology Division is developing sensors and cameras that permit highly sensitive detection of photons in the visible and infrared portions of the spectrum. Our Commercial Imaging Division is developing commercial products based on technology developed by PTD.

Included in corporate activities are general corporate expenses, the equity in net loss of IMAT, Inc. (see Note 5), amortization expenses related to certain intangible assets and the reversal in 2000 of a

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

portion of a restructuring reserve established in September 1999, less an allocation of corporate expenses to operating units equal to 1% of net revenues. Assets of corporate activities include unallocated cash and short-term investments, deferred income tax assets (which were written off in 2001) and certain intangibles and other assets.

Segment Profit or Loss and Segment Assets

We evaluate performance and allocates resources based on a number of factors including, profit or loss from operations and future revenue potential. The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies.

**Business Segment Net Revenues** 

	2002	2001	2000
Equipment Products Photonics Technology Commercial Imaging	\$27,100 6,641 43	(In thousands) \$42,723 8,761	\$28,797 7,252
Total	\$33,784	\$51,484	\$36,049
	_		
Business Segment Profit & Loss			
	2002	2001	2000
		(In thousands)	
Equipment Products (1)(2)	\$ (5,139)	\$ (7,234)	\$ (8,048)
Photonics Technology (3)	(2,173)	(2,595)	(2,164)
Commercial Imaging	(1,656)		_
Corporate activities (4)	(2,321)	(1,639)	(2,151)
Operating loss	(11,289)	(11,468)	(12,363)
Interest expense	(2,981)	(2,912)	(3,033)
Interest income	284	1,245	2,341
Other income and expense, net	16,168	1,228	731
Income (loss) before income taxes	\$ 2,182	\$(11,907)	\$(12,324)

<sup>(1)</sup> Includes goodwill write-off of \$818,000 in 2000.

<sup>(2)</sup> Includes inventory provisions of \$847,000, \$3,830,000 and \$6,007,000 in 2002, 2001 and 2000, respectively.

<sup>(3)</sup> Includes inventory provisions of \$469,000, (\$114,000) and \$316,000 in 2002, 2001 and 2000, respectively.

<sup>(4)</sup> Includes goodwill write-off of \$238,000 in 2000.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Business Segment Assets** 

Dustriess Segment Tissels			
	20	02 2001	1
		(In thousands)	
Equipment Products Photonics Technology	\$20,	162 \$31,8 719 7,2	
Commercial Imaging	7,	— 1,2 —	—
Corporate activities	32,4	417 21,0	69
Total assets	\$60,2	298 \$60,1	65
Business Segment Property, Plant & Equipment			
Additions		2002 200	)1
		(In thousands)	
Equipment Products	\$		
Photonics Technology Commercial Imaging		1,203 3,0	10
Corporate activities		188 3-	48
Total additions	\$	1,480 \$4,0	50
	1		
Depreciation	2002	2001	2000
		(In thousands	
Equipment Products Photonics Technology	\$1,346 860		\$2,387 716
Commercial Imaging	—	——————————————————————————————————————	/10 —
Corporate activities	371	558	618
Total depreciation	\$2,577	\$3,916	\$3,721
•	_		
Geographic Area Net Trade Revenues			
	2002	2001	2000
		(In thousands)	
United States	\$16,332	\$14,154	\$26,466
Far East	17,150	36,363	9,414
Europe Rest of World	301	827 140	49 120
NEST OF WORLD	1		120
Total revenues	\$33,784	\$51,484	\$36,049

# 11. Shareholders' Equity

Intevac's Articles of Incorporation authorize 10,000,000 shares of Preferred Stock. The Board of Directors has the authority to issue the Preferred Stock in one or more series and to fix the price, rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without further vote or action by the shareholders.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Stock Option/ Stock Issuance Plans

The Board of Directors approved the 1991 Stock Option/ Stock Issuance Plan (the "1991 Plan") in 1991. The maximum number of shares that may be issued over the term of the 1991 Plan is 2,666,667 shares. The 1991 Plan is divided into two separate components: the Option Grant Program and the Stock Issuance Program. Under the Option Grant Program, Intevac may grant either incentive stock options or nonqualified options or implement stock appreciation rights provisions at the discretion of the Board of Directors. Exercisability, option price, and other terms are determined by the Board of Directors, but the option price shall not be less than 85% and 100% of the fair market value for nonqualified options and incentive stock options, respectively, as determined by the Board of Directors. Options granted under the 1991 Plan are immediately exercisable; however, unexercised options and shares purchased upon the exercise of the options are subject to vesting over a five-year period. Intevac may repurchase shares that are not vested. No shares were subject to repurchase at December 31, 2002, 2001 and 2000.

In 1995, the Board of Directors approved adoption of (i) the 1995 Stock Option/ Stock Issuance Plan (the "1995 Plan") under which employees, non-employee directors and consultants may be granted stock options to purchase stock or issued shares of stock at not less than 85% of fair market value on the grant/issuance date; and (ii) the Employee Stock Purchase Plan. The 1995 Plan, as amended in 2000, serves as the successor equity incentive program to our 1991 Plan. Upon adoption of the 1995 Plan, all shares available for issuance under the 1991 Plan were transferred to the 1995 Plan. As of December 31, 2002, 2,065,851 shares of common stock are authorized for future issuance under the 1995 Plan. Options granted under the 1995 Plan are exercisable upon vesting and vest over periods of up to five years. Options currently expire no later than ten years from the date of grant.

A summary of Intevac's stock option activity and related information for the years ended December 31 follows:

	2002		2001		2000	
	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price
Outstanding — beginning of						
year	1,802,022	\$5.22	1,570,297	\$5.39	1,496,370	\$5.82
Granted	429,800	3.19	341,900	3.90	336,100	3.75
Exercised	(13,400)	1.46	(41,149)	0.30	(20,261)	2.86
Forfeited	(368,340)	4.00	(69,026)	5.32	(241,912)	5.99
Outstanding — end of year	1,850,082	5.02	1,802,022	5.22	1,570,297	5.39
Exercisable at end of year	1,188,382	\$5.81	1,062,242	\$5.89	878,157	\$5.84
Weighted-average per share fair value of options granted during the year		\$1.58		\$1.93		\$2.20
•		<b>.</b>	20			

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

# Outstanding and Exercisable by Price Range as of December 31, 2002

**Options Outstanding** 

**Options Exercisable** 

Range of Exercise Prices	Number Outstanding As of December 31, 2002	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable As of December 31, 2002	Weighted Average Exercise Price
\$1.275 - \$ 2.630	334,812	7.35 yrs	\$ 2.49	84,812	\$ 2.09
\$3.063 - \$ 3.550	203,040	8.64 yrs	\$ 3.22	61,380	\$ 3.25
\$3.570 - \$ 3.980	211,790	8.04 yrs	\$ 3.81	107,110	\$ 3.74
\$4.000 - \$ 5.120	190,500	8.71 yrs	\$ 4.40	104,300	\$ 4.44
\$5.375 - \$ 5.690	121,640	6.71 yrs	\$ 5.41	83,360	\$ 5.39
\$6.000 - \$ 6.000	353,161	2.61 yrs	\$ 6.00	353,161	\$ 6.00
\$6.063 - \$ 6.625	161,300	5.71 yrs	\$ 6.46	140,680	\$ 6.46
\$6.750 - \$ 7.625	180,779	3.87 yrs	\$ 7.48	172,819	\$ 7.50
\$7.688 – \$21.250	93,060	5.09 yrs	\$10.60	80,760	\$10.99
\$1.275 - \$21.250	1,850,082	6.17 yrs	\$ 5.02	1,188,382	\$ 5.81

#### 12. Income Taxes

The provision for (benefit from) income taxes on income from continuing operations consists of the following (in thousands):

Years Ended December 31,		
2002	2001	2000
\$(6,585)	\$ —	\$
_	3,771	_
		_
(6,585)	3,771	_
2	_	
_	1,217	
		_
2	1,217	_
(9)	41	
\$(6,592)	\$5,029	\$—

The tax benefits associated with exercises of nonqualified stock options and disqualifying dispositions of stock acquired through the incentive stock option and employee stock purchase plans reduced taxes currently payable for 2002, 2001 and 2000 as shown above by \$0, \$0 and \$29,000, respectively. Such benefits are credited to additional paid-in capital when realized.

Deferred income taxes reflect the net tax effects of temporary differences between losses reported and the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

income tax purposes. Significant components of our deferred tax assets computed in accordance with SFAS 109 are as follows (in thousands):

	December 31,		
	2002	2001	
Deferred tax assets:			
Vacation accrual, rent accrual and warranty reserve	\$ 1,167	\$ 1,260	
Depreciation	1,370	1,237	
Inventory valuation	3,534	5,505	
Research and other tax credit carry-forwards	513	1,767	
Federal and State NOL carry-forward	4,962	6,745	
Basis difference in subsidiary investment	_	2,337	
Other	587	428	
	12,133	19,279	
Valuation allowance for deferred tax assets	(12,083)	(19,227)	
Total deferred tax assets	\$ 50	\$ 52	
Deferred tax liabilities:			
Other	\$ 50	\$ 52	
Total deferred tax liabilities	\$ 50	\$ 52	
Net deferred tax assets	\$	\$	

The valuation allowance decreased by \$7,144,000 during 2002 due primarily to the carry-back of 2001 net operating losses, which resulted in a tax refund of \$6,585,000. This carry-back resulted from the enactment of the Job Creation and Worker Assistance Act of 2002, which increased the length of time over which losses incurred in 2001 could be carried back from 2 years to 5 years. The Federal and State net operating loss carry-forwards of \$13,166,000 and \$8,319,000 expire at various dates through 2021 and 2013, respectively, if not previously utilized.

A reconciliation of the income tax provision on income from continuing operations at the federal statutory rate of 34% to the income tax provision at the effective tax rate is as follows (in thousands):

	Years Ended December 31,		
	2002	2001	2000
Income taxes (benefit) computed at the federal statutory rate	\$ 766	\$ (4,125)	\$(4,314)
State taxes (net of federal benefit)	109	(408)	(640)
Tax exempt income	_	_	(14)
Goodwill amortization	_	_	713
Research and other tax credit	(142)	(1,033)	
Effect of tax rate changes and other permanent differences	(181)	44	650
Valuation allowance	(7,144)	10,551	3,605
Total	\$(6,592)	\$ 5,029	\$

# 13. Research and Development Cost Sharing Agreements

In 1992 Intevac entered into an agreement with a Japanese company to perform best efforts joint research and development work. The nature of the project was to develop a glass-coating machine to be used in the production of flat panel displays. We were funded for one-half of the actual costs of the project up to a ceiling of \$9,450,000. At December 31, 1999, we had received the entire amount under the contract.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Qualifying costs of approximately \$3,108,000 for the year ended December 31, 2000 were incurred on this project, resulting in offsets against research and development costs of approximately \$583,000 in 2000. As of December 31, 2000, the entire advance had been applied to qualifying costs. Each party received certain manufacturing and marketing rights for separate regions of the world. The agreement also calls for 5% royalty payments by each party to the other party, based on production and sales.

#### 14. Other Accrued Liabilities

	Decen	December 31,		
	2002	2001		
	(In the	(In thousands)		
Accrued product warranties	\$ 845	\$ 906		
Accrued interest expense	662	813		
Accrued rent expense	1,435	1,241		
Other	781	587		
Total other accrued liabilities	\$3,723	\$3,547		

# 15. Quarterly Consolidated Results of Operations (Unaudited)

Three Months Ended			
March 30, 2002	June 29, 2002	Sept. 28, 2002	Dec. 31, 2002
	(In thousands, ex	cept per share data)	
\$ 6,670	\$8,385	\$ 6,737	\$11,992
963	2,003	1,342	3,001
(2,142)	809	(3,835)	13,942
\$ (0.18)	\$ 0.07	\$ (0.32)	\$ 1.15
(0.18)	0.07	(0.32)	0.86
	Three Montl	ns Ended	
March 31, 2001	June 30, 2001	Sept. 29, 2001	Dec. 31, 2001
	(In thousands, excep	t per share data)	
\$10,005	\$ 9,490	\$ 8,414	\$23,575
3,400	(181)	1,682	4,854
(3,784)	(4,540)	(5,356)	(3,256)
\$ (0.32)	\$ (0.38)	\$ (0.45)	\$ (0.27)
	\$ 6,670 963 (2,142) \$ (0.18) (0.18) March 31, 2001 \$10,005 3,400 (3,784)	March 30, 2002   2002	March 30, 2002   Sept. 28, 2002

<sup>(1)</sup> Net income (loss) for the three months ended March 30, 2002, June 29, 2002 and December 31, 2002 include tax benefits of \$2.2 million, \$4.2 million and \$0.2 million, respectively, booked as a result of the enactment of the Job Creation and Worker Assistance Act of 2002.

<sup>(2)</sup> Net income (loss) for the three months ended December 31, 2002 includes a gain of \$15.4 million from the sale of the rapid thermal processing product line.

<sup>(3)</sup> Net income (loss) for the three months ended December 31, 2002 includes a gain of \$0.3 million from the sale of fabrication shop fixed assets.

<sup>(4)</sup> Net loss for the three months ended December 31, 2001 includes a gain of \$1.4 million from the repurchase of Intevac's convertible notes.

intevac
PROSPECTUS

Needham & Company, Inc.

Piper Jaffray

Thomas Weisel Partners LLC

, 2003

#### **PART II**

## INFORMATION NOT REQUIRED IN THE PROSPECTUS

## Item 14. Other Expenses of Issuance and Distribution

The following is an itemized statement of the costs and expenses, other than underwriting discounts and commissions, payable by Intevac in connection with the issuance and distribution of the securities registered hereby. All amounts are estimates except the Securities and Exchange Commission registration fee and the National Association of Securities Dealers, Inc. filing fee.

	Amount to be Paid by Intevac
SEC Registration Fee	\$ 5,528
NASD Filing Fee	7,333
Accounting Fees and Expenses	50,000
Legal Fees and Expenses	300,000
Printing Fees	100,000
Transfer Agent and Registrar Fees	15,000
Miscellaneous	22,139
Total	\$500.000

# Item 15. Indemnification of Directors and Officers

Section 317 of the California Corporations Code authorizes a corporation's Board of Directors to grant indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act. Article V of the our Amended and Restated Articles of Incorporation and Article VI of the our Bylaws provide for indemnification of our directors, officers and other agents to the maximum extent permitted by the California Corporations Code. In addition, we have entered into indemnification agreements with each of our directors and executive officers.

The Underwriting Agreement provides for indemnification by the Underwriters of Intevac and our directors and officers who sign this Registration Statement against certain liabilities, including liabilities under the Securities Act.

#### Item 16. Exhibits

The following exhibits are filed herewith or incorporated by reference herein:

Exhibit Number	Description of Document
1.1	Form of Underwriting Agreement
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
23.1*	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1)
23.2	Consent of Grant Thornton LLP, independent auditors
24.1†	Power of Attorney (included on page II-3 herein)

<sup>\*</sup> Previously filed.

# Item 17. Undertakings

We hereby undertake that, for purposes of determining any liability under the Securities Act of 1933, each filing of our annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange

<sup>†</sup> Previously filed in part.

#### **Table of Contents**

Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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

## We hereby undertake that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by us pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

# **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-3 and has duly caused this Amendment No. 1 to Registration Statement No. 333-111342 to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Santa Clara, State of California, on January 6, 2004.

INTEVAC, INC.

By: /s/ KEVIN FAIRBAIRN

# Kevin Fairbairn President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Amendment No. 1 to Registration Statement No. 333-111342 has been signed by the following persons in the capacities and on the dates indicated:

	Signature	Title	Date	
	/s/ KEVIN FAIRBAIRN  President, Chief Executive Officer and		January 6, 2004	
	(Kevin Fairbairn)	Director (Principal Executive Officer)		
	* NORMAN H. POND	Chairman of the Board	January 6, 2004	
	(Norman H. Pond)			
	/s/ CHARLES B. EDDY	Vice President, Finance and Administration,	January 6, 2004	
	(Charles B. Eddy)	Chief Financial Officer Treasurer and Secretary (Principal Financial and Accounting Officer)		
	* DAVID DURY	Director	January 6, 2004	
	(David Dury)			
	/s/ DAVID N. LAMBETH	Director	January 6, 2004	
	(David N. Lambeth)			
	* ROBERT LEMOS	Director	January 6, 2004	
	(Robert Lemos)			
	* ARTHUR L. MONEY	Director	January 6, 2004	
	(Arthur L. Money)			
* By:	/s/ CHARLES B. EDDY III			
	Charles B. Eddy III (Attorney-in-Fact)			
		II-3		

#### POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kevin Fairbairn and Charles B. Eddy III, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and to sign any registration statement for the same offering covered by this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933 and all post-effective amendments thereto, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Power of Attorney has been signed by the following person in the capacity and on the date indicated:

Signature	Title	Date
/s/ DAVID N. LAMBETH	Director	January 6, 2004
(David N. Lambeth)		
	II-4	

# **Table of Contents**

# EXHIBIT INDEX

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24.1†	Power of Attorney (included on page II-3 herein)

<sup>\*</sup> Previously filed. † Previously filed in part.

**EXHIBIT 1.1** 

4,000,000 SHARES\*

INTEVAC, INC.

#### COMMON STOCK

#### UNDERWRITING AGREEMENT

\_\_\_, 2004

## NEEDHAM & COMPANY, INC.

Piper Jaffray & Co. Thomas Weisel Partners LLC c/o Needham & Company, Inc. 445 Park Avenue New York, New York 10022 Ladies and Gentlemen:

Intevac, Inc., a California corporation (the "Company"), proposes to issue and sell 2,500,000 shares (the "Company Firm Shares") of the Company's common stock, no par value (the "Common Stock"), and the shareholder of the Company named in Schedule II hereto (the "Selling Shareholder") propose to sell 1,500,000 shares of the Common Stock (the "Selling Shareholder Firm Shares"), in each case to you and to the several other Underwriters named in Schedule I hereto (collectively, the "Underwriters"), for whom you are acting as Representatives (the "Representatives"). The Selling Shareholder has also agreed to grant to you and the other Underwriters an option (the "Selling Shareholder Option") to purchase up to an additional 600,000 shares of Common Stock, on the terms and for the purposes set forth in Section 1(b) ("Selling Shareholder Option Shares"). The Company Firm Shares and the Selling Shareholder Firm Shares are collectively referred to as the "Firm Shares." The Selling Shareholder Option Shares are referred to herein as the "Option Shares and the Option."

The Company and the Selling Shareholder confirm as follows their respective agreements with the Representatives and the several other Underwriters.

# 1. AGREEMENT TO SELL AND PURCHASE.

(a) On the basis of the representations, warranties and agreements of the Company herein contained and subject to all the terms and conditions of
this Agreement, (i) the Company agrees to issue and sell the Company Firm Shares to the Underwriters and (ii) each of the Underwriters,
severally and not jointly, agrees to purchase from the Company the respective number of Company Firm Shares set forth opposite that
Underwriter's name in Schedule I hereto, at the purchase price of \$ for each Company Firm Share.

<sup>\*</sup> Plus an option to purchase up to an additional 600,000 shares to cover over-allotments.

(b) On the basis of the representations, warranties and agreements of the Selling Shareholder herein contained and subject to all the terms and conditions of this Agreement, (i) the Selling Shareholder agrees to issue and sell the Selling Shareholder Firm Shares to the Underwriters and (ii) each of the Underwriters, severally and not jointly, agrees to purchase from the Selling Shareholder the respective number of Selling Shareholder Firm Shares set forth opposite that Underwriter's name in Schedule I hereto, at the purchase price of \$\_\_\_\_\_\_ for each Selling Shareholder Firm Share.

(c) Subject to all the terms and conditions of this Agreement, the Company grants the Company Option and the Selling Shareholder grants the Selling Shareholder Option to the Underwriters to purchase, severally and not jointly, up to the maximum number of Option Shares set forth in Schedule II of this Agreement at the same price per share as the Underwriters shall pay for the Firm Shares. The Option may be exercised only to cover over-allotments in the sale of the Firm Shares by the Underwriters and may be exercised in whole or in part, but pro rata with respect to the Company and Selling Shareholder, at any time (but not more than once) on or before the 30th day after the date of this Agreement upon written or telegraphic notice (the "Option Shares Notice") by the Representatives to the Company and the Selling Shareholder no later than 12:00 noon, New York City time, at least two and no more than five business days before the date specified for closing in the Option Shares Notice (the "Option Closing Date"), setting forth the aggregate number of Option Shares to be purchased and the time and date for such purchase. On the Option Closing Date, the Company will issue and sell, and the Selling Shareholder will sell, to the Underwriters the number of Option Shares set forth in the Option Shares Notice with respect to the Company and Selling Shareholder, as the case may be, and each Underwriter will purchase such percentage of the Option Shares as is equal to the percentage of Firm Shares that such Underwriter is purchasing, as adjusted by Needham & Company, Inc. in such manner as they deem advisable to avoid fractional shares.

#### 2. DELIVERY AND PAYMENT.

Delivery of the Firm Shares shall be made to the Representatives for the accounts of the Underwriters against payment of the purchase price by wire transfer or certified check payable in same-day funds to the order of (i) the Company for the Company Firm Shares to be sold by it and (ii) to the order of the Selling Shareholder for the Selling Shareholder Firm Shares sold by it at the office of Needham & Company, Inc., 445 Park Avenue, New York, New York 10022, at 10:00 a.m., New York City time, on the third (or, if the purchase price set forth in Section 1(a) hereof is determined after 4:30 p.m., New York City time, the fourth) business day following the commencement of the offering contemplated by this Agreement, or at such time on such other date, not later than seven business days after the date of this Agreement, as may be agreed upon by the Company, the Selling Shareholder and the Representatives (such date is hereinafter referred to as the "Closing Date").

To the extent the Underwriters exercise the Option, delivery of the Option Shares against payment by the Underwriters (in the manner specified above) will take place at the offices specified above for the Closing Date at the time and date (which may be the Closing Date) specified in the Option Shares Notice.

Certificates evidencing the Shares shall be in definitive form and shall be registered in such names and in such denominations as the Representatives shall request at least two business days prior to the Closing Date or the Option Closing Date, as the case may be, by written notice to the Company. For the purpose of expediting the checking and packaging of certificates for the Shares, the Company agrees to make such certificates available for inspection at least 24 hours prior to the Closing Date or the Option Closing Date, as the case may be.

The Company shall bear the cost of original issue tax stamps and other transfer taxes, if any, in connection with the issuance and delivery of the Firm Shares and the Option Shares by the Company and the Selling Shareholder to the Underwriters. The Company or the Selling Shareholder, as appropriate, will pay and save each Underwriter and any subsequent holder of the Shares harmless from any and all liabilities with respect to or resulting from any failure or delay in paying federal and state stamp and other transfer taxes, if any, which may be

payable or determined to be payable in connection with the original issuance or sale to such Underwriter of the Shares.

## 3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY AND THE SELLING SHAREHOLDER.

The Company and the Selling Shareholder represent, warrant and covenant to each Underwriter that:

- (a) The Company meets the requirements for use of Form S-3 and a registration statement (Registration No. 333-\_\_\_\_\_) on Form S-3 relating to the Shares, including a preliminary prospectus and such amendments to such registration statement as may have been required to the date of this Agreement, has been prepared by the Company under the provisions of the Securities Act of 1933, as amended (the "Act"), and the rules and regulations (collectively referred to as the "Rules and Regulations") of the Securities and Exchange Commission (the "Commission") thereunder, and has been filed with the Commission. The term "preliminary prospectus" as used herein means a preliminary prospectus, including the documents incorporated by reference therein, as contemplated by Rule 430 or Rule 430A of the Rules and Regulations included at any time as part of the registration statement. Copies of such registration statement and amendments and of each related preliminary prospectus have been delivered to the Representatives. If such registration statement has not become effective, the Company will promptly file with the Commission a further amendment to such registration statement, including a form of final prospectus, necessary to permit such registration statement to become effective. If such registration statement has become effective, a final prospectus containing information permitted to be omitted at the time of effectiveness by Rule 430A of the Rules and Regulations will be filed promptly by the Company with the Commission in accordance with Rule 424(b) of the Rules and Regulations. The term "Registration Statement" means the registration statement as amended at the time it becomes or became effective (the "Effective Date"), including all documents incorporated by reference therein, financial statements and all exhibits and schedules thereto and any information deemed to be included by Rule 430A, and includes any registration statement relating to the offering contemplated by this Agreement and filed pursuant to Rule 462(b) of the Rules and Regulations. The term "Prospectus" means the prospectus, including the documents incorporated by reference therein, as first filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations or, if no such filing is required, the form of final prospectus, including the documents incorporated by reference therein, included in the Registration Statement at the Effective Date. Any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement, any preliminary prospectus or the Prospectus shall be deemed to refer to and include the filing of any document under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), after the Effective Date, the date of any preliminary prospectus or the date of the Prospectus, as the case may be, and deemed to be incorporated therein by reference.
- (b) No order preventing or suspending the use of any preliminary prospectus has been issued by the Commission, and no stop order suspending the effectiveness of the Registration Statement (including any related registration statement filed pursuant to Rule 462(b) under the Act) or any post-effective amendment thereto has been issued, and no proceeding for that purpose has been initiated or threatened by the Commission. On the Effective Date, the date the Prospectus is first filed with the Commission pursuant to Rule 424(b) (if required), during the period through and including the Closing Date and, if later, the Option Closing Date, and when any post-effective amendment to the Registration Statement becomes effective or any amendment or supplement to the Prospectus (is filed with the Commission, the Registration Statement and the Prospectus (as amended or as supplemented if the Company shall have filed with the Commission any amendment or supplement thereto), including the financial statements included in the Prospectus, did and will comply with all applicable provisions of the Act and the Rules and Regulations and will contain all statements required to be stated therein in accordance with the Act, the Exchange Act, the rules and regulations under the Exchange Act (the "Exchange Act Rules and Regulations") and the Rules and Regulations. On the Effective Date and when any post-effective amendment to the Registration Statement becomes effective, no part of the Registration Statement, the Prospectus or any such amendment or supplement thereto did or will contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. At the Effective Date, the date the Prospectus or any amendment or supplement to the Prospectus is filed with the Commission and at the Closing Date and, if later, the Option Closing Date, the Prospectus did not and will not cont

state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. The foregoing representations and warranties in this Section 3(b) do not apply to any statements or omissions made in reliance on and in conformity with information relating to any Underwriter furnished in writing to the Company by the Representatives specifically for inclusion in the Registration Statement or Prospectus or any amendment or supplement thereto. The Company and the Selling Shareholder each acknowledges that the only information furnished in writing to the Company by the Representatives on behalf of the Underwriters expressly for inclusion in the Registration Statement or Prospectus or any amendments or supplements thereto, appears under the heading "Underwriting".

- (c) The documents that are incorporated by reference in the preliminary prospectus and the Prospectus or from which information is so incorporated by reference, when they became or become effective or were or are filed with the Commission, as the case may be, complied or will comply in all material respects with the requirements of the Act or the Exchange Act, as applicable, and the Rules and Regulations or the Exchange Act Rules and Regulations, as applicable; and any documents so filed and incorporated by reference subsequent to the Effective Date shall, when they are filed with the Commission, comply in all material respects with the requirements of the Act or the Exchange Act, as applicable, and the Rules and Regulations or the Exchange Act Rules and Regulations, as applicable.
- (d) The Company does not own, and at the Closing Date and, if later, the Option Closing Date, will not own, directly or indirectly, any shares of stock or any other equity or long-term debt securities of any corporation or have any equity interest in any corporation, firm, partnership, joint venture, association or other entity, other than the subsidiaries listed in Exhibit 21 to the Registration Statement (the "Subsidiaries"). The Company and each of its Subsidiaries is, and at the Closing Date and, if later, the Option Closing Date, will be, an entity duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or organization. The Company and each of its Subsidiaries has, and at the Closing Date and, if later, the Option Closing Date, will have, full power and authority to conduct all the activities conducted by it, to own or lease all the assets owned or leased by it and to conduct its business as described in the Registration Statement and the Prospectus. The Company and each of its Subsidiaries is, and at the Closing Date and, if later, the Option Closing Date, will be, duly licensed or qualified to do business and in good standing as a foreign corporation in all jurisdictions in which the nature of the activities conducted by it or the character of the assets owned or leased by it makes such license or qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to materially and adversely affect the Company and its Subsidiaries or its or their business, properties, business prospects, condition (financial or other) or results of operations, taken as a whole. All of the outstanding shares of capital stock of each Subsidiary have been duly authorized and validly issued and are fully paid and nonassessable, and owned by the Company free and clear of all claims, liens, charges and encumbrances. There are no securities outstanding that are convertible into or exercisable or exchangeable for capital stock of any Subsidiary. The Company and its Subsidiaries are not, and at the Closing Date and, if later, the Option Closing Date, will not be, engaged in any discussions or a party to any agreement or understanding, written or oral, regarding the acquisition of an interest in any corporation, firm, partnership, joint venture, association or other entity where such discussions, agreements or understandings would require amendment to the Registration Statement pursuant to applicable securities laws, unless such amendment has been filed. Complete and correct copies of the articles of incorporation and of the by-laws, or other organizational documents, of the Company and each of its Subsidiaries and all amendments thereto have been delivered to the Representatives, and no changes therein will be made subsequent to the date hereof and prior to the Closing Date or, if later, the Option Closing Date.
- (e) All of the outstanding shares of capital stock of the Company (including the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder under this Agreement) have been duly authorized, validly issued and are fully paid and nonassessable and were issued in compliance with all applicable state and federal securities laws. The Company Firm Shares and the Company Option Shares to be issued by the Company (if any) have been duly authorized and when issued and paid for as contemplated herein will be validly issued, fully paid and nonassessable. No preemptive or similar rights exist with respect to any of the Shares or the issue and sale thereof. The description of the capital stock of the Company incorporated by reference into the Registration Statement and the Prospectus is, and at the Closing Date and, if later, the Option Closing Date, will be, complete and accurate in all material respects. Except as set forth in the

Prospectus, or as a result of option grants under the Company's stock option plans in the ordinary course and consistent with past practice, the Company does not have outstanding, and at the Closing Date and, if later, the Option Closing Date, will not have outstanding, any options to purchase, or any rights or warrants to subscribe for, or any securities or obligations convertible into, or any contracts or commitments to issue or sell, any shares of capital stock, or any such warrants, convertible securities or obligations. No further approval or authority of Shareholders or the Board of Directors of the Company will be required for the transfer and sale of the Selling Shareholder Firm Shares or the Selling Shareholder Option Shares or the issuance and sale of the Company Firm Shares and the Company Option Shares as contemplated herein.

- (f) The financial statements, notes and schedules included in or incorporated by reference into the Registration Statement or the Prospectus present fairly the financial condition of the Company and its consolidated Subsidiaries as of the respective dates thereof and the results of operations and cash flows of the Company and its consolidated Subsidiaries for the respective periods covered thereby, all in conformity with generally accepted accounting principles applied on a consistent basis throughout the entire period involved, except as otherwise disclosed in the Prospectus. No other financial statements or schedules of the Company are required by the Act or the Rules and Regulations to be included in the Registration Statement or the Prospectus. Grant Thornton LLP ("Grant Thornton"), who have reported on such financial statements and schedules, are independent accountants with respect to the Company as required by the Act and the Rules and Regulations. The summary consolidated financial and statistical data included in the Registration Statement present fairly the information shown therein and have been compiled on a basis consistent with the audited financial statements presented in or incorporated by reference into the Registration Statement subject, in the case of quarterly information, to normal year-end audit adjustments.
- (g) Subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus and prior to the Closing Date and, if later, the Option Closing Date, except as set forth in or contemplated by the Registration Statement and the Prospectus, (i) there has not been and will not have been any change in the capitalization of the Company (other than in connection with the exercise of options to purchase the Company's Common Stock granted pursuant to the Company's stock option plans from the shares reserved therefore, and in connection with the purchase of shares under the Company's stock purchase plan, all as described in the Registration Statement), or any material adverse change in the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries, arising for any reason whatsoever, (ii) neither the Company nor any of its Subsidiaries has incurred nor will any of them incur, except in the ordinary course of business as described in the Prospectus, any material liabilities or obligations, direct or contingent, nor has the Company or any of its Subsidiaries entered into nor will any of them enter into, except in the ordinary course of business as described in the Prospectus, any material transactions other than pursuant to this Agreement and the transactions referred to herein, and (iii) the Company has not and will not have paid or declared any dividends or other distributions of any kind on any class of its capital stock.
- (h) The Company is not, will not become as a result of the transactions contemplated hereby, and will not conduct its business in a manner that would cause it to become, an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for, an "investment company," as such terms are defined in the Investment Company Act of 1940, as amended.
- (i) There are no legal actions, suits or proceedings pending or threatened against the Company, or any of its Subsidiaries, or any of its or their officers or directors in their capacity as such, nor, to the knowledge of either the Company or the Selling Shareholder, any basis therefore, before or by any federal or state court, commission, regulatory body, administrative agency or other governmental body, domestic or foreign, wherein an unfavorable ruling, decision or finding might materially and adversely affect the Company, any of its Subsidiaries, or the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries.
- (j) The Company and each Subsidiary has, and at the Closing Date and, if later, the Option Closing Date, will have, performed all the obligations required to be performed by it, and is not, and at the Closing Date, and, if later, the Option Closing Date, will not be, in default, under any contract or other instrument to which it

is a party or by which its property is bound or affected, which default might reasonably be expected to materially and adversely affect the Company or the business, properties, business prospects, condition (financial or other) or results of operations of the Company or any of its Subsidiaries. To the knowledge of either the Company or the Selling Shareholder, no other party under any contract or other instrument to which it or any of its Subsidiaries is a party is in default in any respect thereunder, which default might reasonably be expected to materially and adversely affect the Company or any of its Subsidiaries, or the business, properties, business prospects, condition (financial or other) or results of operations of the Company or any of its Subsidiaries. Neither the Company nor any of its Subsidiaries is, and at the Closing Date and, if later, the Option Closing Date, will be in violation of any provision of its articles of incorporation, by-laws or other organizational documents.

- (k) No consent, approval, authorization or order of, or any filing or declaration with, any court or governmental agency or body is required for the consummation by the Company of the transactions on its part contemplated herein, except such as have been obtained under the Act or the Rules and Regulations and such as may be required under state securities or Blue Sky laws or the by-laws and rules of the National Association of Securities Dealers, Inc. (the "NASD") in connection with the purchase and distribution by the Underwriters of the Shares.
- (l) The Company has full corporate power and authority to enter into this Agreement. This Agreement has been duly authorized, executed and delivered by the Company and constitutes a valid and binding agreement of the Company, enforceable against the Company in accordance with the terms hereof. The performance of this Agreement and the consummation of the transactions contemplated hereby will not result in the creation or imposition of any lien, charge or encumbrance upon any of the assets of the Company pursuant to the terms or provisions of, or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or give any party a right to terminate any of its obligations under, or result in the acceleration of any obligation under, the articles of incorporation, by-laws or other organizational documents of the Company or any of its Subsidiaries, any indenture, mortgage, deed of trust, voting trust agreement, loan agreement, bond, debenture, note agreement or other evidence of indebtedness, lease, contract or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which the Company, any of its Subsidiaries, or any of its or their properties is bound or affected, or violate or conflict with any judgment, ruling, decree, order, statute, rule or regulation of any court or other governmental agency, self-regulatory organization or body applicable to the business or properties of the Company or any of its Subsidiaries.
- (m) The Company and its Subsidiaries have good and marketable title to all properties and assets described in the Prospectus as owned by them, free and clear of all liens, charges, encumbrances or restrictions, except such as are described in the Prospectus or are not material to the business of the Company or its Subsidiaries. The Company and its Subsidiaries have valid, subsisting and enforceable leases for the properties described in the Prospectus as leased by them. The Company and its Subsidiaries own or lease all such properties as are necessary to their operations as now conducted or as proposed to be conducted, except where the failure to so own or lease would not materially and adversely affect the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or its Subsidiaries.
- (n) There is no document, contract, permit or instrument of a character required to be described in the Registration Statement or the Prospectus or to be filed as an exhibit to the Registration Statement which is not described or filed as required. All such contracts to which the Company or any of its Subsidiaries is a party have been duly authorized, executed and delivered by the Company or such Subsidiary, constitute valid and binding agreements of the Company or such Subsidiary and are enforceable against and by the Company or such Subsidiary in accordance with the terms thereof, except where the enforcement thereof may be limited by equitable principles or bankruptcy laws.
- (o) No statement, representation, warranty or covenant made by the Company in this Agreement or made in any certificate or document required by Section 6 of this Agreement to be delivered to the Representatives was or will be, when made, inaccurate, untrue or incorrect in any material respect.

- (p) The Company has not distributed and will not distribute prior to the later of (i) the Closing Date or, if later, the Option Closing Date, and (ii) completion of the distribution of the Shares, any offering material in connection with the offering and sale of the Shares other than any preliminary prospectuses, the Prospectus, the Registration Statement and other materials, if any, permitted by the Act. Neither the Company nor any of its directors, officers or controlling persons has taken, directly or indirectly, any action designed, or which might reasonably be expected, to cause or result in, under the Act or otherwise, or which has constituted, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares.
- (q) Except as stated in the prospectus, no holder of securities of the Company has rights to the registration of any securities of the Company because of the filing of the Registration Statement, which rights have not been waived by the holder thereof as of the date hereof.
- (r) The Common Stock is registered under Section 12(g) of the Exchange Act. The Common Stock is included on the Nasdaq National Market (the "NNM") and the Shares to be sold by the Company hereunder have been approved for listing, subject to official notice of issuance of the Company Firm Shares and the Company Option Shares. The Shares to be sold by the Selling Shareholder hereunder are included on the NNM.
- (s) The Company and its Subsidiaries have sufficient trademarks, trade names, patents, patent rights, mask works, copyrights, licenses, approvals and governmental authorizations to conduct their businesses as now conducted, and none of the foregoing intellectual property rights owned or licensed by the Company is invalid or unenforceable. Neither the Company nor the Selling Shareholder has any knowledge of any infringement by it or any of its Subsidiaries of trademarks, trade names, patents, patent rights, mask work rights, copyrights, licenses, trade secrets or other similar rights of others, where such infringement could have a material adverse effect on the Company, any of its Subsidiaries, or the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries. The Company is not aware of any infringement, misappropriation or violation by others of, or conflict by others with rights of the Company with respect to, any of the foregoing intellectual property rights. There is no claim being made or threatened to be made against the Company or any of its Subsidiaries, or to the knowledge of either the Company or the Selling Shareholder, any employee of the Company or any of its Subsidiaries, regarding trademark, trade name, patent, mask work, copyright, license, trade secret or other infringement which could reasonably be expected to have a material adverse effect on the Company, any of its Subsidiaries, or the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries.
- (t) The Company and each of its Subsidiaries have filed all federal, state, local and foreign income tax returns which have been required to be filed and have paid all taxes and assessments received by them to the extent that such taxes or assessments have become due. Neither the Company nor any of its Subsidiaries has any tax deficiency which has been or, to the knowledge of the Company, might be asserted or threatened against them which could reasonably be expected to have a material and adverse effect on the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries.
- (u) The Company and each of its Subsidiaries own or possess all authorizations, approvals, orders, licenses, registrations, other certificates and permits of and from all governmental regulatory officials and bodies, necessary to conduct their respective businesses as contemplated in the Prospectus, except where the failure to own or possess all such authorizations, approvals, orders, licenses, registrations, other certificates and permits would not materially adversely affect the Company, any of its Subsidiaries, or the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries. There is no proceeding pending or threatened (or any basis therefor known to the Company) which may cause any such authorization, approval, order, license, registration, certificate or permit to be revoked, withdrawn, cancelled, suspended or not renewed; and the Company and each of its Subsidiaries is conducting its business in compliance with all laws, rules and regulations applicable thereto (including, without limitation, all applicable federal, state and local environmental laws and regulations), except where such noncompliance would not materially adversely affect the Company, any of its Subsidiaries, or the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries.

- (v) The Company and each of its Subsidiaries maintains insurance of the types and in the amounts generally deemed adequate for its business, including, but not limited to, insurance covering product liability and claims insurance covering real and personal property owned or leased by the Company and its Subsidiaries against theft, damage, destruction, acts of vandalism and all other risks customarily insured against, all of which insurance is in full force and effect.
- (w) Neither the Company nor any of its Subsidiaries has nor, to the knowledge of either the Company or the Selling Shareholder, any of its or their respective employees or agents at any time during the last five years (i) made any unlawful contribution to any candidate for foreign office, or failed to disclose fully any contribution in violation of law, or (ii) made any payment to any federal or state governmental officer or official, or other person charged with similar public or quasi-public duties, other than payments required or permitted by the laws of the United States or any jurisdiction thereof.
- (x) The Company and each of its Subsidiaries is in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA"); no "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Company or any Subsidiary would have any liability; neither the Company nor any Subsidiary has incurred or expects to incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan" or (ii) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the "Code"); and each "pension plan" for which the Company or any Subsidiary would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects, and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification.
- (y) The Company and each of its Subsidiaries has complied in all material respects with all applicable domestic or foreign laws (statutory, common, or otherwise), orders, writs, injunctions, decrees, awards, stipulations, ordinances or administrative doctrines, equitable principles, codes, rules, regulations, executive orders, requests, or other similar authority enacted, adopted, promulgated, or applied by any governmental body and applicable to the Company or a Subsidiary of the Company (collectively, the "Laws"). No action, appeal, petition, plea, charge, complaint, claim, suit, demand, litigation, arbitration, mediation, hearing, investigation or similar event, occurrence or proceeding is pending or, to the knowledge of the Company or the Selling Shareholder, threatened against it alleging any failure to comply with the Laws.

#### 4. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE SELLING SHAREHOLDER.

The Selling Shareholder, represents, warrants and covenants to each Underwriter that:

(a) All consents, approvals, authorizations and orders necessary for the execution and delivery by the Selling Shareholder of this Agreement and the Custody Agreement (the "Shareholder's Agreement") and for the sale and delivery of the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder hereunder, have been obtained; and the Selling Shareholder has full right, power and authority to enter into this Agreement and the Shareholder's Agreement, to make the representations, warranties and agreements hereunder and thereunder, and to sell, assign, transfer and deliver the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by such Selling Shareholder hereunder.

(b) Certificates in negotiable form representing all of the Selling Sh	areholder Firm Shares and the Selling Shareholder Option Shares to be sold
by such Selling Shareholder have been placed in custody under the	Shareholder's Agreement, in the form heretofore furnished to you, duly
executed and delivered by the Selling Shareholder to	, (the "Custodian").

(c) The Selling Shareholder specifically agrees that the Selling Shareholder Option Shares represented by the certificates held in custody for the Selling Shareholder under the Shareholder's Agreement are for the benefit of and coupled with and subject to the interests of the Underwriters, the Custodian, and the Company, that the arrangements made by the Selling Shareholder for such custody are, except as specifically provided in the

Shareholder's Agreement, to that extent irrevocable, and that the obligations of the Selling Shareholder hereunder shall not be terminated by operation of law, whether by the death, disability or incapacity of the Selling Shareholder or by the occurrence of any other event. If the Selling Shareholder or any executor or trustee for the Selling Shareholder should die, become incapacitated, or if any other such event should occur, before the delivery of the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares, the certificates representing the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares shall be delivered by or on behalf of the Selling Shareholder in accordance with the terms and conditions of this Agreement and of the Shareholder's Agreement, regardless of whether or not the Custodian shall have received notice of such death, incapacity, or other event.

- (d) This Agreement and the Shareholder's Agreement have each been duly authorized, executed and delivered by or on behalf of the Selling Shareholder and each such document constitutes a valid and binding obligation of the Selling Shareholder, enforceable in accordance with its terms.
- (e) No consent, approval, authorization or order of, or any filing or declaration with, any court or governmental agency or body is required in connection with the sale of the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares by the Selling Shareholder or the consummation by the Selling Shareholder of the transactions on its part contemplated by this Agreement and the Shareholder's Agreement, except such as have been obtained under the Act or the Rules and Regulations and such as may be required under state securities or Blue Sky laws or the by-laws and rules of the NASD in connection with the purchase and distribution by the Underwriters of the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder.
- (f) The sale of the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder hereunder and the performance by the Selling Shareholder of this Agreement and the Shareholder's Agreement and the consummation of the transactions contemplated hereby and thereby will not result in the creation or imposition of any lien, charge or encumbrance upon any of the assets of the Selling Shareholder pursuant to the terms or provisions of, or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or give any party a right to terminate any of its obligations under, or result in the acceleration of any obligation under, any indenture, mortgage, deed of trust, voting trust agreement, loan agreement, bond, debenture, note agreement or other evidence of indebtedness, lease, contract or other agreement or instrument to which the Selling Shareholder is a party or by which the Selling Shareholder or any of the Selling Shareholder's properties is bound or affected, or violate or conflict with any judgment, ruling, decree, order, statute, rule or regulation of any court or other governmental agency or body applicable to the Selling Shareholder.
- (g) The Selling Shareholder has, and at the Closing Date and, if later, the Option Closing Date, will have, good and marketable title to the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder hereunder, free and clear of all liens, encumbrances, equities or claims whatsoever; and, upon delivery of such Selling Shareholder Firm Shares and the Selling Shareholder Option Shares and payment therefor pursuant hereto, good and marketable title to such Selling Shareholder Firm Shares and the Selling Shareholder Option Shares, free and clear of all liens, encumbrances, equities or claims whatsoever, will be delivered to the Underwriters.
- (h) On the Closing Date and the Option Closing Date, all stock transfer or other taxes (other than income taxes) that are required to be paid in connection with the sale and transfer of the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder to the Underwriters hereunder will have been fully paid or provided for by the Selling Shareholder and all laws imposing such taxes will have been fully complied with.
- (i) Other than as permitted by the Act and the Rules and Regulations, the Selling Shareholder has not distributed and will not distribute any preliminary prospectus, the Prospectus or any other offering material in connection with the offering and sale of the Shares. The Selling Shareholder has not taken and will not at any time take, directly or indirectly, any action designed, or which might reasonably be expected, to cause

or result in, or which will constitute, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Shares.

- (j) All information with respect to the Selling Shareholder contained in the Registration Statement, any preliminary prospectus, the Prospectus or any amendment or supplement thereto complied or will comply in all material respects with all applicable requirements of the Act and the Rules and Regulations and does not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading.
- (k) In order to document the Underwriters' compliance with the reporting and withholding provisions of the Tax Equity and Fiscal Responsibility Act of 1982 with respect to the transactions herein contemplated, the Selling Shareholder agrees to deliver to you prior to or at the Closing Date a properly completed and executed United States Treasury Department Form W-9 (or other applicable form or statement specified by Treasury Department regulations in lieu thereof).
- (1) The Selling Shareholder, directly or indirectly, has not entered into any commitment, transaction or other arrangement, including any prepaid forward contract, 10b5-1 plan or similar arrangement, which transfers or may transfer any of the legal or beneficial ownership or any of the economic consequences of ownership of Common Stock of the Company.

### 5. AGREEMENTS OF THE COMPANY AND THE SELLING SHAREHOLDER.

The Company and the Selling Shareholder each covenant and agree with the Underwriters as follows:

- (a) The Company will not, either prior to the Effective Date or thereafter during such period as the Prospectus is required by law to be delivered in connection with sales of the Shares by an Underwriter or dealer, file any amendment or supplement to the Registration Statement or the Prospectus, unless a copy thereof shall first have been submitted to the Representatives within a reasonable period of time prior to the filing thereof and the Representatives shall not have objected thereto in good faith.
- (b) The Company will use its best efforts to cause the Registration Statement to become effective, and will notify the Representatives promptly, and will confirm such advice in writing, (i) when the Registration Statement has become effective and when any post-effective amendment thereto becomes effective, (ii) of any request by the Commission for amendments or supplements to the Registration Statement or the Prospectus or for additional information, (iii) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose or the threat thereof, (iv) of the happening of any event during the period mentioned in the second sentence of Section 5(e) that in the judgment of the Company makes any statement made in the Registration Statement or the Prospectus untrue or that requires the making of any changes in the Registration Statement or the Prospectus in order to make the statements therein, in the light of the circumstances in which they are made, not misleading and (v) of receipt by the Company or any representative or attorney of the Company of any other communication from the Commission relating to the Company, the Registration Statement, any preliminary prospectus, the Prospectus or the offering. If at any time the Commission shall issue any order suspending the effectiveness of the Registration Statement, the Company will make every reasonable effort to obtain the withdrawal of such order at the earliest possible moment. If the Company has omitted any information from the Registration Statement pursuant to Rule 430A of the Rules and Regulations, the Company will comply with the provisions of and make all requisite filings with the Commission pursuant to said Rule 430A and notify the Representatives promptly of all such filings. If the Company elects to rely upon Rule 462(b) under the Act, the Company shall file a registration statement under Rule 462(b) with the Commission in compliance with Rule 462(b) by 10:00 p.m., Washington, D.C. time, on the date of this Agreement, and the Company shall at the time of filing either pay to the Commission the filing fee for such Rule 462(b) registration statement or give irrevocable instructions for the payment of such fee pursuant to the Rules and Regulations.

- (c) The Company will furnish to each of the Representatives, without charge, one signed copy of each of the Registration Statement and of any pre- or post-effective amendment thereto, including financial statements and schedules, and all exhibits thereto, and will furnish to the Representatives, without charge, for transmittal to each of the other Underwriters, a copy of the Registration Statement and any pre- or post-effective amendment thereto, including financial statements and schedules but without exhibits.
- (d) The Company will comply with all the provisions of any undertakings contained in the Registration Statement.
- (e) On the Effective Date, and thereafter from time to time, the Company will deliver to each of the Underwriters, without charge, as many copies of the Prospectus or any amendment or supplement thereto as the Representatives may reasonably request. The Company and the Selling Shareholder consent to the use of the Prospectus or any amendment or supplement thereto by the Underwriters and by all dealers to whom the Shares may be sold, both in connection with the offering or sale of the Shares and for any period of time thereafter during which the Prospectus is required by law to be delivered in connection therewith. If during such period of time any event shall occur which in the reasonable judgment of the Company or counsel to the Underwriters should be set forth in the Prospectus in order to make any statement therein, in the light of the circumstances under which it was made, not misleading, or if it is necessary to supplement or amend the Prospectus to comply with law, the Company will forthwith prepare and duly file with the Commission an appropriate supplement or amendment thereto, and will deliver to each of the Underwriters, without charge, such number of copies of such supplement or amendment to the Prospectus as the Representatives may reasonably request. The Company will not file any document under the Exchange Act or the Exchange Act Rules and Regulations before the termination of the offering of the Shares by the Underwriters, if such document would be deemed to be incorporated by reference into the Prospectus, that is not approved by the Representatives after reasonable notice thereof.
- (f) Prior to the public offering of the Shares contemplated by this Agreement, the Company will cooperate with the Representatives and counsel to the Underwriters in connection with the registration or qualification of the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as the Representatives may request; provided, that in no event shall the Company be obligated to qualify to do business in any jurisdiction where it is not now so qualified or to take any action which would subject it to general service of process in any jurisdiction where it is not now so subject.
- (g) The Company will, so long as and to the extent required under the Rules and Regulations, furnish to its Shareholders as soon as practicable after the end of each fiscal year an annual report (including a balance sheet and statements of income, Shareholders' equity and cash flow of the Company and its consolidated Subsidiaries, certified by independent public accountants) and, as soon as practicable after the end of each of the first three quarters of each fiscal year (beginning with the fiscal quarter ending after the effective date of the Registration Statement), consolidated summary financial information of the Company and its Subsidiaries for such quarter in reasonable detail.
- (h) During the period of five years commencing on the Effective Date, the Company will furnish to the Representatives and each other Underwriter who may so request copies of such financial statements and other periodic and special reports as the Company may from time to time distribute generally to the holders of any class of its capital stock, and will furnish to the Representatives and each other Underwriter who may so request a copy of each annual or other report it shall be required to file with the Commission.
- (i) The Company will timely file such reports under the Exchange Act as are necessary to make generally available to holders of its securities as soon as may be practicable an earning statement (which need not be audited but shall be in reasonable detail) covering a period of 12 months commencing after the Effective Date, which will satisfy the provisions of Section 11(a) of the Act (including Rule 158 of the Rules and Regulations).
- (j) Whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, the Company and, unless otherwise paid by the Company, the Selling Shareholder will pay

or reimburse if paid by the Representatives, in such proportions as they may agree upon themselves, all costs and expenses incident to the performance of the obligations of the Company and the Selling Shareholder under this Agreement and in connection with the transactions contemplated hereby, including but not limited to costs and expenses of or relating to (i) the preparation, printing and filing of the Registration Statement and exhibits to it, each preliminary prospectus, Prospectus and any amendment or supplement to the Registration Statement or Prospectus, (ii) the preparation and delivery of certificates representing the Shares, (iii) the printing of this Agreement, the Agreement Among Underwriters, any Selected Dealer Agreements, any Underwriters' Questionnaires, the Shareholder's Agreement, any Underwriters' Powers of Attorney, and any invitation letters to prospective Underwriters, (iv) furnishing (including costs of shipping and mailing) such copies of the Registration Statement, the Prospectus and any preliminary prospectus, and all amendments and supplements thereto, as may be requested for use in connection with the offering and sale of the Shares by the Underwriters or by dealers to whom Shares may be sold, (v) the listing of the Shares on the NNM, (vi) any filing fees associated with filings required to be made by the Underwriters with the NASD, and the fees, disbursements and other charges of counsel for the Underwriters in connection therewith, (vii) the registration or qualification of the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions designated pursuant to Section 5(f), including the fees, disbursements and other charges of counsel to the Underwriters in connection therewith, and the preparation and printing of preliminary, supplemental and final Blue Sky memoranda, (viii) fees, disbursements and other charges of counsel to the Company (but not those of counsel for the Underwriters, except as otherwise provided herein) and (ix) the transfer agent for the Shares. The Underwriters may deem the Company to be the primary obligor with respect to all costs, fees and expenses to be paid by the Company and by the Selling Shareholder. The Selling Shareholder will pay (directly or by reimbursement) all fees and expenses incident to the performance of the Selling Shareholder's obligations under this Agreement that are not otherwise specifically provided for herein, including but not limited to any fees and expenses of counsel for such Selling Shareholder, any fees and expenses of the Custodian, and all expenses and taxes incident to the sale and delivery of the Shares to be sold by such Selling Shareholder to the Underwriters hereunder.

- (k) The Company and the Selling Shareholder will not at any time, directly or indirectly, take any action designed or which might reasonably be expected to cause or result in, or which will constitute, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Shares.
- (l) The Company will apply the net proceeds from the offering and sale of the Shares to be sold by the Company in the manner set forth in the Prospectus under "Use of Proceeds."
- (m) During the period beginning from the date hereof and continuing to and including the date 90 days after the date of the Prospectus, without the prior written consent of Needham & Company, Inc., the Company will not (1) offer, sell, contract to sell, pledge, grant options, warrants or rights to purchase or otherwise dispose of any equity securities of the Company or any other securities convertible into or exchangeable for its Common Stock or other equity security (other than pursuant hereto and to employee stock option plans and the stock purchase plan disclosed in the Prospectus), or (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise.
- (n) During the period of 90 days after the date of the Prospectus, the Company will not file with the Commission or cause to become effective any registration statement (other than a registration statement on Form S-8 filed to register securities issued or to be issued under employee stock option plans or the employee stock purchase plan, each such plan as disclosed in the Prospectus) filed relating to any securities of the Company without the prior written consent of Needham & Company, Inc.
- (o) The Selling Shareholder will, and the Company will cause each of its officers and directors to, enter into lock-up agreements with the Representatives to the effect that they will not, without the prior written consent of Needham & Company, Inc., sell, contract to sell or otherwise dispose of any shares of Common

Stock or rights to acquire such shares according to the terms and subject to the conditions set forth in the form of lock-up agreement attached as Schedule III hereto.

# 6. CONDITIONS OF THE OBLIGATIONS OF THE UNDERWRITERS.

The obligations of each Underwriter hereunder are subject to the following conditions:

- (a) Notification that the Registration Statement has become effective shall be received by the Representatives not later than 5:00 p.m., New York City time, on the date of this Agreement or at such later date and time as shall be consented to in writing by the Representatives and all filings required by Rule 424 and Rule 430A of the Rules and Regulations shall have been made. If the Company has elected to rely upon Rule 462(b), the registration statement filed under Rule 462(b) shall have become effective by 10:00 p.m., Washington, D.C. time, on the date of this Agreement.
- (b) (i) No stop order suspending the effectiveness of the Registration Statement shall have been issued and no proceedings for that purpose shall be pending or threatened by the Commission, (ii) no order suspending the effectiveness of the Registration Statement or the qualification or registration of the Shares under the securities or Blue Sky laws of any jurisdiction shall be in effect and no proceeding for such purpose shall be pending before or threatened or contemplated by the Commission or the authorities of any such jurisdiction, (iii) any request for additional information on the part of the staff of the Commission or any such authorities shall have been complied with to the satisfaction of the staff of the Commission or such authorities, (iv) after the date hereof no amendment or supplement to the Registration Statement or the Prospectus shall have been filed unless a copy thereof was first submitted to the Representatives and counsel for the Underwriters and the Representatives do not object thereto in good faith, and
- (v) the Representatives shall have received certificates, dated the Closing Date and, if later, the Option Closing Date and signed by the Chief Executive Officer and the Chief Financial Officer of the Company (who may, as to proceedings threatened, rely upon their information and belief), to the effect of clauses
- (i), (ii) and (iii) of this paragraph.
- (c) Since the respective dates as of which information is given in the Registration Statement and the Prospectus, (i) there shall not have been a material adverse change in the general affairs, business, business prospects, properties, management, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries, whether or not arising from transactions in the ordinary course of business, in each case other than as described in or contemplated by the Registration Statement and the Prospectus, and (ii) the Company shall not have sustained any material loss or interference with its business or properties from fire, explosion, flood, act of terrorism, or other casualty, whether or not covered by insurance, or from any labor dispute or any court or legislative or other governmental action, order or decree, which is not described in the Registration Statement and the Prospectus, if in the reasonable judgment of the Representatives any such development makes it impracticable or inadvisable to consummate the sale and delivery of the Shares by the Underwriters at the price set forth in Section 1(a) of this Agreement.
- (d) Since the respective dates as of which information is given in the Registration Statement and the Prospectus, there shall have been no litigation or other proceeding instituted against the Company, any of its Subsidiaries, or any of its or their officers or directors in their capacities as such, before or by any federal, state or local court, commission, regulatory body, administrative agency or other governmental body, domestic or foreign, in which litigation or proceeding an unfavorable ruling, decision or finding would, in the reasonable judgment of the Representatives, materially adversely affect the business, properties, business prospects, condition (financial or otherwise) or results of operations of the Company or any of its Subsidiaries.
- (e) Each of the representations and warranties of the Company and the Selling Shareholder contained herein shall be true and correct in all material respects at the Closing Date and, with respect to the Option Shares, at the Option Closing Date, and all covenants and agreements contained herein to be performed on the part of the Company or the Selling Shareholder and all conditions contained herein to be fulfilled or complied with by the Company or the Selling Shareholder at or prior to the Closing Date and, with respect to the Option Shares, at or prior to the Option Closing Date, shall have been duly performed, fulfilled or complied with.

- (f) The Representatives shall have received an opinion, dated the Closing Date and, with respect to the Option Shares, the Option Closing Date, satisfactory in form and substance to the Representatives and counsel for the Underwriters, from Wilson, Sonsini, Goodrich & Rosati, counsel to the Company and the Selling Shareholder, with respect to the following matters:
- (i) Each of the Company and its Subsidiaries is a corporation duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation; has full corporate power and authority to conduct all the activities conducted by it, to own or lease all the assets owned or leased by it and to conduct its business as described in the Registration Statement and Prospectus; and is duly licensed or qualified to do business and is in good standing as a foreign corporation in all jurisdictions in which the nature of the activities conducted by it or the character of the assets owned or leased by it makes such license or qualification necessary and where the failure to be licensed or qualified would have a material and adverse effect on the business or financial condition of the Company.
- (ii) All of the outstanding shares of capital stock of the Company (including the Selling Shareholder Firm Shares and Selling Shareholder Option Shares to be sold by the Selling Shareholder) have been duly authorized, validly issued and are fully paid and nonassessable, were issued pursuant to effective registration statements under the Act or exemptions from the registration and qualification requirements of federal and applicable state securities laws, and were not issued in violation of or subject to any preemptive or similar rights.
- (iii) The Shares to be sold by the Company hereunder have been duly authorized and, when issued and paid for as contemplated by this Agreement, will be validly issued, fully paid and nonassessable; and no preemptive or similar rights exist with respect to any of the Shares or the issue and sale thereof.
- (iv) All of the outstanding shares of capital stock of each Subsidiary have been duly authorized and validly issued and are fully paid and nonassessable, and owned by the Company free and clear of all claims, liens, charges and encumbrances. There are no securities outstanding that are convertible into or exercisable or exchangeable for capital stock of any Subsidiary.
- (v) The authorized and outstanding capital stock of the Company is as set forth in the Registration Statement and the Prospectus in the column titled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to this Agreement or pursuant to reservations, agreements, employee benefit plans or the exercise of convertible securities, options or warrants referred to in the Prospectus). To such counsel's knowledge, except as disclosed in or specifically contemplated by the Prospectus, there are no outstanding options, warrants or other rights calling for the issuance of, and no commitments, plans or arrangements to issue, any shares of capital stock of the Company or any security convertible into or exchangeable or exercisable for capital stock of the Company. The description of the capital stock of the Company in the Registration Statement and the Prospectus conforms in all material respects to the terms thereof.
- (vi) To such counsel's knowledge, there are no legal or governmental proceedings pending or threatened to which the Company or any of its Subsidiaries is a party or to which any of their respective properties is subject that are required to be described in the Registration Statement or the Prospectus but are not so described.
- (vii) No consent, approval, authorization or order of, or any filing or declaration with, any court or governmental agency or body is required for the consummation by the Company of the transactions on its part contemplated under this Agreement, except such as have been obtained or made under the Act or the Rules and Regulations and such as may be required under state securities or Blue Sky laws or the by-laws and rules of the NASD in connection with the purchase and distribution by the Underwriters of the Shares.
- (viii) The Company has full corporate power and authority to enter into this Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

- (ix) The execution and delivery of this Agreement, the compliance by the Company with all of the terms hereof and the consummation of the transactions contemplated hereby do not contravene any provision of applicable law or the Articles of Incorporation or By-Laws of the Company or any of its Subsidiaries, and to such counsel's knowledge will not result in the creation or imposition of any lien, charge or encumbrance upon any of the assets of the Company or any of its Subsidiaries pursuant to the terms and provisions of, result in a breach or violation of any of the terms or provisions of, or constitute a default under, or give any party a right to terminate any of its obligations under, or result in the acceleration of any obligation under, any indenture, mortgage, deed of trust, voting trust agreement, loan agreement, bond, debenture, note agreement or other evidence of indebtedness, lease, contract or other agreement or instrument known to such counsel to which the Company or any of its Subsidiaries is a party or by which the Company, any of its Subsidiaries, or any of their respective properties is bound or affected, or violate or conflict with (i) any judgment, ruling, decree or order known to such counsel, or (ii) any statute, rule or regulation of any court or other governmental agency or body, applicable to the business or properties of the Company or any of its Subsidiaries.
- (x) To such counsel's knowledge, there is no document or contract of a character required to be described in the Registration Statement or the Prospectus or to be filed as an exhibit to the Registration Statement which is not described or filed or incorporated by reference as required, and each description of such contracts and documents that is contained in the Registration Statement and Prospectus fairly presents in all material respects the information required under the Act and the Rules and Regulations.
- (xi) The statements under the caption "Risk Factors Anti-takeover provisions in our charter documents and under California law could prevent or delay a change in control, which could negatively impact the value of our common stock by discouraging a favorable merger or acquisition of us" in the Prospectus, insofar as the statements constitute a summary of documents referred to therein or matters of law, are accurate summaries and fairly and correctly present, in all material respects, the information called for with respect to such documents and matters.
- (xii) All of the issued shares of Common Stock (including the Shares) conform to the description thereof incorporated by reference into the Prospectus.
- (xiii) The Company is not an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for, an "investment company," as such terms are defined in the Investment Company Act of 1940, as amended.
- (xiv) The Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder are duly listed on the NNM and the Company Firm Shares and Company Option Shares to be sold by the Company have been duly authorized for listing on the NNM, subject to official notice of issuance.
- (xv) Except as stated in the Prospectus, no holder of securities of the Company has rights, which have not been waived or satisfied, to require the Company to register with the Commission shares of Common Stock or other securities, as part of the offering contemplated hereby.
- (xvi) The Registration Statement has become effective under the Act, and to such counsel's knowledge, no stop order suspending the effectiveness of the Registration Statement has been issued and no proceeding for that purpose has been instituted or is pending, threatened or contemplated.
- (xvii) The Registration Statement and the Prospectus comply as to form in all material respects with the requirements of the Act and the Rules and Regulations (other than the financial statements, schedules and other financial data contained in or incorporated by reference into the Registration Statement or the Prospectus, as to which such counsel need express no opinion).
- (xviii) Such counsel has participated in the preparation of the Registration Statement and Prospectus and has no reason to believe that, as of the Effective Date the Registration Statement, or any

amendment or supplement thereto, (other than the financial statements, schedules and other financial data contained therein, as to which such counsel need express no opinion) contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading or that the Prospectus, or any amendment or supplement thereto, as of its date and the Closing Date and, if later, the Option Closing Date, contained or contains any untrue statement of a material fact or omitted or omits to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (other than the financial statements, schedules and other financial data contained therein, as to which such counsel need express no opinion).

(xix) The documents incorporated by reference in the Prospectus (other than the financial statements, schedules and other financial data contained therein, as to which such counsel need express no opinion), when they were filed with the Commission, complied as to form in all material respects with the requirements of the Exchange Act and the Exchange Act Rules and Regulations.

(xx) This Agreement and the Shareholder's Agreement have each been duly executed and delivered by the Selling Shareholder; the Shareholder's Agreement constitutes a valid and binding agreement of the Selling Shareholder in accordance with its terms, except as enforceability may be limited by the application of bankruptcy, insolvency or other laws affecting creditors' rights generally or by general principles of equity; the Custodian has been duly authorized by the Selling Shareholder to deliver the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares on behalf of the Selling Shareholder in accordance with the terms of this Agreement; and, to such counsel's knowledge, the sale of the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder hereunder, the performance by the Selling Shareholder of this Agreement and the Shareholder's Agreement and the consummation of the transactions contemplated hereby and thereby will not result in a breach or violation of any of the terms or provisions of, or constitute a default under, or give any party a right to terminate any of its obligations under, or result in the acceleration of any obligation under any indenture, mortgage, deed of trust, voting trust agreement, loan agreement, bond, debenture, note agreement or other evidence of indebtedness, lease, contract or other agreement or instrument to which the Selling Shareholder is a party or by which the Selling Shareholder or any of the Selling Shareholder's properties is bound or affected, or violate or conflict with any judgment, ruling, decree, order, statute, rule or regulation of any court or other governmental agency or body applicable to the Selling Shareholder.

(xxi) No consent, approval, authorization or order of, or any filing or declaration with, any court or governmental agency or body is required for the consummation by the Selling Shareholder of the transactions on the Selling Shareholder's part contemplated by this Agreement, except such as have been obtained or made under the Act or the Rules and Regulations and such as may be required under state securities or Blue Sky laws or the by-laws and rules of the NASD in connection with the purchase and distribution by the Underwriters of the Shares.

(xxii) The Selling Shareholder has full legal right, power and authority to enter into this Agreement and the Shareholder's Agreement and to sell, assign, transfer and deliver the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares to be sold by the Selling Shareholder hereunder and, upon payment for such Shares and assuming that the Underwriters are purchasing such Shares in good faith and without notice of any other adverse claim within the meaning of the Uniform Commercial Code, the Underwriters will have acquired all rights of the Selling Shareholder in the Selling Shareholder Firm Shares and the Selling Shareholder Option Shares free of any adverse claim, any lien and any restrictions on transfer imposed by the Company.

In rendering the opinions in subparagraphs (xix) - (xxi), such counsel may rely upon opinions of other counsel retained by the Selling Shareholder reasonably acceptable to the Representatives and as to matters of fact on certificates of the Selling Shareholder, officers of the Company and governmental officials and the representations and warranties of the Company and the Selling Shareholder contained in this Agreement and the Shareholder's Agreement, provided that the opinion of counsel to the Company and the Selling Shareholder shall state that they are doing so, that they have no reason to believe that they and the Underwriters are not entitled to rely on such opinions or certificates and that copies of such opinions or certificates are to be attached to the opinion.

In rendering such opinion, such counsel may rely upon as to matters of local law on opinions of counsel satisfactory in form and substance to the Representatives and counsel for the Underwriters, provided that the opinion of counsel to the Company and the Selling Shareholder shall state that they are doing so, that they have no reason to believe that they and the Underwriters are not entitled to rely on such opinions and that copies of such opinions are to be attached to the opinion.

- (g) The Representatives shall have received an opinion, dated the Closing Date and the Option Closing Date, from Gray Cary Ware & Freidenrich LLP, counsel to the Underwriters, with respect to the Registration Statement, the Prospectus and this Agreement, which opinion shall be satisfactory in all respects to the Representatives.
- (h) Concurrently with the execution and delivery of this Agreement, Grant Thornton shall have furnished to the Representatives a letter, dated the date of its delivery, addressed to the Representatives, and in form and substance satisfactory to the Representatives, confirming that they are independent accountants with respect to the Company and its Subsidiaries as required by the Act, the Exchange Act, the Rules and Regulations and the Exchange Act Rules and Regulations, and with respect to certain financial and other statistical and numerical information contained in or incorporated by reference into the Registration Statement. At the Closing Date and, as to the Option Shares, the Option Closing Date, Grant Thornton shall have furnished to the Representatives a letter, dated the date of its delivery, which shall confirm, on the basis of a review in accordance with the procedures set forth in the letter from Grant Thornton, that nothing has come to their attention during the period from the date of the letter referred to in the prior sentence to a date (specified in the letter) not more than three days prior to the Closing Date and the Option Closing Date, as the case may be, which would require any change in their letter dated the date hereof if it were required to be dated and delivered at the Closing Date and the Option Closing Date.
- (i) Concurrently with the execution and delivery of this Agreement and at the Closing Date and, as to the Option Shares, the Option Closing Date, there shall be furnished to the Representatives a certificate, dated the date of its delivery, signed by each of the Chief Executive Officer and the Chief Financial Officer of the Company, in form and substance satisfactory to the Representatives, to the effect that:
- (i) Each signer of such certificate has carefully examined the Registration Statement and the Prospectus (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Prospectus) and (A) as of the date of such certificate, the Registration Statement and Prospectus are true and correct in all material respects and do not omit to state a material fact required to be stated therein or necessary in order to make the statements therein not untrue or misleading, and (B) in the case of the certificate delivered at the Closing Date and the Option Closing Date, since the Effective Date, no event has occurred as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein not untrue or misleading.
- (ii) Each of the representations and warranties of the Company contained in this Agreement were, when originally made, and are, at the time such certificate is delivered, true and correct.
- (iii) Each of the covenants contained in this Agreement required to be performed by the Company on or prior to the date of such certificate has been duly, timely and fully performed and each condition herein required to be satisfied or fulfilled on or prior to the date of such certificate has been duly, timely and fully satisfied or fulfilled.
- (j) Concurrently with the execution and delivery of this Agreement and at the Closing Date, and, as to the Option Shares, the Option Closing Date, there shall be furnished to the Representatives a certificate, dated the date of its delivery, signed by the Selling Shareholder, in form and substance satisfactory to the Representatives, to the effect that the representations and warranties of the Selling Shareholder contained in this Agreement are true and correct on and as of the date of such certificate as if made on and as of the date of such certificate, and each of the covenants and conditions required in this Agreement to be performed or complied with

by the Selling Shareholder on or prior to the date of such certificate has been duly, timely and fully performed or complied with.

- (k) On or prior to the Closing Date, the Representatives shall have received the executed lock-up agreements referred to in Section 5(o).
- (1) The Shares shall be qualified for sale in such jurisdictions as the Representatives may reasonably request and each such qualification shall be in effect and not subject to any stop order or other proceeding on the Closing Date or the Option Closing Date.
- (m) Prior to the Closing Date, the Company Firm Shares and the Company Option Shares shall have been duly authorized for listing on the NNM upon official notice of issuance.
- (n) The Company and the Selling Shareholder shall have furnished to the Representatives such certificates, in addition to those specifically mentioned in this Agreement, as the Representatives may have reasonably requested as to the accuracy and completeness at the Closing Date and the Option Closing Date of any statement in the Registration Statement or the Prospectus, as to the accuracy at the Closing Date and the Option Closing Date of the representations and warranties of the Company and the Selling Shareholder contained in this Agreement, as to the performance by the Company and the Selling Shareholder of their respective obligations pursuant to this Agreement, or as to the fulfillment of the conditions concurrent and precedent to the obligations of the Representatives pursuant to this Agreement.

## 7. INDEMNIFICATION.

(a) The Company and the Selling Shareholder, jointly and severally, will indemnify and hold harmless each Underwriter, the directors, officers, employees and agents of each Underwriter and each person, if any, who controls each Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any and all losses, claims, liabilities, expenses and damages (including any and all investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted), to which they, or any of them, may become subject under the Act, the Exchange Act, or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based on any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, the Registration Statement or the Prospectus, or any amendment or supplement to the Registration Statement or the Prospectus, or the omission or alleged omission to state in such document a material fact required to be stated in it or necessary to make the statements in it not misleading in the light of the circumstances in which they were made, or arise out of or are based in whole or in part on any inaccuracy in the representations and warranties of the Company or the Selling Shareholder contained in this Agreement or any failure of the Company or the Selling Shareholder to perform their respective obligations pursuant to this Agreement or under law in connection with the transactions contemplated hereby; provided, however, that (i) the Company and the Selling Shareholder will not be liable to the extent that such loss, claim, liability, expense or damage arises from the sale of the Shares in the public offering to any person by an Underwriter and is based on an untrue statement or omission or alleged untrue statement or omission made in reliance on and in conformity with information relating to any Underwriter furnished in writing to the Company by the Underwriters, expressly for inclusion in the Registration Statement, the preliminary prospectus or the Prospectus; (ii) the Company and the Selling Shareholder will not be liable to any Underwriter, the directors, officers, employees or agents of such Underwriter or any person controlling such Underwriter with respect to any loss, claim, liability, expense, or damage arising out of or based on any untrue statement or omission or alleged untrue statement or omission or alleged omission to state a material fact in the preliminary prospectus which is corrected in the Prospectus if the person asserting any such loss, claim, liability, charge or damage purchased Shares from such Underwriter but was not sent or given a copy of the Prospectus at or prior to the written confirmation of the sale of such Shares to such person and if copies of the Prospectus were timely delivered to such Underwriter pursuant to Section 5 hereof; and (iii) the liability of the Selling Shareholder under this Section 7(a) shall not exceed the product of the purchase price for each Share set forth in Section 1(a) hereof multiplied by 2,100,000 (the number of Shares sold by the Selling Shareholder pursuant to this Agreement). The Company and the Selling Shareholder each acknowledges that the

only information furnished in writing to the Company by the Representatives on behalf of the Underwriters expressly for inclusion in the Registration Statement or Prospectus or any amendments or supplements thereto, appears under the heading "Underwriting". This indemnity agreement will be in addition to any liability that the Company and the Selling Shareholder might otherwise have.

- (b) Each Underwriter will indemnify and hold harmless the Company, each director of the Company, each officer of the Company who signs the Registration Statement, each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and the Selling Shareholder to the same extent as the foregoing indemnity from the Company and the Selling Shareholder to each Underwriter, as set forth in Section
- 7(a), but only insofar as losses, claims, liabilities, expenses or damages arise out of or are based on any untrue statement or omission or alleged untrue statement or omission made in reliance on and in conformity with information relating to any Underwriter furnished in writing to the Company by the Representatives, on behalf of such Underwriter, expressly for inclusion in the Registration Statement, the preliminary prospectus or the Prospectus. The Company and the Selling Shareholder each acknowledges that the only information furnished in writing to the Company by the Representatives on behalf of the Underwriters expressly for inclusion in the Registration Statement or Prospectus or any amendments or supplements thereto, appears under the heading "Underwriting". This indemnity will be in addition to any liability that each Underwriter might otherwise have.
- (c) Any party that proposes to assert the right to be indemnified under this Section 7 shall, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 7, notify each such indemnifying party in writing of the commencement of such action, enclosing with such notice a copy of all papers served, but the omission to so notify such indemnifying party will not relieve it from any liability that it may have to any indemnified party under the foregoing provisions of this Section 7 unless, and only to the extent that, such omission results in the loss of substantive rights or defenses by any indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party. After notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable costs of investigation incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (i) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (ii) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (iii) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party), or (iv) the indemnifying party has not in fact employed counsel to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly as they are incurred. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened action in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party unless such settlement (i) includes an unconditional release of such indemnified party from all liability on any claims that are the subject matter of such action, and (ii) does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party. An

indemnifying party will not be liable for any settlement of any action or claim effected without its written consent (which consent will not be unreasonably withheld or delayed).

(d) If the indemnification provided for in this Section 7 is applicable in accordance with its terms but for any reason is held to be unavailable to or insufficient to hold harmless an indemnified party under paragraphs (a), (b) and (c) of this Section 7 in respect of any losses, claims, liabilities, expenses and damages referred to therein, then each applicable indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company or the Selling Shareholder from persons other than the Underwriters, such as persons who control the Company within the meaning of the Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) by such indemnified party as a result of such losses, claims, liabilities, expenses and damages in such proportion as shall be appropriate to reflect the relative benefits received by the Company and the Selling Shareholder, on the one hand, and the Underwriters, on the other hand. The relative benefits received by the Company and the Selling Shareholder, on the one hand, and the Underwriters, on the other hand, shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company and the Selling Shareholder bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company and the Selling Shareholder, on the one hand, and the Underwriters, on the other hand, with respect to the statements or omissions which resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company, the Selling Shareholder or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company, the Selling Shareholder and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 7(d) were to be determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss claim, liability, expense or damage, or action in respect thereof, referred to above in this Section 7(d) shall be deemed to include, for purposes of this Section 7(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 7(d), no Underwriter shall be required to contribute any amount in excess of the underwriting discounts received by it and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute as provided in this Section 7(d) are several in proportion to their respective underwriting obligations and not joint. For purposes of this Section 7(d), any person who controls a party to this Agreement within the meaning of the Act will have the same rights to contribution as that party, and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against any such party in respect of which a claim for contribution may be made under this Section 7(d), will notify any such party or parties from whom contribution may be sought, but the omission so to notify will not relieve the party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 7(d). No party will be liable for contribution with respect to any action or claim settled without its written consent (which consent will not be unreasonably withheld).

(e) The indemnity and contribution agreements contained in this Section 7 and the representations and warranties of the Company and the Selling Shareholder contained in this Agreement shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of the Underwriters, (ii) acceptance of any of the Shares and payment therefor, or (iii) any termination of this Agreement.

### 8. REIMBURSEMENT OF CERTAIN EXPENSES.

In addition to their other obligations under Section 7(a) of this Agreement, the Company and the Selling Shareholder, jointly and severally, hereby agree to reimburse on a quarterly basis the Underwriters for all reasonable legal and other expenses incurred in connection with investigating or defending any claim, action, investigation, inquiry or other proceeding arising out of or based upon, in whole or in part, any statement or omission or alleged statement or omission, or any inaccuracy in the representations and warranties of the Company or the Selling Shareholder contained herein or failure of the Company or the Selling Shareholder to perform their respective obligations hereunder or under law, all as described in Section 7(a), notwithstanding the absence of a judicial determination as to the propriety and enforceability of the obligations under this Section 8 and the possibility that such payment might later be held to be improper; provided, however, that, to the extent any such payment is ultimately held to be improper, the persons receiving such payments shall promptly refund them.

### 9. TERMINATION.

The obligations of the Underwriters under this Agreement may be terminated at any time on or prior to the Closing Date (or, with respect to the Option Shares, on or prior to the Option Closing Date), by notice to the Company and the Selling Shareholder, without liability on the part of any Underwriter to the Company or the Selling Shareholder if, prior to delivery and payment for the Firm Shares or Option Shares, as the case may be, in the sole judgment of the Representatives (i) trading in any of the equity securities of the Company shall have been suspended by the Commission or by NNM, (ii) trading in securities generally on NNM shall have been suspended or limited or minimum or maximum prices shall have been generally established in such market, or additional material governmental restrictions, not in force on the date of this Agreement, shall have been imposed upon trading in securities generally by such market, by order of the Commission or any court or other governmental authority, (iii) a general banking moratorium shall have been declared by federal authority, or

(iv) any material adverse change in the financial or securities markets in the United States or in political, financial or economic conditions in the United States or any outbreak or material escalation of war or armed hostilities or other national or international calamity, crisis or terrorist act shall have occurred, the effect of which is such as to make it, in the sole judgment of the Representatives, impracticable or inadvisable to proceed with completion of the public offering or the delivery of and payment for the Shares.

If this Agreement is terminated pursuant to Section 9 or 10 hereof, neither the Company nor the Selling Shareholder shall be under any liability to any Underwriter except as provided in Sections 5(j), 7 and 8 hereof; but, if for any other reason the purchase of the Shares by the Underwriters is not consummated or if for any reason the Company shall be unable to perform its obligations hereunder, the Company and the Selling Shareholder in addition to any liability under Sections 5(j), 7 and 8 or otherwise hereunder will reimburse the Underwriters for all reasonable out-of-pocket expenses (including the reasonable fees, disbursements and other charges of counsel to the Underwriters) incurred by them in connection with the offering of the Shares.

## 10. SUBSTITUTION OF UNDERWRITERS.

If any one or more of the Underwriters shall fail or refuse to purchase any of the Firm Shares which it or they have agreed to purchase hereunder, and the aggregate number of Firm Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of Firm Shares, the other Underwriters shall be obligated, severally, to purchase the Firm Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase, in the proportions which the number of Firm Shares which they have respectively agreed to purchase pursuant to Section 1 bears to the aggregate number of Firm Shares which all such non-defaulting Underwriters have so agreed to purchase, or in such other proportions as the Representatives may specify; provided that in no event shall the maximum number of Firm Shares which any Underwriter has become obligated to purchase pursuant to Section 1 be increased pursuant to this

Section 10 by more than one-ninth of such number of Firm Shares without the prior written consent of such Underwriter. In any such case either the Representatives or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement and the Prospectus or in any other documents or arrangements may be effected. If any

Underwriter or Underwriters shall fail or refuse to purchase any Firm Shares and the aggregate number of Firm Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase exceeds one-tenth of the aggregate number of the Firm Shares and arrangements satisfactory to the Representatives and the Company for the purchase of such Firm Shares are not made within 48 hours after such default, this Agreement will terminate without liability on the part of any non-defaulting Underwriter, the Company or the Selling Shareholder for the purchase or sale of any Shares under this Agreement. Any action taken pursuant to this Section 10 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

## 11. MISCELLANEOUS.

Notice given pursuant to any of the provisions of this Agreement shall be in writing and, unless otherwise specified, shall be mailed or delivered (a) if to the Company or the Selling Shareholder, at the office of the Company, 3560 Bassett Street, Santa Clara, CA 95054 Attention: Chief Executive Officer, with a copy to Herbert P. Fockler, Esq., Wilson, Sonsini, Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304-1050, or (b) if to the Underwriters, to Needham & Company, Inc., 445 Park Avenue, New York, New York 10022, Attention: Corporate Finance Department, with a copy to Scott Stanton, Esq., Gray Cary Ware & Freidenrich LLP, 4365 Executive Drive, Suite 1100, San Diego, California 92121. Any such notice shall be effective only upon receipt. Any notice under such Section 9 or 10 may be made by telecopier or telephone, but if so made shall be subsequently confirmed in writing.

This Agreement has been and is made solely for the benefit of the several Underwriters, the Company, the Selling Shareholder and the controlling persons, directors and officers referred to in Section 7, and their respective successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. The term "successors and assigns" as used in this Agreement shall not include a purchaser, as such purchaser, of Shares from any of the several Underwriters.

Any action required or permitted to be taken by the Representatives under this Agreement may be taken by them jointly or by Needham & Company, Inc.

This Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed entirely within such State.

This Agreement may be signed in two or more counterparts with the same effect as if the signatures thereto and hereto were upon the same instrument.

In case any provision in this Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

The Company the Selling Shareholder and the Underwriters each hereby waive any right they may have to a trial by jury in respect of any claim based upon or arising out of this Agreement or the transactions contemplated hereby.

Please confirm that the foregoing correctly sets forth the agreement among the Company, the Selling Shareholder and the Underwriters.	
Very truly yours,	
INTEVAC, INC.	

By:\_\_\_\_\_ Title: SELLING SHAREHOLDER By:\_\_\_\_ [print name] 23

Confirmed as of the date first above mentioned:

# NEEDHAM & COMPANY, INC. THOMAS WEISEL PARTNERS LLC As Representatives of the Several Underwriters listed on Schedule I of this Agreement

By: NEEDHAM & COMPANY, INC.	
Ву:	
Title:	

# SCHEDULE I

# UNDERWRITERS

UNDERWRITERS	NUMBER OF COMPANY FIRM SHARES TO BE PURCHASED	NUMBER OF SELLING SHAREHOLDER FIRM SHARES TO BE PURCHASED
Needham & Company, Inc. Thomas Weisel Partners LLC		
Total	2,500,000	1,500,000

# SCHEDULE II

	TOTAL NUMBER OF FIRM SHARES	TOTAL NUMBER OF OPTION SHARES
	TO BE SOLD	TO BE SOLD
Intevac, Inc.	2,500,000	0
Foster City LLC	1,500,000	600,000
TOTALS	4,000,000	600,000 =====

### **SCHEDULE III**

INTEVAC, INC. FORM OF LOCK-UP AGREEMENT

December \_\_\_, 2003

Needham & Company, Inc. Thomas Weisel Partners LLC c/o Needham & Company, Inc. 445 Park Avenue New York, NY 10022

Ladies and Gentlemen:

The undersigned is a holder of securities of Intevac, Inc. a Delaware corporation (the "Company"), and wishes to facilitate the public offering of shares of the Common Stock (the "Common Stock") of the Company (the "Offering"). The undersigned recognizes that such Offering will be of benefit to the undersigned.

In consideration of the foregoing and in order to induce you to act as underwriters in connection with the Offering, the undersigned hereby agrees that he, she or it will not, without the prior written approval of Needham & Company, Inc., acting on its own behalf and/or on behalf of other representatives of the underwriters, directly or indirectly, sell, contract to sell, make any short sale, pledge, or otherwise dispose of, or enter into any hedging transaction that is likely to result in a transfer of, any shares of Common Stock, options to acquire shares of Common Stock or securities exchangeable for or convertible into shares of Common Stock of the Company which he, she or it may own, for a period commencing as of the date hereof and ending on the date which is ninety

(90) days after the date of the final Prospectus relating to the Offering; provided, however, that the foregoing shall not prohibit any distribution by a partnership to its partners so long as such partners agree to be bound by the terms of this Agreement. The undersigned confirms that he, she or it understands that the underwriters and the Company will rely upon the representations set forth in this Agreement in proceeding with the Offering. The undersigned further confirms that the agreements of the undersigned are irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns. The undersigned agrees and consents to the entry of stop transfer instructions with the Company's transfer agent against the transfer of securities held by the undersigned except in compliance with this Agreement.

This Agreement shall be binding on the undersigned and his, her or its respective successors, heirs, personal representatives and assigns.

Very truly yours,	
	(Print Shareholder Name)
	By: Title, if applicable:

### **EXHIBIT 23.2**

## CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

We have issued our report dated January 29, 2003, accompanying the December 31, 2002 consolidated financial statements of Intevac, Inc., contained in the Registration Statement and Prospectus, and also contained in the 2002 Annual Report on Form 10-K incorporated by reference in the Registration Statement and Prospectus. We consent to the use of the aforementioned report in the Registration Statement and Prospectus, the incorporation by reference of the aforementioned report in the Registration Statement and Prospectus and to the use of our name as it appears under the caption "Experts".

/s/ Grant Thorton LLP San Jose, California January 6, 2004