FILED PURSUANT TO RULE 424(B)(4) REGISTRATION NO. 333-43192

# 4,500,000 Shares

[PDF Solutions, Inc. Logo] Common Stock

Prior to this offering, there has been no public market for our common stock. Our common stock has been approved for listing on The Nasdaq Stock Market's National Market under the symbol "PDFS."

The underwriters have an option to purchase a maximum of 675,000 additional shares to cover over-allotments of shares.

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. SEE "RISK FACTORS" ON PAGE 6.

		UNDERWRITING	
	PRICE TO	DISCOUNTS AND	PROCEEDS TO
	PUBLIC	COMMISSIONS	PDF SOLUTIONS
Per Share	\$12.00	\$0.84	\$11.16
Total	\$54,000,000	\$3,780,000	\$50,220,000

Delivery of the shares of common stock will be made on or about August 1, 2001.

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

CREDIT SUISSE FIRST BOSTON

ROBERTSON STEPHENS

DAIN RAUSCHER WESSELS

The date of this prospectus is July 26, 2001.

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[INSIDE FRONT COVER]

[COLOR ARTWORK]

[The artwork depicts a bridge between IC design and manufacturing.]

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YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS DOCUMENT OR TO WHICH WE HAVE REFERRED YOU. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH INFORMATION THAT IS DIFFERENT. THIS DOCUMENT MAY ONLY BE USED WHERE IT IS LEGAL TO SELL THESE SECURITIES. THE INFORMATION IN THIS DOCUMENT MAY ONLY BE ACCURATE ON THE DATE OF THIS DOCUMENT.

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## DEALER PROSPECTUS DELIVERY OBLIGATION

UNTIL AUGUST 20, 2001, ALL DEALERS THAT EFFECT TRANSACTIONS IN THESE SECURITIES, WHETHER OR NOT PARTICIPATING IN THIS OFFERING, MAY BE REQUIRED TO DELIVER A PROSPECTUS. THIS IS IN ADDITION TO THE DEALERS' OBLIGATION TO DELIVER A PROSPECTUS WHEN ACTING AS AN UNDERWRITER AND WITH RESPECT TO UNSOLD ALLOTMENTS OR SUBSCRIPTIONS.

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#### PROSPECTUS SUMMARY

You should read the following summary together with the more detailed information and our Consolidated Financial Statements and Notes thereto appearing elsewhere in this prospectus. Unless otherwise stated, information in this prospectus assumes (i) no exercise of the underwriters' over-allotment option, (ii) the two-for-three reverse stock split of our common and preferred stock, which was completed on July 6, 2001, and (iii) the conversion of all outstanding shares of preferred stock into 6,333,318 shares of common stock upon completion of the offering.

## PDF SOLUTIONS, INC.

Our comprehensive technologies and services enable semiconductor companies to improve yield and performance of manufactured integrated circuits by providing infrastructure to integrate the design and manufacturing processes. We believe that our solutions can significantly improve a semiconductor company's time to market, the rate at which yield improves and product profitability. To date, we have sold our technologies and services to, and established ongoing relationships with, key integrated device manufacturers such as Toshiba Corporation, Sony Corporation, Conexant Systems, Inc., Philips Semiconductor and Texas Instruments Incorporated.

Customers for electronic products continue to demand new applications with more power, reduced cost and smaller size. This leads semiconductor companies to adopt diverse new technologies for integrated circuits, or ICs. At the same time, they face dramatically compressed product life cycles. This has reduced the time for semiconductor companies to successfully bring a product to market in high volumes to achieve dominant market share and high-margin revenues. In the current environment, semiconductor companies have encountered significant challenges in their attempt to achieve competitive yields and optimize performance, which are critical drivers of IC companies' financial results. Disaggregation of the semiconductor industry into several separate specialized organizations and entities has further complicated IC companies' ability to maximize yield and optimize performance by fragmenting design and manufacturing process knowledge. The combination of these factors has left a gap between the design of an IC and its manufacture. We call this gap the design-to-silicon yield gap.

We provide comprehensive silicon-infrastructure technologies and services to address and bridge the design-to-silicon yield gap. Our offerings combine proprietary manufacturing process simulation, IC yield and performance modeling software, comprehensive test chips, proven yield and performance enhancement methodologies, and professional services. Our technologies and services drive design and manufacturing changes that enable our customers to improve IC yield and performance earlier in product life cycles, thereby enabling our customers to simultaneously generate additional revenue and reduce costs. The result of implementing our solutions is the creation of value that can be measured based on improvements to our customers' actual IC yield and performance. We seek to align our financial interests with our customers' business results. Through an innovative approach that we call gain share, in addition to a fixed fee we receive revenue that increases based on increased value we create for our customers. To date, we have determined this value based on the demonstrated yield and performance improvements our customers realize on specific products or processes. As a result, our recurring revenues scale to the extent our customers continue to realize these improvements.

Our objective is to provide the industry standard in design-to-silicon yield solutions. To achieve this objective, we intend to leverage our results-based gain share model to deepen our relationships with our customers and rapidly generate market-driven improvements to our solutions. In addition, we intend to focus our solutions on key high-volume, high-growth IC product segments. We will also seek to extend and enhance our relationships with leading companies at key stages of the design-to-silicon process, thereby increasing our insight into future industry needs, and increasing industry awareness of our solutions. We intend to continue expanding our research and development efforts, and to selectively acquire complementary businesses and technologies to increase the scope of our solutions. Further, we plan to expand geographically to gain access to international engineering talent and to maintain proximity to our expanding customer base.

We have a limited operating history. As of March 31, 2001, our accumulated deficit was \$12.6 million. For the years ended December 31, 1998, 1999, 2000 and the three months ended March 31,

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2001, our net losses were approximately \$404,000, \$145,000, \$9.1 million and \$2.7 million respectively. We expect our spending to continue to exceed our revenue as we expand our business.

We were incorporated in Pennsylvania in November 1992. We reincorporated in California in November 1995 and reincorporated in Delaware in July 2001. Our principal executive office is located at 333 West San Carlos Street, Suite 700, San Jose, CA 95110. Our telephone number at that location is (408) 280-7900. Our Internet address on the world wide web is http://www.pdf.com. Information on our web site does not constitute part of this prospectus.

#### RECENT DEVELOPMENTS

For the quarter ended June 30, 2001, we had revenue of \$8.3 million, compared to revenues of \$4.6 million for the quarter ended June 30, 2000. Revenue from design-to-silicon yield solutions represented 73% and gain share represented 27% of total revenue for the quarter ended June 30, 2001. Our net loss for the quarter ended June 30, 2001, was \$2.2 million, or \$0.25 per share on a basic and diluted basis (on approximately 8.5 million weighted average shares), compared to a net loss for the quarter ended June 30, 2000 of \$1.3 million or \$0.19 per share on a basic and diluted basis (on approximately 7.1 million weighted average shares). For the quarters ended June 30, 2001 and 2000 our net loss included stock-based compensation amortization of \$2.1 million and \$1.2 million, respectively.

## THE OFFERING

Common stock offered	4,500,000 shares
Common stock offered in the concurrent private placement Common stock to be outstanding after this offering and the concurrent	500,000 shares
private placement	22,206,611 shares
Use of proceeds	For general corporate purposes, including working capital. See "Use of Proceeds."
Nasdag National Market symbol	PDFS

Nasdaq National Market symbol..... PDFS

This table is based on shares outstanding as of March 31, 2001. The number of shares to be outstanding after this offering and the concurrent private placement is based on:

- a two-for-three reverse stock split of our common and preferred stock that was effective July 6, 2001;
- 10,873,293 shares of our common stock outstanding on March 31, 2001;
- automatic conversion of our Series A preferred stock outstanding on March 31, 2001 into 5,833,331 shares of our common stock upon completion of this offering; and
- automatic conversion of our Series B preferred stock outstanding on March 31, 2001 into 499,987 shares of common stock upon the closing of this offering, which includes an additional 149,115 shares of our common stock to be issued upon conversion of our Series B preferred stock.

The number of shares to be outstanding after this offering and the concurrent private placement excludes:

- 369,689 shares issuable upon exercise of stock options and stock purchase rights outstanding on March 31, 2001 at a weighted average exercise price of \$4.45 per share;
- 1,395,117 shares reserved under our 1997 stock plan as of March 31, 2001 and available for grant prior to completion of this offering of which we currently intend to grant options to purchase at least 650,000 shares to new and existing employees prior to completion of this offering; and
- 3,300,000 shares reserved under our 2001 stock plans and available for grant following completion of this offering.

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SUMMARY CONSOLIDATED FINANCIAL INFORMATION (IN THOUSANDS, EXCEPT PER SHARE DATA)

	YEAR ENDED DECEMBER 31,		THREE MON MARCH	31,	
	1998				
CONSOLIDATED STATEMENTS OF OPERATIONS DATA:					
Total revenue	\$6,227	\$11,824	\$20,135	\$ 3,694	\$ 7,534
Total costs and expenses	6,417	11,541	29,216	4,102	10,224
Income (loss) from operations	(190)	283	(9,081)	(408)	(2,690)
Net loss	(404)	(145)	(9,097)	(498)	(2,743)
Net loss per share basic and diluted	\$(0.08)	\$ (0.02)	\$ (1.24)	\$ (0.07)	\$ (0.34)
Shares used in computing basic and diluted					
net loss per share	4,944	6,086	7,356	6,797	8,065
Pro forma net loss per share basic and					
diluted			\$ (0.68)		\$ (0.19)
Shares used in computing pro forma basic					

	MARCH 31, 2001		
	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED
CONSOLIDATED BALANCE SHEET DATA:			
Cash and cash equivalents	\$ 6,866	\$ 6,866	\$61,916
Working capital	3,377	3,377	58,427
Total assets	15,034	15,034	70,084
Long-term debt, less current portion	43	43	43
Convertible preferred stock	8,457		
Total shareholders' equity (deficiency)	(2,214)	6,243	61,293

See Notes 1 and 8 of Notes to Consolidated Financial Statements for an explanation of the determination of the amounts used in computing net loss per share and pro forma net loss per share amounts.

The pro forma balance sheet data above reflects the conversion of all shares of our preferred stock into 6,333,318 shares of common stock automatically upon completion of this offering.

The pro forma as adjusted balance sheet data gives effect to the sale of shares of common stock in this offering and 500,000 shares of common stock to be sold in the concurrent private placement at the initial public offering price of \$12.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses, and the application of the net proceeds.

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# RISK FACTORS

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You should carefully consider the following risk factors and all other information contained in this prospectus before purchasing our common stock in this offering.

#### RISKS RELATING TO OUR BUSINESS

IF SEMICONDUCTOR DESIGNERS AND MANUFACTURERS DO NOT ADOPT OUR DESIGN-TO-SILICON YIELD SOLUTIONS, WE MAY BE UNABLE TO INCREASE OR MAINTAIN OUR REVENUE.

If semiconductor designers and manufacturers do not adopt our design-to-silicon yield solutions, our revenue could decline. To date, we have worked with a limited number of semiconductor companies on a limited number of integrated circuit, or IC, products and processes. To be successful, we will need to enter into agreements covering a larger number of IC products and processes with existing customers and new customers. Our existing customers are large integrated device manufacturers, or IDMs. We will need to target as new customers additional IDMs, as well as semiconductor companies in different segments of the semiconductor market, such as fabless semiconductor companies, foundries and system manufacturers. Factors that may limit adoption of our design-to-silicon yield solutions by semiconductor companies include:

- our customers' failure to achieve satisfactory yield improvements using our design-to-silicon yield solutions;
- a decrease in demand for semiconductors generally or the demand for deep submicron semiconductors failing to grow as rapidly as expected;
- the industry may develop alternative methods to enhance the integration between the semiconductor design and manufacturing processes due to a rapidly evolving market and the likely emergence of new technologies;
- our existing and potential customers' reluctance to understand and accept our innovative gain share fee component, which is a variable fee based on improvements in our customers' yields; and

- our customers' concern about our ability to keep highly competitive

OUR EARNINGS PER SHARE AND OTHER KEY OPERATING RESULTS MAY BE UNUSUALLY HIGH IN A GIVEN QUARTER, THEREBY RAISING INVESTORS' EXPECTATIONS, AND THEN UNUSUALLY LOW IN THE NEXT QUARTER, THEREBY DISAPPOINTING INVESTORS, WHICH COULD CAUSE OUR STOCK PRICE TO DROP.

Historically, our quarterly operating results have fluctuated. Our future quarterly operating results will likely fluctuate from time to time and may not meet the expectations of securities analysts and investors in some future period. The price of our common stock could decline due to such fluctuations. The following factors may cause significant fluctuations in our future quarterly operating results:

- the size and timing of sales volumes achieved by our customers' products;
- the loss of any of our large customers;
- the size of improvements in our customers' yield and the timing of agreement as to those improvements;
- our long and variable sales cycle;
- changes in the mix of our revenue;
- changes in the level of our operating expenses needed to support our projected growth; and
- delays in completing solution implementations for our customers.

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OUR RECENT ADOPTION OF A NOVEL AND UNPROVEN BUSINESS MODEL MAKES IT DIFFICULT TO EVALUATE OUR FUTURE PROSPECTS.

Since we recently adopted our current business model, we do not have a long history of operating results on which you can base your evaluation of our business. In 1998, we began selling software, services and other technologies together as a design-to-silicon yield solution for the first time. Because we have not demonstrated our ability to generate significant revenue, our business model is unproven, especially with respect to gain share fees, which we expect will constitute a significant portion of our revenue for the foreseeable future. In the past, we generally earned fixed fees for the separate sale of our software, services and other technologies. Under our new business model, we are selling these items together as a package and charging both a fixed fee and a variable fee based on demonstrated improvements in our customers' yields, which we call gain share. Our existing and potential customers may resist this approach and may seek to limit or restrict our gain share fees. As a result, it will be difficult for financial markets analysts and investors to evaluate our future prospects.

OUR GAIN SHARE REVENUE IS LARGELY DEPENDENT ON THE VOLUME OF ICS OUR CUSTOMERS ARE ABLE TO SELL TO THEIR CUSTOMERS, WHICH IS OUTSIDE OUR CONTROL.

Our gain share revenue for a particular product is largely determined by the volume of that product our customer is able to sell to its customers, which is outside of our control. We have limited ability to predict the success or failure of our customers' IC products. We may commit a significant amount of time and resources to a customer who is ultimately unable to sell as many units as we had anticipated when contracting with them. Since we currently work on a small number of large projects, any product that does not achieve commercial viability could significantly reduce our revenue and results of operations below expectations. In addition, if we work with two directly competitive products, volume in one may offset volume, and any of our related gain share, in the other product.

GAIN SHARE MEASUREMENT REQUIRES DATA COLLECTION AND IS SUBJECT TO CUSTOMER AGREEMENT, WHICH CAN RESULT IN UNCERTAINTY AND CAUSE QUARTERLY RESULTS TO FLUCTUATE.

We can only recognize gain share revenue once we have reached agreement with our customers on their level of yield performance improvements. Because measuring the amount of yield improvement is inherently complicated and

dependent on our customers' internal information systems, there may be uncertainty as to some components of measurement. This could result in our recognition of less revenue than expected. In addition, any delay in measuring gain share could cause all of the associated revenue to be delayed until the next quarter. Since we currently have only a few large customers and we are relying on gain share as a significant component of our total revenue, any delay could significantly harm our quarterly results.

CHANGES IN THE STRUCTURE OF OUR CUSTOMER CONTRACTS, PARTICULARLY THE MIX BETWEEN FIXED AND VARIABLE REVENUE, CAN ADVERSELY AFFECT THE SIZE AND TIMING OF OUR TOTAL REVENUE.

Our success is largely dependent upon our ability to structure our future customer contracts to include a larger gain share component relative to the fixed fee component. If we are successful in increasing the gain share component of our customer contracts, we will experience an adverse impact on our operating results in the short term as we reduce the fixed fee component, which we typically recognize earlier than gain share fees. In addition, by increasing the gain share component, we increase the variability of our revenue, and therefore increase the risk that our total future revenue will be lower than expected and fluctuate significantly from period to period.

WE GENERATE VIRTUALLY ALL OF OUR TOTAL REVENUE FROM A LIMITED NUMBER OF CUSTOMERS, SO THE LOSS OF ANY ONE OF THESE CUSTOMERS COULD SIGNIFICANTLY REDUCE OUR REVENUE AND RESULTS OF OPERATIONS BELOW EXPECTATIONS.

Historically, we have had a small number of large customers and we expect this to continue in the near term. In the three months ended March 31, 2001, four customers accounted for 83% of our total net

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revenue, with Toshiba representing 31%, Matsushita Electric Industrial Co., Ltd. representing 20%, Conexant representing 17% and Sony representing 15%. The loss of any one customer could significantly reduce our total revenue below expectations. In particular, such a loss could cause significant fluctuations in results of operations due to our expenses being fixed in the short term, the fact that it takes us a long time to replace customers and because any offsetting gain share revenue from new customers would not begin to be recognized until much later.

IT TYPICALLY TAKES US A LONG TIME TO SELL OUR NOVEL SOLUTIONS TO NEW CUSTOMERS, WHICH CAN RESULT IN UNCERTAINTY AND DELAYS IN GENERATING ADDITIONAL REVENUE.

Because our gain share business model is novel and our design-to-silicon yield solutions are unfamiliar, our sales cycle is lengthy and requires a significant amount of our senior management's time and effort. Furthermore, we need to target those individuals within a customer's organization who have overall responsibility for the profitability of an IC. These individuals tend to be senior management or executive officers. We may face difficulty identifying and establishing contact with such individuals. We typically send one or more of our senior executives and several engineers to meet with a prospective customer. Even after initial acceptance, due to the complexity of structuring the gain share component, the negotiation and documentation processes can be lengthy. It can take six months or more to reach a signed contract with a customer. Unexpected delays in our sales cycle could cause our revenue to fall short of expectations.

WE HAVE A HISTORY OF LOSSES, WE EXPECT TO INCUR LOSSES IN THE FUTURE AND WE MAY BE UNABLE TO ACHIEVE OR SUBSEQUENTLY MAINTAIN PROFITABILITY.

We may not achieve or subsequently maintain profitability if our revenue increases more slowly than we expect or not at all. In addition, virtually all of our operating expenses are fixed in the short term, so any shortfall in anticipated revenue in a given period could significantly reduce our operating results below expectations. Our accumulated deficit was \$12.6 million as of March 31, 2001. We expect to continue to incur significant expenses in connection with:

- increased funding for research and development;
- expansion of our solution implementation teams;

- expansion of our sales and marketing efforts; and
- additional non-cash charges relating to amortization of intangibles and deferred stock compensation.

As a result, we will need to significantly increase revenue to achieve profitability. If we do achieve profitability, we may be unable to sustain or increase profitability on a quarterly or annual basis. Any of these factors could cause our stock price to decline.

WE MUST CONTINUALLY ATTRACT AND RETAIN HIGHLY TALENTED EXECUTIVES, ENGINEERS AND RESEARCH AND DEVELOPMENT PERSONNEL OR WE WILL BE UNABLE TO EXPAND OUR BUSINESS AS PLANNED.

We will need to continue to hire highly talented executives, engineers and research and development personnel to support our planned growth. We have experienced, and we expect to continue to experience, delays and limitations in hiring and retaining highly skilled individuals with appropriate qualifications. We intend to continue to hire foreign nationals, particularly as we expand our operations internationally. We have had, and expect to continue to have, difficulty in obtaining visas permitting entry into the United States, for several of our key personnel, which disrupts our ability to strategically locate our personnel. In addition, we have a number of openings for key executive positions, including a Vice President of Marketing and additional Vice Presidents of Client Services, that we will need to fill in order to successfully execute our business strategy. We may have difficulty recruiting these executives or integrating them into our existing management team. If we lose the services of any of our key executives or a significant number of our engineers, it could disrupt our ability to implement our business strategy.

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Competition for executives and qualified engineers is intense, especially in Silicon Valley where we are principally based.

IF OUR DESIGN-TO-SILICON YIELD SOLUTIONS FAIL TO KEEP PACE WITH THE RAPID TECHNOLOGICAL CHANGES IN THE SEMICONDUCTOR INDUSTRY, WE COULD LOSE CUSTOMERS AND REVENUE.

We must continually devote significant engineering resources to enable us to keep up with the rapidly evolving technologies and equipment used in the semiconductor design and manufacturing processes. These innovations are inherently complex and require long development cycles. Not only do we need the technical expertise to implement the changes necessary to keep our technologies current, we also rely heavily on the judgment of our advisors and management to anticipate future market trends. Our customers expect us to stay ahead of the technology curve and expect that our design-to-silicon yield solutions will support any new design or manufacturing processes or materials as soon as they are deployed. If we are not able to timely predict industry changes, or if we are unable to modify our design-to-silicon yield solutions on a timely basis, our existing solutions will be rendered obsolete and we may lose customers. If we do not keep pace with technology, our existing and potential customers may choose to develop their own solutions internally as an alternative to ours, and we could lose market share to competitors, which could adversely affect our operating results.

WE INTEND TO PURSUE ADDITIONAL STRATEGIC RELATIONSHIPS, WHICH ARE NECESSARY TO MAXIMIZE OUR GROWTH AND WHICH COULD SUBSTANTIALLY DIVERT MANAGEMENT ATTENTION AND RESOURCES.

In order to establish strategic relationships with industry leaders at each stage of the IC design and manufacturing processes, we may need to expend significant resources and will need to commit a significant amount of management's time and attention, with no guarantee of success. If we are unable to enter into strategic relationships with these companies, we will not be as effective at modeling existing technologies or at keeping ahead of the curve as new technologies are introduced. In the past, the absence of an established working relationship with key companies in the industry has meant that we have had to exclude the effect of their component parts from our modeling analysis, which reduces the overall effectiveness of our analysis and limits our ability to improve yield. We may be unable to establish key industry strategic relationships if any of the following occur:

- potential industry partners become concerned about our ability to protect their intellectual property;
- potential industry partners develop their own solutions to address the need for yield improvement;
- our potential competitors establish relationships with industry partners with which we seek to establish a relationship; or
- potential industry partners attempt to restrict our ability to enter into relationships with their competitors.

WE FACE OPERATIONAL AND FINANCIAL RISKS ASSOCIATED WITH INTERNATIONAL OPERATIONS.

We derive a majority of our revenue from international sales, principally from customers based in Japan. Revenue generated from customers in Japan accounted for 82% of total revenue in the year ended December 31, 1998, 90% of total revenue in the year ended December 31, 1999, 66% of total revenue in the year ended December 31, 2000 and 66% of total revenue in the three months ended March 31, 2001. We expect that a significant portion of our total future revenue will continue to be derived from companies based in Japan. We are subject to risks inherent in doing business in international markets. These risks include:

- some of our key engineers and other personnel who are foreign nationals may have difficulty gaining access to the United States and other countries in which our customers or our offices may be located;
- greater difficulty in collecting account receivables resulting in longer collection periods;

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- language and other cultural differences may inhibit our sales and marketing efforts and create internal communication problems among our U.S. and foreign research and development teams;
- compliance with, and unexpected changes in, a wide variety of foreign laws and regulatory environments with which we are not familiar;
- currency risk due to the fact that expenses for our international offices are denominated in the local currency, while virtually all of our revenue is denominated in U.S. dollars; and
- economic or political instability.

In Japan, in particular, we face the following additional risks:

- Any recurrence of the recent overall downturn in Asian economies could limit our ability to retain existing customers and attract new ones in Asia.
- If the U.S. dollar increases in value relative to the Japanese Yen, the cost of our solutions will be more expensive to existing and potential Japanese customers and therefore less competitive.

If any of these risks materialize, we may be unable to continue to market our design-to-silicon yield solutions successfully in international markets.

COMPETITION IN THE MARKET FOR SOLUTIONS THAT ADDRESS YIELD IMPROVEMENT AND INTEGRATION BETWEEN IC DESIGN AND MANUFACTURING MAY INTENSIFY IN THE FUTURE, WHICH COULD SLOW OUR ABILITY TO GROW OR EXECUTE OUR STRATEGY.

Competition in our market may intensify in the future, which could slow our ability to grow or execute our strategy. Our current and potential customers may choose to develop their own solutions internally, particularly if we are slow in deploying our solutions. Many of these companies have the financial and technical capability to develop their own solutions. Currently, we are not aware of any other provider of comprehensive commercial solutions for Systematic IC yield and performance enhancement. We face indirect competition from the internal groups at IC companies that work on process integration, including groups at current customers, such as Toshiba or Conexant, and at prospective customers. Some vendors to IC companies may also compete with us indirectly. For

example, Cadence Design Systems, Inc., a prominent electronic design automation vendor, has offerings that help enhance IC layout in ways that could result in improved yield. Providers of yield management software aimed at maintaining and improving yield in mass production, such as KLA-Tencor Corporation, although they can help us maintain yield gains achieved in integration and ramp, may increasingly seek to broaden their offering and compete with us. In addition, we believe that the demand for solutions that address the need for better integration between the silicon design and manufacturing processes may encourage direct competitors to enter into our market. For example, large integrated organizations, such as IDMs, electronic design automation software providers, IC design service companies or semiconductor equipment vendors, may decide to spin-off a business unit that competes with us. Other potential competitors include fabrication facilities that may decide to offer solutions competitive with ours as part of their value proposition to their customers. If these potential competitors are able to attract industry partners or customers faster than we can, we may not be able to grow and execute our strategy as quickly or at all. In addition, customer preferences may shift away from our design-to-silicon yield solutions as a result of the increase in competition.

WE MUST EFFECTIVELY MANAGE AND SUPPORT OUR RECENT AND PLANNED GROWTH IN ORDER FOR OUR BUSINESS STRATEGY TO SUCCEED.

We will need to continue to grow in all areas of operation and successfully integrate and support our existing and new employees into our operations, or we may be unable to implement our business strategy in the time frame we anticipate, if at all. We expect to outgrow our principal office facilities by May 2003 and at that time will need to secure additional space or relocate to a larger facility, which could be difficult in the very competitive Silicon Valley office leasing market. We will also need to switch to a new accounting system in the near future, which could result in reporting errors and other difficulties that may

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disrupt our business operations and distract management. In addition, we will need to expand our intranet to support new data centers to enhance our research and development efforts. Our intranet is expensive to expand and must be highly secure due to the sensitive nature of our customers' information that we transmit. Building and managing the support necessary for our growth places significant demands on our management and resources. These demands may divert these resources from the continued growth of our business and implementation of our business strategy. Further, we must adequately train our new personnel, especially our technical support personnel, to adequately, and accurately, respond to and support our customers. If we fail to do this, it could lead to dissatisfaction among our customers, which could slow our growth.

OUR SOLUTION IMPLEMENTATIONS MAY TAKE LONGER THAN WE ANTICIPATE WHICH COULD CAUSE US TO LOSE CUSTOMERS AND MAY RESULT IN ADJUSTMENTS TO OUR OPERATING RESULTS.

Our solution implementations require a team of engineers to collaborate with our customers to address complex yield loss issues by using our software and other technologies. We must estimate the amount of time needed to complete an existing solution implementation in order to estimate when the engineers will be able to commence a new solution implementation. Given the time pressures involved in bringing IC products to market, targeted customers may proceed without us if we are not able to commence their solution implementation on time. Due to our lengthy sales cycle, we may be unable to replace these targeted implementations in a timely manner, which could cause fluctuations in our operating results.

In addition, our accounting for solution implementation contracts, which generate fixed fees, sometimes require adjustments to profit and loss based on revised estimates during the performance of the contract. These adjustments may have a material effect on our results of operations in the period in which they are made. The estimates giving rise to these risks, which are inherent in fixed-price contracts, include the forecasting of costs and schedules, and contract revenues related to contract performance.

OUR CHIEF EXECUTIVE OFFICER AND OUR VICE PRESIDENT OF PRODUCTS AND METHODS ARE CRITICAL TO OUR BUSINESS AND WE CANNOT GUARANTEE THAT THEY WILL REMAIN WITH US INDEFINITELY.

Our future success will depend to a significant extent on the continued services of John Kibarian, our President and Chief Executive Officer, and David Joseph, our Vice President, Products and Methods. If we lose the services of either of these key executives, it could slow execution of our business plan, hinder our product development processes and impair our sales efforts. Searching for their replacements could divert our other senior management's time and increase our operating expenses. In addition, our industry partners and customers could become concerned about our future operations, which could injure our reputation. We do not have long-term employment agreements with these executives and we do not maintain any key person life insurance policies on their lives.

INADVERTENT DISCLOSURE OF OUR CUSTOMERS' CONFIDENTIAL INFORMATION COULD RESULT IN COSTLY LITIGATION AND CAUSE US TO LOSE EXISTING AND POTENTIAL CUSTOMERS.

Our customers consider their product yield information and other confidential information, which we must gather in the course of our engagement with the customer, to be extremely competitively sensitive. If we inadvertently disclosed or were required to disclose this information, we would likely lose existing and potential customers, and could be subject to costly litigation. In addition, to avoid potential disclosure of confidential information to competitors, some of our customers may, in the future, ask us not to work with key competitive products.

IF WE FAIL TO PROTECT OUR INTELLECTUAL PROPERTY RIGHTS, CUSTOMERS OR POTENTIAL COMPETITORS MAY BE ABLE TO USE OUR TECHNOLOGIES TO DEVELOP THEIR OWN SOLUTIONS WHICH COULD WEAKEN OUR COMPETITIVE POSITION, REDUCE OUR REVENUE OR INCREASE OUR COSTS.

Our success depends largely on the proprietary nature of our technologies. We currently rely primarily on copyright, trademark and trade secret protection. Whether or not patents are granted to us, litigation

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may be necessary to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. As a result of any such litigation, we could lose our proprietary rights and incur substantial unexpected operating costs. Litigation could also divert our resources, including our managerial and engineering resources. In the future, we intend to rely primarily on a combination of patents, copyrights, trademarks and trade secrets to protect our proprietary rights and prevent competitors from using our proprietary technologies in their products. These laws and procedures provide only limited protection. Our pending patent applications may not result in issued patents, and even if issued, they may not be sufficiently broad to protect our proprietary technologies. Also, patent protection in foreign countries may be limited or unavailable where we need such protection.

OUR TECHNOLOGIES COULD INFRINGE THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS CAUSING COSTLY LITIGATION AND THE LOSS OF SIGNIFICANT RIGHTS.

Significant litigation regarding intellectual property rights exists in the semiconductor industry. It is possible that a third party may claim that our technologies infringe their intellectual property rights or misappropriate their trade secrets. Any claim, even if without merit, could be time consuming to defend, result in costly litigation or require us to enter into royalty or licensing agreements, which may not be available to us on acceptable terms, or at all. For example, in May 2001, we were named as a defendant in a lawsuit claiming, among other things, that we misappropriated trade secrets. We are defending ourselves against the claims, which we believe to be without merit. We do not believe that this litigation, or resolution of this litigation, will have a material negative impact on our business. In general, however, a successful claim of infringement against us in connection with the use of our technologies could adversely affect our business.

DEFECTS IN OUR PROPRIETARY TECHNOLOGIES AND SOFTWARE TOOLS COULD DECREASE OUR REVENUE AND OUR COMPETITIVE MARKET SHARE.

If the software or proprietary technologies we provide to a customer contain defects that increase our customer's cost of goods sold and time to market, these defects could significantly decrease the market acceptance of our design-to-silicon yield solutions. Any actual or perceived defects with our software or proprietary technologies may also hinder our ability to attract or retain industry partners or customers, leading to a decrease in our revenue. These defects are frequently found during the period following introduction of new software or proprietary technologies or enhancements to existing software or proprietary technologies. Our software or proprietary technologies may contain errors not discovered until after customer implementation of the silicon design and manufacturing process recommended by us. If our software or proprietary technologies contain errors or defects, it could require us to expend significant resources to alleviate these problems, which could result in the diversion of technical and other resources from our other development efforts.

WE MAY NOT BE ABLE TO RAISE NECESSARY FUNDS TO SUPPORT OUR GROWTH OR EXECUTE OUR STRATEGY.

We currently anticipate that our available cash resources, combined with the net proceeds from this offering, will be sufficient to meet our presently anticipated working capital and capital expenditure requirements for at least the next 12 months. However, we may need to raise additional funds in order to:

- support more rapid expansion;
- develop or enhance design-to-silicon yield solutions;
- respond to competitive pressures; or
- acquire complementary businesses or technologies.

These factors will impact our future capital requirements and the adequacy of our available funds. We may need to raise additional funds through public or private financings, strategic relationships or other arrangements. We cannot guarantee that we will be able to raise any necessary funds on terms favorable to us, or at all.

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GENERAL ECONOMIC CONDITIONS MAY REDUCE OUR REVENUES AND HARM OUR BUSINESS.

As our business has grown, we have become increasingly subject to the risks arising from adverse changes in domestic and global economic conditions. Because of the recent economic slowdown in the United States, many industries are delaying or reducing technology purchases. The impact of this slowdown on us is difficult to predict, but it may result in reductions in purchases of our technologies and services by our customers, longer sales cycles and increased price competition. As a result, if the current economic slowdown continues or worsens, we may fall short of our revenue expectations for any given quarter in fiscal 2001 or for the entire year. These conditions would negatively affect our business and results of operations.

WE RELY ON CONTINUOUS POWER SUPPLY TO CONDUCT OUR OPERATIONS, AND THE CURRENT ENERGY CRISIS COULD DISRUPT OUR OPERATIONS AND INCREASE OUR EXPENSES.

California is in the midst of an energy crisis that could disrupt our operations and increase our expenses. In the event of an acute power shortage, that is, when power reserves for the State of California fall below 1.5%, California has on some occasions implemented, and may in the future continue to implement, rolling blackouts throughout the state, with or without advance notice. If blackouts interrupt our power supply, we may be temporarily unable to operate. Any such interruption in our ability to continue operations could delay the development of our products. Future interruptions could damage our reputation, harm our ability to promote the use of our solutions and could result in lost revenue, any of which could substantially harm our business and results of operations. In addition, we do not carry sufficient business interruption insurance to compensate us for losses that may occur, and any losses or damages incurred by us could have a material adverse effect on our business.

Furthermore, the deregulation of the energy industry instituted in 1996 by the California government and shortages in wholesale electricity supplies have caused power prices to increase dramatically, and these prices will likely continue to increase for the foreseeable future. If wholesale prices continue to increase, our operating expenses will likely increase, as our headquarters and most of our employees are based in California.

WE MAY NOT BE ABLE TO EXPAND OUR PROPRIETARY TECHNOLOGIES IF WE DO NOT

CONSUMMATE POTENTIAL ACQUISITIONS OR INVESTMENTS OR SUCCESSFULLY INTEGRATE THEM WITH OUR BUSINESS.

To expand our proprietary technologies, we may acquire or make investments in complementary businesses, technologies or products if appropriate opportunities arise. We may be unable to identify suitable acquisition or investment candidates at reasonable prices or on reasonable terms, or consummate future acquisitions or investments, each of which could slow our growth strategy. We may have difficulty integrating the acquired products, personnel or technologies of our recently acquired German company or of any additional acquisitions we might make. These difficulties could disrupt our ongoing business, distract our management and employees and increase our expenses.

## RISKS RELATING TO OUR INDUSTRY

## THE SEMICONDUCTOR INDUSTRY IS CYCLICAL IN NATURE.

Our revenue is highly dependent upon the overall condition of the semiconductor industry, especially in light of our gain share revenue component. The semiconductor industry is highly cyclical and subject to rapid technological change and has been subject to significant economic downturns at various times, characterized by diminished product demand, accelerated erosion of average selling prices and production overcapacity. One such downturn appears to have commenced during the third quarter of calendar 2000 and is continuing currently. The semiconductor industry also periodically experiences increased demand and production capacity constraints. As a result, we may experience significant fluctuations in operating results due to general semiconductor industry conditions, and overall economic conditions.

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SEMICONDUCTOR COMPANIES ARE SUBJECT TO RISK OF NATURAL DISASTERS.

Semiconductor companies have in the past experienced major reductions in foundry capacity due to earthquakes in Taiwan, Japan and California. In light of our gain share revenue component, our results of operations can be significantly decreased if one of our customers must shut down IC production due to a natural disaster such as earthquake, fire, tornado or flood. Moreover, since semiconductor product life cycles have become relatively short, a significant delay in the production of a product could result in lost revenue, not merely delayed revenue.

# RISKS RELATING TO THIS OFFERING

MANAGEMENT WILL HAVE BROAD DISCRETION AS TO THE USE OF PROCEEDS FROM THIS OFFERING AND, AS A RESULT, WE MAY NOT USE THE PROCEEDS TO THE SATISFACTION OF OUR STOCKHOLDERS.

Our board of directors and management will have broad discretion in allocating the net proceeds of this offering. They may choose to allocate such proceeds in ways that do not yield a favorable return or are not supported by our stockholders. We have designated only limited specific uses for the net proceeds from this offering. Please see "Use of Proceeds."

THE CONCENTRATION OF OUR CAPITAL STOCK OWNERSHIP WITH INSIDERS UPON THE COMPLETION OF THIS OFFERING WILL LIKELY LIMIT YOUR ABILITY TO INFLUENCE CORPORATE MATTERS.

The concentration of ownership of our outstanding capital stock with our directors and executive officers after this offering may limit your ability to influence corporate matters. Upon completion of this offering, our directors and executive officers, and their affiliates, will beneficially own 46.1% of our outstanding capital stock. As a result, these stockholders, if acting together, will have the ability to control all matters submitted to our stockholders for approval, including the election and removal of directors and the approval of any corporate transactions.

WE HAVE ANTI-TAKEOVER DEFENSES THAT COULD DELAY OR PREVENT AN ACQUISITION OF OUR COMPANY.

Provisions of our certificate of incorporation and bylaws in effect after completion of this offering and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders. Please see "Description of Capital Stock."

NEGOTIATIONS BETWEEN THE UNDERWRITERS AND US DETERMINED THE INITIAL PUBLIC OFFERING PRICE, BUT THE MARKET PRICE MAY BE LESS OR MAY BE VOLATILE, AND YOU MAY NOT BE ABLE TO RESELL YOUR SHARES AT OR ABOVE THE INITIAL PUBLIC OFFERING PRICE.

The initial public offering price for the shares has been determined by negotiations between us and the representatives of the underwriters and may not be indicative of prices that will prevail in the trading market. An active public market for our common stock may not develop or be sustained after this offering. The market price of our common stock may fluctuate significantly in response to factors, some of which are beyond our control, including:

- actual or anticipated fluctuations in our operating results;
- changes in market valuations of other technology companies;
- conditions or trends in the semiconductor industry;
- announcements by us or our potential competitors of significant technical innovations, contracts, acquisitions or partnerships;
- additions or departures of key personnel;
- any deviations in revenue or in losses from levels expected by securities analysts;

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- volume fluctuations, which are particularly common among highly volatile securities of technology related companies; and
- sales of substantial amounts of our common stock or other securities in the open market.

General political or economic conditions, such as a recession, or interest rate or currency rate fluctuations could also cause the market price of our common stock to decline. Please see "Underwriting."

OUR STOCK PRICE IS LIKELY TO BE EXTREMELY VOLATILE AS THE MARKET FOR TECHNOLOGY COMPANIES' STOCK HAS RECENTLY EXPERIENCED EXTREME PRICE AND VOLUME FLUCTUATIONS.

Volatility in the market price of our common stock could result in securities class action litigation. Any litigation would likely result in substantial costs and a diversion of management's attention and resources. Despite the strong pattern of operating losses of technology companies, the market demand, valuation and trading prices of these companies have been high. At the same time, the share prices of these companies' stocks have been highly volatile and have recorded lows well below their historical highs. As a result, investors in these companies often buy the stock at very high prices only to see the price drop substantially a short time later, resulting in an extreme drop in value in the stock holdings of these investors. Our stock may not trade at the same levels as other technology stocks. In addition, technology stocks in general may not sustain current market prices.

A LARGE NUMBER OF SHARES BECOMING ELIGIBLE FOR SALE AFTER THIS OFFERING COULD CAUSE OUR STOCK PRICE TO DECLINE.

Sales of a substantial number of shares of our common stock after this offering could cause our stock price to fall. Our current stockholders hold a substantial number of shares, which they will be able to sell in the public market in the near future. Beginning on the effective date of this prospectus, only the shares sold in the offering will be immediately available for sale in the public market. Beginning 180 days after the effective date, approximately 15,715,207 shares will be eligible for sale pursuant to Rule 701 and pursuant to Rule 144. An additional 1,991,404 shares will be eligible for sale on various dates following the 181st day after the effective date of this prospectus, subject to compliance with the provisions of Rule 144 or Rule 701 or pursuant to a registration statement on Form S-8, which we expect to file following completion of the offering. Outstanding options and rights to purchase an additional 369,689 shares and at least an additional 650,000 shares we anticipate granting to new and existing employees prior to completion of this offering will be exercisable and eligible for sale on various dates following the 181st day after the effective date of this offering. Please see "Shares Eligible for Future Sale."

YOU WILL INCUR IMMEDIATE AND SUBSTANTIAL DILUTION IN THE BOOK VALUE OF THE STOCK YOU PURCHASE.

The initial public offering price is substantially higher than the book value per share of our outstanding common stock immediately after the offering. This is referred to as dilution. Accordingly, if you purchase common stock in the offering, you will incur immediate dilution of approximately \$9.31, at the initial public offering price of \$12.00 per share, in the tangible book value per share of our common stock from the price you pay for our common stock. Please see "Dilution."

IF WE RAISE ADDITIONAL CAPITAL THROUGH THE ISSUANCE OF NEW SECURITIES AT A PRICE LOWER THAN THE INITIAL PUBLIC OFFERING PRICE, YOU WILL INCUR ADDITIONAL DILUTION.

If we raise additional capital through the issuance of new securities at a lower price than the initial public offering price of \$12.00 per share, you will be subject to additional dilution. If we are unable to access the public markets in the future, or if our performance or prospects decrease, we may need to consummate a private placement or public offering of our capital stock at a lower price than the initial public offering price of \$12.00 per share. In addition, any new securities may have rights, preferences or privileges senior to those securities held by you.

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EXERCISE OF REGISTRATION RIGHTS AFTER THIS OFFERING COULD ADVERSELY AFFECT OUR STOCK PRICE.

If holders of registration rights exercise those rights after this offering and the concurrent private placement, a large number of securities could be registered and sold in the public market, which could result in a decline in the price of our common stock. If we were to include in a company-initiated registration shares held by these holders pursuant to the exercise of their registration rights, our ability to raise needed capital could suffer. After this offering, the holders of 12,416,644 shares of our common stock, which will represent a total of approximately 55.9% of our outstanding stock after completion of this offering, are entitled to rights with respect to registration under the Securities Act of 1933.

# WE DO NOT INTEND TO PAY DIVIDENDS.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain any future earnings for funding growth and, therefore, do not expect to pay any dividends in the foreseeable future. See "Dividend Policy."

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology; for instance, may, will, should, intend, expect, plan, anticipate, believe, estimate, predict, potential or continue, the negative of these terms or other comparable terminology. These statements are only predictions. Actual events or results may differ materially. In evaluating these statements, you should specifically consider various factors, including the risks outlined in "Risk Factors." These factors may cause our actual results to differ materially from any forward-looking statement.

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. Moreover, we are under no duty to update any of the forward-looking statements after the date of this prospectus to conform these statements to actual results, unless required by law. We estimate that the net proceeds to us from the sale of the 4,500,000 shares of our common stock pursuant to this offering and the sale of the 500,000 shares of our common stock in the concurrent private placement will be \$55.1 million, or \$62.6 million if the underwriters' over-allotment option is exercised in full, at the initial public offering price of \$12.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses.

We currently intend to use the net proceeds from the offering, in approximate percentage terms, as follows:

- 20-35% for further development of our products, technologies and methodologies;
- 15-30% to increase Design-to-Silicon Yield Solutions capacity;
- 10-25% for the expansion of our marketing and sales organizations; and
- 10-55% for working capital and general corporate purposes.

These operating expenses will be partially offset by the degree to which we continue to garner revenues from our ongoing activities.

The amounts and timing of these expenditures will vary significantly depending upon a number of factors, including future revenue growth, if any, competitive and technological developments and the amount of cash we generate from operations. We may also use a portion of the net proceeds of this offering to acquire additional businesses, products and technologies, to acquire additional office space, or to establish joint ventures that we believe will complement our current or future business. As a result, we will retain broad discretion in the allocation of the net proceeds of this offering. Pending the uses described above, we intend to invest the net proceeds from this offering in short-term, interest-bearing, investment grade securities. We cannot predict whether the proceeds will be invested to yield a favorable return. We believe our available cash, together with the net proceeds of this offering, will be sufficient to meet our capital needs for at least the next 12 months.

## DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends in the foreseeable future.

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#### CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2001, on the following three bases:

- on an actual basis after giving effect to the two-for-three reverse stock split of our common stock and preferred stock;
- on a pro forma basis to reflect the conversion of all shares of our preferred stock into 6,333,318 shares of common stock automatically upon completion of this offering including the effects of dividends to be recorded of \$1,619,000 (based on the initial public offering price of \$12.00 per share) representing the fair value of additional shares to be issued to the Series B preferred stockholders in excess of the shares issuable pursuant to the original terms of the Series B preferred stock; and
- on a pro forma as adjusted basis to reflect the sale of shares of common stock in this offering and 500,000 shares of common stock to be sold in the concurrent private placement, based on the initial public offering price of \$12.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses, and the application of the net proceeds.

This table excludes:

- an aggregate of 369,689 shares subject to outstanding options and purchase rights as of March 31, 2001 at a weighted average exercise price of \$4.45 per share;
- 1,395,117 shares reserved under our 1997 stock plan as of March 31, 2001 and available for grant prior to completion of this offering, of which we currently intend to grant options to purchase at least 650,000 shares to new and existing employees prior to completion of this offering; and
- 3,300,000 shares reserved under our 2001 stock plans and available for grant following completion of this offering.

You should read this information together with our Consolidated Financial Statements and Notes thereto appearing elsewhere in this prospectus. See "Management -- Benefit Plans," "Related-Party Transactions" and Notes 7 and 12 of Notes to Consolidated Financial Statements.

		MARCH 31, 2	001
			PRO FORMA AS ADJUSTED
		ANDS, EXCEPT	
Current portion of long-term debt		\$ 1,023	
Long-term debt, less current portion Series A convertible preferred stock, \$0.00015 par value; shares authorized: 5,833,333 actual and pro forma and none pro forma as adjusted; issued and outstanding: 5,833,331	\$ <u>4</u> 3	\$ 43	\$ 43
actual and none pro forma and pro forma as adjusted Series B convertible preferred stock, \$0.00015 par value; 366,667 shares authorized; issued and outstanding: 350,872	3,497		
actual and none pro forma and pro forma as adjusted Shareholders' equity (deficit): Preferred stock, \$0.00015 par value; shares authorized: none actual and pro forma and 5,000,000 pro forma as adjusted; issued and outstanding: none actual, pro forma	4,960		
and pro forma as adjusted Common stock, \$0.00015 par value; shares authorized: 33,333,333 actual and pro forma and 75,000,000 pro forma as adjusted; shares issued and outstanding: 10,873,293 actual, 17,206,611 pro forma and 22,206,611 pro forma as			
adjusted	2	3	3
Additional paid-in capital	25,088	35,163	90,213
Deferred stock-based compensation	(9,087)	(9,087)	(9,087)
Notes receivable from shareholders	(5,578)	(5,578)	(5,578)
Accumulated deficit	(12,622)	(14,241)	(14,241)
Cumulative other comprehensive income	(17)	(17)	(17)
Total shareholders' equity (deficiency)		6,243	61,293
Total capitalization		\$ 6,286	

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#### DILUTION

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Our pro forma net tangible book value as of March 31, 2001 was approximately \$4.7 million or \$0.27 per share of common stock. Pro forma net tangible book value per share of common stock represents the amount of pro forma total assets, reduced by the amount of total liabilities and intangible assets, divided by the total number of shares of common stock outstanding assuming conversion of our preferred stock into 6,333,318 shares of common stock. After giving effect to the adjustments set forth above, and the sale of shares of common stock in this offering and 500,000 shares of common stock in the concurrent private placement at the initial public offering price of \$12.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses, our pro forma net tangible book value as of March 31, 2001 would have been \$59.7 million or \$2.69 per share of common stock. This represents an immediate increase in pro forma net tangible book value of \$2.42 per share to existing stockholders and an immediate dilution of \$9.31 per share to new investors. The following table illustrates this per share dilution:

Initial public offering price per share Pro forma net tangible book value per share before this		\$12.00
offering Increase per share attributable to new public investors	\$0.27 2.42	
Pro forma net tangible book value per share after this offering		2.69
Dilution per share to new public investors		\$ 9.31

The following table summarizes on a pro forma basis as of March 31, 2001, the differences between the existing stockholders and new investors with respect to the number of shares of common stock purchased from us, the total consideration paid to us and the average price per share paid. The pro forma basis gives effect to the automatic conversion of all preferred stock into 6,333,318 shares of common stock upon completion of this offering.

	SHARES PUR		TOTAL CASH CONSIDERATION		AVERAGE PRICE	
	NUMBER	PERCENT	AMOUNT	PERCENT	PER SHARE	
Existing stockholders New investors (including private	17,206,611	77.5%	\$14,518,344	19.5%	\$ 0.84	
placement investor)	5,000,000	22.5	60,000,000	80.5	\$12.00	
Totals	22,206,611	100.0%	\$74,518,344	100.0% =====		

As of March 31, 2001, options and rights to purchase 369,689 shares were outstanding with a weighted average exercise price of \$4.45 per share. As of March 31, 2001, 1,395,117 shares were reserved under our 1997 stock plan and available for grant prior to completion of this offering. Of the shares reserved, we currently intend to grant options to purchase at least 650,000 shares to new and existing employees prior to completion of this offering. Upon completion of this offering, we will have 3,300,000 shares reserved under our 2001 stock plans and available for grant upon completion of this offering. The issuance of common stock under these plans will result in further dilution to new investors. See "Management -- Benefit Plans," "Related-Party Transactions" and Notes 7 and 12 of Notes to Consolidated Financial Statements.

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## SELECTED CONSOLIDATED FINANCIAL DATA

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The following selected consolidated financial data is qualified by reference to, and should be read in conjunction with, Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements and Notes thereto and the other information contained in this prospectus.

The selected consolidated balance sheets data as of December 31, 1999 and 2000 and the selected consolidated statements of operations data for each year in the three years ended December 31, 2000, have been derived from our audited Consolidated Financial Statements appearing elsewhere in this prospectus. The balance sheet data as of March 31, 2001 and for the three months ended March 31, 2000 and 2001 have been derived from our unaudited Consolidated Financial Statements appearing elsewhere in this prospectus. The statements appearing elsewhere in this prospectus. The selected consolidated balance sheet data as of December 31, 1998 and the selected consolidated statement of operations data for the year ended December 31, 1997 have been derived from our audited consolidated financial statements not included in this prospectus. The selected consolidated balance sheets data as of December 31, 1996 and 1997, and the selected consolidated statements of operations data for

the year ended December 31, 1996 have been derived from our unaudited consolidated financial statements not included in this prospectus. The unaudited consolidated financial statements have been prepared by us on a basis consistent with the audited consolidated financial statements appearing elsewhere in this prospectus and, in the opinion of management, include all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of this data. Historical results are not necessarily indicative of future results.

	YEAR ENDED DECEMBER 31,				THREE MON MARC	THS ENDED H 31,	
	1996	1997	1998	1999	2000	2000	2001
		 (II)	THOUSANE	DS, EXCEPT	PER SHARE	data)	
CONSOLIDATED STATEMENTS OF OPERATIONS DATA:							
Revenue:							
Design-to-silicon yield solutions Gain share	\$ 916	\$2,621	\$6,227	\$10,567 1,257	\$15,538 4,597	\$ 2,194 1,500	\$ 5,753 1,781
Gain Share							
Total revenue	916	2,621	6,227	11,824	20,135	3,694	7,534
Costs and expenses:							
Cost of design-to-silicon yield							
solutions	163	596	1,533	4,091	6,915	1,252	2,556
Research and development Selling, general and administrative	624 454	1,005 1,404	1,864 2,959	3,087 4,295	6,418 7,333	946 1,446	2,657 2,454
Offering costs	434	1,404	2,555	4,295	1,258	1,440	2,434
Stock-based compensation amortization*		14	61	68	7,292	458	2,557
Total costs and expenses	1,241	3,019	6,417	11,541	29,216	4,102	10,224
Income (loss) from operations	(325)	(398)	(190)	283	(9,081)	(408)	(2,690)
Interest income and other	175	139	128	105	347	17	132
Income (loss) before taxes	(150)	(259)	(62)	388	(8,734)	(391)	(2,558)
Tax provision	(150)	(233)	342	533	363	107	185
Net loss	\$ (150) ======	\$ (268) 	\$ (404)	\$ (145) 	\$(9,097)	\$ (498)	\$(2,743)
Net loss per share basic and diluted	\$(0.04)	\$(0.07)	\$(0.08)	\$ (0.02)	\$ (1.24)	\$ (0.07)	\$ (0.34)
Shares used in computing basic and diluted							
net loss per share	3,372	4,101	4,944	6,086	7,356	6,797	8,065
Pro forma net loss per share basic and							
diluted					\$ (0.68)		\$ (0.19)
Shares used in computing pro forma basic and							
diluted net loss per share					13,394		14,398
*STOCK-BASED COMPENSATION AMORTIZATION: Cost of design-to-silicon yield							
solutions	s	S 4	S 18	\$ 20	\$ 1,715	s 42	\$ 719
Research and development		10	43	48	4,016	355	1,181
Selling, general and administrative					1,561	61	657
	\$	\$ 14	\$ 61	\$ 68	\$ 7,292	\$ 458	\$ 2 <b>,</b> 557

	DECEMBER 31,					MADOU 21
	1996	1997	1998	1999	2000	MARCH 31, 2001
			(IN TH	OUSANDS)		
CONSOLIDATED BALANCE SHEETS DATA:						
Cash and cash equivalents	\$3,357	\$2,208	\$2,155	\$1,933	\$ 7 <b>,</b> 625	\$ 6,866
Working capital	3,277	2,854	2,501	2,153	3,707	3,377
Total assets	3,797	5,351	4,837	5,644	15,514	15,034
Long-term debt, less current portion				72	56	43
Convertible preferred stock	3,497	3,497	3,497	3,497	8,457	8,457
Total shareholders' equity (deficiency)	100	(155)	(480)	(512)	(2,026)	(2,214)

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

# OVERVIEW

Our comprehensive technologies and services enable semiconductor companies to improve yield and performance of integrated circuits by providing infrastructure to integrate the design and manufacturing processes. Our design-to-silicon yield solutions combine proprietary manufacturing process simulation, yield and performance modeling software, comprehensive test chips, proven yield and performance enhancement methodologies, and professional services.

From our incorporation in 1992 through late 1995, we were primarily focused on research and development of our proprietary manufacturing process simulation and yield and performance modeling software. From late 1995 through late 1998, we continued to refine and sell our software, while expanding our offering to include yield and performance improvement consulting services. In late 1998, we began to sell our software and consulting services, together with our newly developed proprietary technologies, as complete design-to-silicon yield solutions, reflecting our current business model. In April 2000, we expanded our research and development team and gained additional technology by acquiring Applied Integrated Systems and Software GmbH, which develops software and provides development services to the semiconductor industry.

#### Sources of Revenue

We derive revenue from two sources: design-to-silicon yield solutions and an innovative arrangement we call gain share.

Design-to-Silicon Yield Solutions. Design-to-silicon yield solutions revenue is derived from solution implementations, software and technology licenses and software support and maintenance.

Our integration engineers implement our solutions by delivering, installing and applying our software and other technologies to provide:

- assessment, which involves extensive diagnosis, analysis and prioritization of yield loss components; and
- implementation, which involves modifications to the design or manufacturing process to improve IC yield and optimize performance.

Solution implementations typically take 9 to 15 months to perform and our customer contracts generally provide for fixed price milestone payments during the course of the engagement. Revenue from solution implementations is recognized on the percentage of completion method as we perform the services. The majority of the software and other technologies that we license are bundled with solution implementations. Accordingly, these license fees are recognized as a component of solution implementation contracts. In some cases, we license selected software and technologies without solution implementation services to our existing customers. In addition, we may license our software and technologies without services to potential strategic industry partners to accelerate the adoption of our design-to-silicon yield solutions. If collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence exists to allocate a portion of the total license fee to any undelivered elements of the arrangement, then these license fees are recognized upon delivery of our software or authorization codes. Otherwise, these license fees are recognized over the term of the license. Software support and maintenance fees are generally allocated based on vendor specific objective evidence and recognized ratably over the term of the maintenance agreement, typically 12 months.

Gain Share. In addition to the revenue we derive from our design-to-silicon yield solutions, many of our solution implementation contracts provide that we will receive revenue that varies based on the value we create for our customers. To date, we have determined this value based on our customers' actual yield improvements relative to a negotiated yield target, or baseline, for specified products or processes. This target is typically based on the customer's projected yield without our solutions. We refer to these value-based fees as gain share. We have historically determined gain share fees:

- as a percentage of the reduction in our customers' cost of goods sold or a percentage of incremental revenue achieved by our customers, in each case, relative to the baseline; or
- as a specified fee based on production milestones achieved by our customers.

Our customer contracts typically contain limitations on the scope of our gain share fees. Gain share may vary significantly because a customer's financial benefits from yield improvements can be affected by forces that are beyond our control, such as market demand for an end product, as well as a company's internal manufacturing performance and pricing decisions. Typically, gain share is measured on a quarterly basis, after mass production begins, and runs for periods of time exceeding one year. We recognize gain share revenue following agreement with our customers as to the level of performance achieved.

#### Stock-Based Awards

During the year ended December 31, 2000, we issued 2,605,486 common stock options to employees at a weighted average exercise price of \$2.73 per share. The weighted average exercise price was below the weighted average deemed fair value of \$9.89 per share. The cumulative deferred stock-based compensation with respect to these grants was \$18.7 million, and is being amortized to expense on an accelerated method over the four year vesting periods of the options. During the year ended December 31, 2000, we amortized \$6.6 million to stock-based compensation expense and reversed \$145,000 of deferred stock compensation for cancelled common stock options. During the three months ended March 31, 2001, we amortized \$2.6 million to stock-based compensation expense and reversed \$238,000 of deferred stock compensation related to repurchased common shares. The deferred stock compensation balance of \$9.1 million at March 31, 2001 will be amortized over the remaining vesting periods through December 2004. Due to the accelerated method of amortization, most of the deferred stock-based compensation charge will be incurred over the first one to two years of the vesting of the options. Through December 31, 1999 the cumulative deferred stock-based compensation amortization related to non-employee awards was not material. During the year ended December 31, 2000 and the three months ended March 31, 2001 we recorded stock-based compensation amortization of approximately \$651,000 and \$4,100, respectively, related to non-employee awards.

## Customer Concentration

To date, a small number of integrated device manufacturers, or IDMs, have accounted for virtually all of our total revenue. In the year ended December 31, 1998, two customers accounted for 82% of our total revenue, with Toshiba representing 66% and Fujitsu representing 16%. In the year ended December 31, 1999, three customers accounted for 87% of our total revenue, with Toshiba representing 53%, Fujitsu representing 19% and Sony representing 15%. In the year ended December 31, 2000, four customers accounted for 84% of our total revenue, with Toshiba representing 32%, Sony representing 27%, Conexant representing 15% and Philips representing 10%. In the three months ended March 31, 2001, four customers accounted for 83% of our total net revenue, with Toshiba representing 31%, Matsushita representing 20%, Conexant representing 17%, and Sony representing 15%.

To date, companies based in Japan have accounted for the majority of our total revenue. Revenue generated from customers in Japan accounted for 82% in the year ended December 31, 1998, 90% in the year ended December 31, 1999, and 66% in the year ended December 31, 2000 and the three months ended March 31, 2001. We expect that a significant portion of our total future revenue will continue to be derived from companies based in Japan. Virtually all of our total revenue generated internationally has been denominated in U.S. dollars.

#### Recent Acquisition

On April 27, 2000, we acquired all of the outstanding stock of Applied Integrated Systems and Software GmbH, or AISS, for \$1.25 million, consisting of \$995,000 in notes payable due on April 27, 2001 and \$255,000 in cash. AISS develops software and provides development services to the semiconductor industry. The acquisition was accounted for using the purchase method and our Consolidated Financial Statements reflect the results of operations of AISS from the date of acquisition. The excess of the purchase price over the fair value of the tangible assets and liabilities assumed was \$2.0 million which was allocated: \$662,000 to acquired technology, \$540,000 to employee workforce and \$807,000 to goodwill which are being amortized on a straight line basis over a period of four years.

#### RESULTS OF OPERATIONS

We have historically experienced fluctuations from period to period. We expect these fluctuations to continue, therefore historical results are not indicative of future results.

# THREE MONTHS ENDED MARCH 31, 2000 AND 2001

#### Revenue

Total revenue increased 104% from \$3.7 million for the three months ended March 31, 2000 to \$7.5 million for the three months ended March 31, 2001.

Design-to-Silicon Yield Solutions. Design-to-silicon yield solutions revenue increased 162% from \$2.2 million for the three months ended March 31, 2000 to \$5.8 million for the three months ended March 31, 2001. The increase was primarily attributable to a greater number of solution implementations during the three months ended March 31, 2001.

Gain Share. Gain share revenue increased 19% from \$1.5 million for the three months ended March 31, 2000 to \$1.8 million for the three months ended March 31, 2001. This increase was due to the attainment of gain share from three customers in the current period versus two customers in the prior year period.

## Costs and Expenses

Costs of Design-to-Silicon Yield Solutions. Cost of design-to-silicon yield solutions consists primarily of compensation, benefits and related personnel costs of the engineers who perform system implementations and software support and maintenance as well as allocated facilities costs. Cost of design-to-silicon yield solutions increased from \$1.3 million for the three months ended March 31, 2000 to \$2.6 million for the three months ended March 31, 2001. The increase was due to a greater number and increased average size of solution implementations. As a percentage of design-to-silicon yield solutions, costs of design-to-silicon yield solutions decreased from 57% for the three months ended March 31, 2000 to 44% for the three months ended March 31, 2001. This percentage decrease was primarily the result of an increase in higher margin design-to-silicon yield solutions will increase in absolute dollars as we support an expanding number of solution implementations.

Research and Development. Research and development expenses consist primarily of compensation, benefits and related personnel costs of the engineers engaged in research and development as well as allocated facilities costs. Research and development expenses increased from \$946,000 for the three months ended March 31, 2000 to \$2.7 million for the three months ended March 31, 2001. The increase was due to our expanding research and development efforts in software and technologies. As a percentage of total revenue, research and development expenses increased from 26% for the three months ended March 31, 2000 to 35% for the three months ended March 31, 2001. A significant portion of this increase was due to the addition of personnel and the increase in personnel-related costs for development of existing and new technologies, including as a result of our acquisition of AISS. We anticipate that we will continue to commit considerable resources to research and development in the future and that these expenses will continue to increase significantly in absolute dollars.

Selling, General & Administrative. Selling, general and administrative expenses consist primarily of compensation, benefits and related personnel costs as well as allocated facilities costs, outside sales representative commissions, recruiting and relocation costs, accounting and administrative expenses, training, costs for legal and professional services and general corporate expenses. Selling, general and administrative expenses increased from \$1.4 million for the three months ended March 31, 2000 to \$2.5 million for the three months ended March 31, 2001. The increase was due to increased spending in personnel and related costs and legal and other professional services in connection with building the necessary administrative infrastructure to support the growth of our operations. As a percentage of total revenue, selling, general and administrative expenses decreased from 39% for the three months ended March 31, 2000 to 33% for the three months ended March 31, 2001. We expect that selling, general and administrative expenses will increase in absolute dollars to support increased selling and administrative efforts.

Stock-Based Compensation Amortization. Stock-based compensation amortization expense increased from \$458,000 for the three months ended March 31, 2000 to \$2.6 million for the three months ended March 31, 2001. The increase was attributable primarily to options granted to employees at exercise prices below the deemed fair value of our common stock.

#### Interest and Other Income

Interest and other income increased from \$17,000 for the three months ended March 31, 2000 to \$132,000 for the three months ended March 31, 2001. This increase was due to higher average cash and short-term investment balances.

#### Provision for Taxes

Provision for taxes increased from \$107,000 for the three months ended March 31, 2000 to \$185,000 for the three months ended March 31, 2001. These provisions primarily represented foreign withholding taxes on certain revenue from Japanese customers with the increase in 2001 resulting from an increase in taxable income from worldwide operations.

#### YEARS ENDED DECEMBER 31, 1999 AND 2000

#### Revenue

Total revenue increased 70% from \$11.8 million for the year ended December 31, 1999 to \$20.1 million for the year ended December 31, 2000.

Design-to-Silicon Yield Solutions. Design-to-silicon yield solutions revenue increased 47% from \$10.6 million for the year ended December 31, 1999 to \$15.5 million for the year ended December 31, 2000. This increase was primarily attributable to a greater number of solution implementations during the year ended December 31, 2000 compared to the prior year.

Gain Share. Gain share revenue increased 266% from \$1.3 million for the year ended December 31, 1999 to \$4.6 million for the year ended December 31, 2000. This increase was due to the attainment of gain share yield targets for two new and one existing customer.

#### Costs and Expenses

Cost of Design-to-Silicon Yield Solutions. Cost of design-to-silicon yield solutions increased from \$4.1 million for the year ended December 31, 1999 to \$6.9 million for the year ended December 31, 2000. This increase was due to a greater number and increased average size of solution implementations, as well as the execution of our business strategy to aggressively increase capacity ahead of revenue, resulting in the hiring of additional personnel. As a percentage of design-to-silicon yield solutions revenue, cost of design-to-silicon yield solutions increased from 39% for the year ended December 31, 1999 to 45% for the year ended December 31, 2000. This percentage increase was primarily the result of increasing capacity in anticipation of expanding our customer base and being awarded new design-to-silicon solutions contracts. We anticipate that our cost of design-to-silicon yield solutions will increase in absolute dollars as we support an expanding number of solution implementations. We expect, however, that cost of design-to-silicon yield solutions revenue will decrease as a percentage of design-to-silicon yield solutions revenue will

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the long term as capacity to deliver solution implementations is more efficiently balanced with the number of ongoing solution implementation

#### contracts.

Research and Development. Research and development expenses increased from \$3.1 million for the year ended December 31, 1999 to \$6.4 million for the year ended December 31, 2000. This increase was due to our expanding research and development efforts in software and technologies. As a percentage of total revenue, research and development expenses increased from 26% for the year ended December 31, 1999 to 32% for the year ended December 31, 2000. A significant portion of this increase was due to the addition of personnel and the increase in personnel-related costs for development of existing and new technologies, including as a result of our acquisition of AISS. We anticipate that we will continue to commit considerable resources to research and development in the future and that these expenses will continue to increase significantly in absolute dollars.

Selling, General and Administrative. Selling, general and administrative expenses increased from \$4.3 million for the year ended December 31, 1999 to \$7.3 million for the year ended December 31, 2000. This increase was due to increased spending in personnel and related costs and legal and other professional services in connection with building the necessary infrastructure to support the growth of our operations. As a percentage of total revenue, selling, general and administrative expenses remained consistent at 36% for the year ended December 31, 1999 and 2000. We expect that selling, general and administrative expenses will increase in absolute dollars to support increased selling and administrative efforts.

Offering Costs. Costs of approximately \$1.3 million related to this offering were expensed during the quarter ended December 31, 2000 due to protracted delays in this offering.

Stock-Based Compensation Amortization. Stock-based compensation amortization expense increased from approximately \$68,000 during the year ended December 31, 1999 to \$7.3 million during the year ended December 31, 2000. The increase was attributable primarily to options granted to employees at exercise prices below the deemed fair value of our common stock.

# Interest and Other Income

Interest and other income increased from approximately \$105,000 for the year ended December 31, 1999 to approximately \$347,000 for the year ended December 31, 2000. This increase was due to higher average cash and short-term investment balances.

# Provision for Taxes

Provision for taxes decreased from approximately \$533,000 for the year ended December 31, 1999 to approximately \$363,000 for the year ended December 31, 2000. This decrease in provision for taxes primarily resulted from a decrease in foreign withholding taxes partially offset by an increase in taxable income from U.S. operations.

#### YEARS ENDED DECEMBER 31, 1998 AND 1999

#### Revenue

Total revenue increased 90% from \$6.2 million for the year ended December 31, 1998, to \$11.8 million for the year ended December 31, 1999.

Design-to-Silicon Yield Solutions. Design-to-silicon yield solutions revenue increased 70% from \$6.2 million for the year ended December 31, 1998, to \$10.6 million for the year ended December 31, 1999. These increases were primarily the result of a greater number and size of solution implementations.

Gain Share. Gain share revenue increased from zero for the year ended December 31, 1998, to \$1.3 million for the year ended December 31, 1999. This increase was due to the introduction of our gain share business model in late 1998 and the achievement of yield improvements over negotiated contract baselines.

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Cost of Design-to-Silicon Yield Solutions. Cost of design-to-silicon yield solutions increased from approximately \$1.5 million for the year ended December 31, 1998, to \$4.1 million for the year ended December 31, 1999. As a percentage of design-to-silicon yield solutions revenue, cost of design-to-silicon yield solutions increased from 25% for the year ended December 31, 1998, to 39% for the year ended December 31, 1998, to 39% for the year ended December 31, 1998, to 39% for the year ended December 31, 1998, to 39% for the year ended December 31, 1998, to 39% for the year ended December 31, 1999. This increase in absolute dollars and as a percentage of design-to-silicon yield solutions revenue was due to the hiring of additional engineers as we built our solution implementation teams in anticipation of increased demand for our solutions.

Research and Development. Research and development expenses increased from \$1.9 million for the year ended December 31, 1998, to \$3.1 million for the year ended December 31, 1999. This increase was due to an increase in personnel and related costs. As a percentage of total revenue, research and development expenses decreased from 30% for the year ended December 31, 1998, to 26% for the year ended December 31, 1999.

Selling, General and Administrative. Selling, general and administrative expenses increased from \$3.0 million for the year ended December 31, 1998, to \$4.3 million for the year ended December 31, 1999. This increase was due to additional personnel and related costs, outside sales representative commissions, recruiting and relocation costs, accounting and administrative expenses, training and costs for legal and professional services. As a percentage of total revenue, selling, general and administrative expenses decreased from 48% for the year ended December 31, 1998, to 36% for the year ended December 31, 1999.

Stock-Based Compensation Amortization. Stock-based compensation amortization expense increased from approximately \$61,000 for the year ended December 31, 1998, to approximately \$68,000 for the year ended December 31, 1999. This increase was primarily attributable to timing of the vesting of options and warrants granted to non-employees and the resulting revaluation of compensation expense related to such vested options and warrants.

## Interest and Other Income

Interest and other income decreased from approximately \$128,000 for the year ended December 31, 1998, to approximately \$105,000 for the year ended December 31, 1999. This decrease was due to lower average balances of cash and cash equivalents.

## Tax Provision

The tax provision increased from approximately \$341,000 for the year ended December 31, 1998, to approximately \$533,000 for the year ended December 31, 1999. These provisions primarily represented foreign withholding taxes on some revenue from Japanese customers. This increase was attributable to the increased number of contracts and the revenue subject to these withholding requirements.

#### NINE QUARTERS ENDED MARCH 31, 2001

The following tables set forth our consolidated statement of operations data for each quarter in the nine quarters ended March 31, 2001. This unaudited quarterly information has been prepared on the same basis as our audited Consolidated Financial Statements and, in the opinion of management, includes all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of such data. We believe that quarterly revenues, particularly the mix of the revenue components, and operating

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results are likely to vary significantly in the future and that period-to-period comparisons of our results of operations should not be relied upon as indications of future performance.

QUARTER ENDED

				~					
	31,		SEPT 30,	DEC 31,	MAR 31,		SEPT 30,	DEC 31,	MAR 31,
19	99	1999	1999	1999	2000	2000	2000	2000	2001
(IN THOUSANDS)									

nevenue.									
Design-to-silicon yield									
solutions	\$2,451	\$2,883	\$2,575	\$2,658	\$2,194	\$ 3,774	\$ 4,490	\$ 5,080	\$ 5,753
Gain share			500	757	1,500	808	848	1,441	1,781
Total revenue	2,451	2,883	3,075	3,415	3,694	4,582	5,338	6,521	7,534
Costs and expenses:									
Cost of design-to-silicon yield									
solutions	722	1,100	1,133	1,136	1,252	1,653	1,887	2,123	2,556
Research and development	650	594	816	1,027	946	1,296	1,817	2,359	2,657
Selling, general and									
administrative	1,142	1,060	1,084	1,009	1,446	1,579	2,239	2,069	2,454
Offering costs								1,258	
Stock-based compensation									
amortization	(13)	13	27	41	458	1,235	2,896	2,703	2,557
Total costs and expenses	2,501	2,767	3,060	3,213	4,102	5,763	8,839	10.512	10,224
Total cobeb and expended									
Income (loss) from operations	(50)	116	15	202	(408)	(1, 181)	(3,501)	(3,991)	(2,690)
Interest income and other	27	25	26	27	17	24	114	192	132
Income (loss) before taxes	(23)	141	41	229	(391)	(1,157)	(3,387)	(3,799)	(2,558)
Tax provision	201	100	102	130	107	166	239	(149)	185
Net income (loss)	\$ (224)	\$ 41	\$ (61)	\$ 99	\$ (498)	\$(1,323)	\$(3,626)	\$(3,650)	\$(2,743)

The trends discussed in the annual comparisons of operating results from 1998 through 2000, generally apply to the comparisons of results for our nine most recent quarters ended March 31, 2001.

A significant portion of our revenue has been, and will continue to be, derived from a small number of substantial contracts with large corporations, which involve extended contract negotiations. We attempt to maximize utilization of our implementation teams by minimizing the time between completion of one solution implementation and commencement of the next. Accordingly, the timing and performance of these contracts may cause material fluctuations in our operating results, particularly on a quarterly basis, although in the past this has been offset by gain share revenue resulting from previous engagements. For example, design-to-silicon yield solutions revenue decreased from the second quarter of 1999 to the third quarter of 1999 and from the fourth quarter of 1999 to the first quarter of 2000 as a result of a delay between completion of existing solution implementations and commencement of the next.

Some of our gain share arrangements provide for non-recurring incentive payments upon the achievement of negotiated yield targets within a specified time. Gain share revenue may increase significantly in the quarter in which these targets are met. For example, in the first quarter of 2000, we recognized revenue in connection with the achievement of one of these targets. In addition, our quarterly operating results, particularly as they pertain to gain share, have in the past and will in the future vary significantly depending upon factors such as our customers' production cycles, our customers' ability to measure, on a timely basis, the performance of their production facilities, changes in market demand for our customers' products, and our ability to deliver results above negotiated gain share baselines. These factors, among others, have made and will continue to make gain share revenues difficult to forecast.

Historically, research and development expenses have fluctuated depending on the rate of hiring engineers and on whether we use engineering resources for development projects or solution implementations. For example, in the fourth quarter of 1999, our research and development expenses increased due to these factors.

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Selling, general and administrative expense levels have remained in a narrow range over most of the past eight quarters. Recently, expenses have increased in the sales, marketing, finance and administration functions as we have built the infrastructure necessary to support the growth of the business. In addition, expenses such as sales commissions and relocation of employees may vary from quarter to quarter as was the case in the third and fourth quarters of 2000.

## LIQUIDITY AND CAPITAL RESOURCES

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Revenue:

Since inception, we have funded our operations primarily with the net proceeds from the sale of common and preferred stock, which has amounted to a total of \$8.8 million and, to a lesser extent, from cash flow from operations, bank borrowings and capital equipment leases.

On December 4, 1995, we issued 5,833,331 shares of Series A preferred stock at \$.60 per share resulting in net proceeds of \$3.5 million. On August 4, 2000, we issued 350,872 shares of Series B preferred stock at \$14.25 per share resulting in net proceeds of \$5.0 million.

Net cash provided by operating activities was approximately \$212,000 for the year ended December 31, 1998, approximately \$272,000 for the year ended December 31, 1999, and approximately \$1.9 million for the year ended December 31, 2000. Net cash provided by operating activities in 1998 was the result of decreases in accounts receivable and increases in accounts payable and other accrued liabilities partially offset by a loss and a decrease in deferred revenues. Net cash provided by operating activities in 1999 resulted from increases in accrued compensation and related benefits and net income, after adjustment for depreciation and amortization, partially offset by increases in accounts receivable. Net cash provided by operating activities in 2000 was the result of increases in accounts payable and accrued expenses of approximately \$1.6 million, billings in excess of recognized revenue of approximately \$1.1 million and deferred revenues of approximately \$1.5 million, partially offset by a net loss of approximately \$968,000 and increases in accounts receivable of approximately \$815,000 and prepaid expenses and other assets of approximately \$540,000. The net loss for the period of approximately \$968,000, was adjusted for depreciation and amortization, including amortization of deferred stock compensation costs of \$7.3 million. Net cash used in operating activities was approximately \$339,000 for the three months ended March 31, 2001. This resulted primarily from decreases in accrued expenses of approximately \$884,000 and increases in accounts receivable and prepaid expenses and other assets of approximately \$178,000, partially offset by net income of approximately \$123,000 after adjustment for depreciation and amortization, including amortization of deferred stock compensation cost of \$2.6 million, and increases in deferred revenues of approximately \$353,000, billings in excess of recognized revenue of approximately \$141,000 and accounts payable of approximately \$104,000. The increase in deferred revenues for the year ended December 31, 2000 and the three months ended March 31, 2001 was due primarily to advance payments from customers under license and maintenance agreements. The increase in accounts receivable for the year ended December 31, 2000 and the three months ended March 31, 2001 was attributable to performance under an increased number of contracts.

Net cash used in investing activities was approximately \$281,000 for the year ended December 31, 1998, approximately \$537,000 for the year ended December 31, 1999, approximately \$1.4 million for the year ended December 31, 2000 and approximately \$412,000 for the three months ended March 31, 2001. Net cash used in investing activities in 1998 and 1999 and in the three months ended March 31, 2001 was primarily the result of purchases of property and equipment consisting primarily of computer hardware and software and office furniture. Net cash used in investing activities in 2000 was primarily due to the purchase of property and equipment of approximately \$1.2 million and the acquisition of AISS for \$995,000 in promissory notes and \$255,000 in cash.

Net cash provided by financing activities was approximately \$16,000 for the year ended December 31, 1998 and approximately \$42,000 for the year ended December 31, 1999. Net cash provided by financing activities was approximately \$5.2 million for the year ended December 31, 2000, primarily due to the issuance of Series B convertible preferred stock. Net cash provided by financing activities of \$1,800 for the

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three months ended March 31, 2001 was the result of collection of notes receivable from shareholders, partially offset by principal payments on long-term debt.

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In connection with our acquisition of AISS, we issued \$995,000 in promissory notes on April 27, 2000. The principal amount, plus interest at 7% per annum, was paid on April 27, 2001.

We expect to experience significant growth in our operating expenses, particularly for research and development and additions to our workforce in order to execute our business plan. As a result, we anticipate that our operating expenses, as well as planned capital expenditures, will constitute a material use of our cash resources. In addition, we may utilize cash resources to fund potential acquisitions of complementary products, technologies or businesses. We believe that the net proceeds from this offering and the concurrent private placement together with our existing cash resources, available bank financing and anticipated funds from operations, will satisfy our cash requirements for at least the next twelve months. In the event additional financing is required, we may not be able to raise it on acceptable terms or at all.

# EURO-CURRENCY

The Single European Currency, or Euro, was introduced on January 1, 1999, with complete transition to this new currency required by January 2002. In connection with our acquisition of AISS, we are currently assessing the issues raised by the introduction of the Euro, but we do not expect that required changes, if any, will have a material effect on our business.

## RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board issued SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities. This statement will require us to record derivatives on our balance sheet as assets or liabilities measured at fair value. Gains or losses resulting from changes in the values of those derivatives would be accounted for depending on the use of the derivative and whether it qualifies for hedge accounting. The Company adopted SFAS No. 133, as amended, on January 1, 2001. The adoption of this statement did not have an effect on the Company's financial position, results of operations or cash flows as the Company had no stand-alone or embedded derivatives at December 31, 2000 and had not historically entered into any derivative transactions to hedge currency or other exposures.

In September 2000, the FASB issued SFAS No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. SFAS No. 140 replaces SFAS No. 125, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. It revises the standards for accounting for securitizations and other transfers of financial assets and collateral and requires certain disclosures, but it carries over most of SFAS No. 125's provisions without reconsideration. We adopted the applicable disclosure requirements of SFAS No. 140 in our consolidated financial statements as of December 31, 2000. We are currently evaluating the impact of adopting the remaining provisions of SFAS No. 140 which will be effective for transactions entered into after March 31, 2001.

## MARKET RISK

The following discusses our exposure to market risk related to changes in interest rates and foreign currency exchange rates. We do not currently own any equity investments, nor do we expect to own any in the foreseeable future. This discussion contains forward-looking statements that are subject to risks and uncertainties. Actual results could vary materially as a result of a number of factors.

Interest Rate Risk. As of March 31, 2001 we had cash and equivalents of \$6.9 million, consisting of cash and highly liquid money market instruments with maturities of less than 90 days. Because of the short maturities of these instruments, a sudden change in market interest rates would not have a material impact on the fair value of the portfolio. We would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest on our portfolio. As of March 31, 2001, we had outstanding notes payable of \$995,000 which bear interest at a fixed rate of

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7%. The fair value of these notes approximated the recorded value at March 31, 2001. Changes in market interest rates will affect the fair market value of these notes. A hypothetical increase in market interest rates of 10% from the market rates in effect at March 31, 2001 would cause the fair value of these investments and notes payable to decrease and increase, respectively, by an immaterial amount and would not have significantly impacted our financial position or results of operations. Declines in interest rates over time will result in lower interest income and increased interest expense.

Foreign Currency and Exchange Risk. Virtually all of our revenue is denominated in U.S. dollars, although such revenue is derived substantially from foreign customers. Foreign sales to date, generated by AISS since the date of its acquisition, have been invoiced in local currencies, creating receivables denominated in currencies other than the U.S. dollar. The risk due to foreign currency fluctuations associated with these receivables is partially reduced by local payables denominated in the same currencies, and presently we do not consider it necessary to hedge these exposures. We intend to monitor our foreign currency exposure, and may use financial instruments to limit this exposure. There can be no assurance that exchange rate fluctuations will not have a materially negative impact on our business.

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## BUSINESS

# OVERVIEW

Our comprehensive technologies and services enable semiconductor companies to improve yield and performance of integrated circuits by providing infrastructure to integrate the design and manufacturing processes. We believe that our solutions significantly improve a semiconductor company's time to market, the rate at which yield improves and product profitability. Our design-to-silicon yield solutions combine proprietary manufacturing process simulation, yield and performance modeling software, comprehensive test chips, proven yield and performance enhancement methodologies, and professional services. The result of implementing our solutions is the creation of value that can be measured based on improvements to our customers' actual yield. We receive recurring revenue based on this value by aligning our financial interests with the demonstrated yield and performance improvement realized by our customers. To date, we have sold our technologies and services to, and we have established ongoing relationships with, key integrated device manufacturers such as Toshiba Corporation, Conexant Systems, Inc., Sony Corporation, Philips Semiconductor, and Texas Instruments Incorporated.

#### INDUSTRY BACKGROUND

Integrated circuits, or ICs, are critical components used in an increasingly wide variety of applications, such as computer systems; Internet and communications infrastructure equipment, including wireless and network devices; and consumer products including cellular phones, pagers, personal digital assistants, game consoles and network appliances. As IC performance has increased and size and cost have decreased, the use of ICs in these applications has grown significantly. According to a November 2000 report by the Semiconductor Industry Association, the worldwide semiconductor market is expected to grow from \$149 billion in 1999 to \$319 billion in 2003. A large part of this growth is expected to occur in deep submicron ICs having circuit component feature sizes, or geometries, that measure less than 0.20 microns, or millionths of a meter. ICs are manufactured onto silicon disks, commonly referred to as wafers. According to an April 2001 report by VLSI Research, the demand for deep submicron silicon wafers, which are wafers with a linewidth of less than 0.2 micron, is estimated to grow at a compound annual rate in excess of 48.6% from 1999 to 2005. Rapid technological innovation has shortened product life cycles, which fuels the economic growth of the semiconductor industry.

Customers for electronic products continue to demand new applications with more power, reduced cost and smaller size. As a result, IC companies are adopting new designs, process technologies and materials at an unparalleled rate. For example, silicon germanium processes will be integrated with standard logic processes to provide better performance for radio-frequency components in communication ICs.

In addition, the IC industry faces compression in product lifecycles. Previously, companies could afford to take months, or years in some cases, to integrate their new design and manufacturing processes. With traditional product life cycles, IC companies ramped production slowly, produced at high volume once the product hit its prime, and slowly reduced production volume when the price and the demand started to decrease near the end of its life cycle. More recently, demand -- largely driven by consumers in search of the next, more powerful, smaller device -- has dramatically reduced the time that semiconductor companies have to successfully bring a product to market in high volumes. Companies now need to sell the most volume when a product is first introduced and has a performance and pricing advantage over its competition, or they will lose the market opportunity and the related high revenue.

Increased IC complexity and compressed product lifecycles create significant challenges to achieving competitive yields and optimizing performance. Yield is the percentage of ICs produced that meet customers' specifications. For example, it is not uncommon for an initial manufacturing run to yield only 20%, meaning 80% of those wafers were wasted. Yield improvement and performance optimization are critical drivers of IC companies' financial results because they typically lead to cost reduction and revenue generation concurrently, causing a leveraged effect on profitability. Historically, yield loss resulted primarily

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from contamination in the IC manufacturing process. The dominant factor of yield loss with deep submicron ICs has shifted from contamination to:

- systematic yield loss, or non-functioning ICs resulting from the lack of compatibility between the design and manufacturing processes; and
- performance yield loss, or functioning ICs that do not meet customer speed requirements.

Manufacturers have historically addressed systematic and performance yield loss reactively and almost exclusively by inefficient and time consuming trial-and-error adjustments to the manufacturing process.

Disaggregation of the semiconductor industry has further complicated IC companies' ability to maximize yield. Historically, leading semiconductor companies designed, manufactured and tested their ICs internally, thus retaining design-manufacturing integration know-how. Today, the industry is comprised of organizations as well as separate companies that specialize in a particular phase of designing and manufacturing ICs. This has resulted in a fragmentation of the knowledge related to the integration of IC design and manufacturing.

The combination of increasingly complex ICs and design and manufacturing processes, reduced time to produce new products in high volumes and the loss of information due to disaggregation has left a gap between the design of an IC and its manufacture. We call this gap the design-to-silicon yield gap. This gap creates a number of significant problems for semiconductor companies, including:

- Slow Yield Ramp. Increased process and design complexity extends the time needed to arrive at acceptable yields and increases the time it takes for a semiconductor company to begin producing at high volumes, directly and negatively impacting a company's potential market share and potential revenue.
- Longer Time to Market and Increased Up-front Costs. Yield problems in the initial manufacturing phase result in numerous design and process iterations that delay product introductions and appreciably increase up-front costs, such as non-recurring engineering, mask-set redesigns and excessive sample wafers.
- High Cost of Goods Sold. Processed wafer costs are typically the largest component of an IC company's cost of goods sold and, therefore, yield loss significantly increases costs.
- Difficulties Producing High-Performance ICs. High-performance ICs are particularly sensitive to the lack of compatibility between design and manufacturing. In addition, semiconductor companies typically experience a trade-off between yield and IC performance because it is generally more difficult to produce ICs with more stringent specifications. Semiconductor companies may target high-performance ICs because they typically have higher margins.

Delivering complex ICs quickly and in high volumes requires unique silicon infrastructure solutions to tightly integrate the IC design and manufacturing processes -- thus bridging this design-to-silicon yield gap.

#### THE PDF SOLUTION

We provide comprehensive silicon infrastructure technologies and services to address and bridge the design-to-silicon yield gap. Our solution combines proprietary manufacturing process simulation software, yield and performance modeling software, comprehensive test chips, proven yield and performance enhancement methodologies and professional services to increase yield, accelerate yield ramp and improve IC performance. We create a prioritized analysis of yield loss mechanisms to identify, quantify and correct the issues that cause yield loss, often before an IC design is complete. This drives IC design and manufacturing improvements that enable our customers to achieve and exceed targeted IC yield and performance earlier in product life cycles. Our solution is designed to increase the initial yield when a design first enters a manufacturing line, increase the rate at which that yield improves, and allow subsequent product designs to be added to manufacturing lines more quickly and easily. Because our

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design-to-silicon yield solutions dramatically and quickly improve a semiconductor company's time to market and yield ramp -- and ultimately product profitability -- we tie our revenue to these improvements through a unique approach that we call gain share. Gain share is the percentage we receive of our customers' incremental cost savings or incremental revenue associated with improved yields and accelerated ramp or may be a specified fee based on production milestones achieved by our customers.

The following graphically depicts the integration of IC design with manufacturing processes using our design-to-silicon yield solutions.

[The diagram depicts the connection between IC design and manufacturing.]

The key benefits of our solution to our customers are:

Faster Time to Market. Our design-to-silicon yield solutions are designed to significantly accelerate our customers' time to market and increase product profitability. Our solutions, which predict and improve product yield even before IC product design is complete, change the traditional design-to-silicon sequence to primarily a concurrent process, and decrease our customers' time to market. Systematically incorporating knowledge of the integration of the design and manufacturing processes into software modules, enables faster introduction of additional products with consistently high initial yields. Our designto-silicon yield solutions decrease design and process iterations, reduce our customers' up-front costs and speed time to market, thus providing our customers with early-mover advantages such as increased market share and higher selling prices.

Faster Time to Volume. After achieving higher initial yields and faster time to market, our design-to-silicon yield solutions are designed to enable our customers to isolate and eliminate remaining systematic yield issues to achieve cost efficient manufacturing volume. Once a manufacturing process has been modeled using our solutions, our customers are able to diagnose problems and simulate potential corrections more quickly than using traditional methods. In addition, if process changes are required, improvements can be verified more quickly using our technology than using traditional methods. Our design-to-silicon yield solutions enable our customers to quickly reach cost efficient volume, so that they are able to increase revenue, improve their competitive position, and capture higher market share.

Increased Manufacturing Efficiencies. After using our design-to-silicon yield solutions for product introduction and yield ramp, our solutions are designed to allow our customers to achieve a higher final yield and therefore a lower cost of goods sold. In addition, our design-to-silicon yield solutions are designed to provide our customers with the ability to proactively monitor process health to avoid potential yield problems. By paying us gain share as our customers recognize cost savings from these manufacturing efficiencies, they also benefit from better matching their costs to their revenue.

Increased Semiconductor Performance. Our design-to-silicon yield solutions are designed to enable our customers to achieve over-all higher level semiconductor performance by modeling the factors that affect speed and simulating possible improvements. Typically, the changes necessary to achieve higher performance result in an overall reduction in yield. Because our design-to-silicon yield solutions also model

the factors that affect yield at the same time, our customers can often achieve both higher IC performance and higher yield, thereby generating higher margin revenues.

#### OUR STRATEGY

Our objective is to provide the industry standard in design-to-silicon yield solutions. Key elements of our strategy include:

Leverage Our Innovative Gain Share Business Model. We intend to expand the gain share component of our customer contracts. We believe this innovative approach helps us to form highly collaborative and longer-term relationships. Working closely with our customers on their core technologies with a common focus on their business results provides direct and real-time feedback, which we will continue to use to rapidly generate market-driven improvements that add value to our solutions. We also believe that gain share allows us to increase penetration of our customer accounts because adding new semiconductor products to existing lines is increasingly easy and economical for our customers once our design-to-silicon yield solutions are implemented. As our gain share customers succeed in improving their yield and performance while reducing costs, we believe that we will generate new customer accounts based on these successes.

Focus on Key IC Product Segments. We intend to focus our solution on key IC product segments such as system-on-a-chip, communications networking, graphics and high-performance central processing units. These are high-volume, high-growth segments and are fueled by the growth of Internet and wireless infrastructure and consumer applications. As a result, we will expand our solution for key technology drivers such as low-k dielectrics, copper, embedded DRAM and silicon germanium, which are all new and relatively complex manufacturing process technologies. We believe that these product segments are particularly attractive because they include complex IC design and manufacturing processes where processed silicon is costly and yield is critical.

Expand Strategic Relationships with Industry Leaders. We intend to extend and enhance our relationships with leading companies at key stages of the design-to-silicon process, such as manufacturing equipment vendors, silicon intellectual property vendors, semiconductor foundries, and test and assembly equipment providers. We believe that strategic relationships with industry leaders will increase our insight into future industry needs, thus allowing us to further accelerate our learning and enhance the value of our solutions. We expect these relationships to also serve as sales channels for our design-to-silicon yield solutions and to increase industry awareness of our solutions.

Extend Our Technology Leadership Position. We intend to continue expanding our research and development efforts by leveraging our experienced engineering staff and codifying the knowledge that we continually acquire in our solution implementations. In addition, we intend to selectively acquire complementary businesses and technologies to increase the scope of our solutions. We will continue to make significant investments in the development of proprietary manufacturing process simulation software, yield and performance modeling software, other technologies, and yield and performance enhancement methodologies to accommodate our customers' increasingly complex semiconductor needs.

Expand Worldwide Presence. We intend to establish engineering design and product development centers in key international locations around the world. To date, we have focused on regions specific to our design efforts -- the United States, Japan and Europe. We intend to expand geographically to gain access to international engineering talent and to maintain proximity to our expanding customer base. In addition, we believe that these efforts will have collateral sales and marketing benefits as a result of local presence.

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## TECHNOLOGY

Our design-to-silicon yield solutions combine proprietary manufacturing process simulation, yield and performance modeling software, comprehensive test chips and proven yield and performance enhancement methodologies. To calculate the likely yield of an IC design, we have designed a proprietary process that uses each of these technologies to:

- identify yield-relevant layout pattern elements by using the knowledge base embedded in our technologies;

- categorize IC layout components into these elements;
- quantify the yield of each of the elements; and
- model the frequency of yield-relevant elements and their yield-loss probabilities.

We continually enhance our technologies through the codification of knowledge that we gain in our solution implementations.

Our software incorporates the following elements:

- efficient modeling algorithms of the interaction between design layout and manufacturing processes, which creates layout pattern-dependent systematic yield models that encompass process technologies such as lithography, etch, interlayer dielectric chemical-mechanical polishing (ILD CMP), copper CMP and shallow trench isolation CMP (STI CMP);
- pattern recognition algorithms, which allow us to categorize the yield-relevant elements of a design as a function of their layout, including the effects of their proximity to other elements;
- a hierarchical representation of the layout, which encompasses layout manufacturing process proximity effects and minimizes the time necessary for computation of systematic yield prediction;
- algorithms that compute an overall yield impact matrix for design as a function of layout elements and manufacturing yield models;
- statistical simulation of circuit performance as a function of manufacturing process variations, including their impact on transistor performance; and
- statistical process and device simulation.

Our software that is used to predict yields of designs is also used to generate test chips, or characterization vehicles. These characterization vehicles, or CVs, are used to calibrate the yield models and to provide manufacturers with early prediction of product yields, often before the IC design is completed. Early prediction generated by the CVs is the basis of the yield improvement methodologies for the manufacturing line. Information generated by the CVs is also used to improve the IC design.

Our methodologies are a series of guidelines that our implementation teams use to drive our customers' adoption of our software and CVs to quantify the yield impact of each module of the process and design block, simulate the impact of changes to the design and manufacturing process, and analyze the outcome of executing such changes.

## PRODUCTS AND SERVICES

Our design-to-silicon yield solutions consist of integration engineering services, proprietary software and other technologies. Our proprietary software and other technologies include proprietary manufacturing process simulation software, yield and performance modeling software, and comprehensive test chips.

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We tailor our solution to our customers' specific business issues by offering one of the following design-to-silicon yield solutions:

- Integration and Ramp. This solution enables our customers to ramp the yield of new products when the manufacturing process or fabrication facility is new. Our solution is used to improve the process capability and manufacturability of designs targeted for that process.
- Yield and Performance Ramp. This solution enables our customers to ramp the yield and performance of new products when the manufacturing process is assumed to be mostly correct and complete. In this case, we focus on design oriented issues.

Our design-to-silicon yield solutions can incorporate various software and other technologies, typically including the following:

- Characterization Vehicles(TM) and Characterization Vehicle Software. Our integration engineers develop a design of experiments, or DOE, to determine how IC design building blocks interact with the manufacturing process. Our software utilizes the DOE, as well as a library of these building blocks that we know have potential yield and performance impact, to generate comprehensive test chips that we call Characterization Vehicles, or CVs(TM). These CVs are run through the manufacturing process with intentional modifications to explore the effects of natural manufacturing process variations. Our CV analysis software is then used to analyze the electrical test results generated by the test chips to model the yield and performance effects of process variations on these design building blocks.
- pdEx(TM) pdEx analyzes an IC design to compute its systematic and contamination yield loss. pdEx takes as input, a layout that is typically in industry standard format, yield models generated by running our CVs, other test chip data and other in-line inspection systems. pdEx is designed to estimate the yield loss due to optical proximity effects, etch micro loading, dishing in chemical-mechanical polishing and contamination, as well as a number of other basic process issues.
- Circuit Surfer(R) Circuit Surfer estimates the performance yield and manufacturability of small blocks in a design, such as analog subsystems or critical paths of digital blocks. Using Circuit Surfer, a design engineer is able to estimate how manufacturing process variations will impact circuit performance.
- pdFab(R) pdFab provides a framework for statistical manufacturing process and transistor simulation that enables our integration engineers to understand the effects of expected or measured manufacturing process variations on transistor performance. pdFab is used to optimize the transistor architecture and associated manufacturing process, and is primarily targeted to provide higher IC performance, although yield improvements may also be generated.
- Optissimo(TM) Optissimo is used to optimize the layout of a design to minimize the impact of wafer printing variations due to optical proximity effects. Optissimo can be used for model based optical proximity correction technologies.

While the primary distribution method for our software and technologies is through our design-to-silicon yield solutions, we have in the past and may in the future separately license these and other technologies.

#### CUSTOMERS AND CASE STUDIES

## Customers

Our current customers are primarily large integrated device manufacturers, or IDMs. We have established ongoing relationships with key IDMs such as Toshiba Corporation, Sony Corporation, Conexant Systems, Inc., Philips Semiconductor and Texas Instruments Incorporated. Our customers' targeted product segments vary significantly, including microprocessors, graphics, memory, and communi-

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cations. We believe that the adoption of our solutions by such diverse and technologically advanced companies validates the application of our design-to-silicon yield solutions to the broader market.

## Case Studies

TOSHIBA CORPORATION -- one of the world's leading semiconductor manufacturers with IC and end product revenue over \$50 billion.

Challenge: To meet the anticipated large market demand for a new consumer product, Toshiba sought to ramp production of a very large, complex system-on-a-chip, or SoC. A chip of this size and complexity had not previously been manufactured at

the projected high volumes. Solution: Toshiba utilized our design-to-silicon yield solution to identify and quantify potential yield loss components and their root causes, and to monitor continuing manufacturing process health. Our CVs and analyses continuously identified yield issues and prioritized the causes by yield impact, which Toshiba used to drive proactive improvements to ensure that SoC yields would be on target. Toshiba made numerous design and manufacturing changes, so that the design and manufacturing process were already co-optimized to yield well by the time the SoC was inserted into mass production. In addition, our solution was used to improve the transistor architecture for significantly better transistor performance, which resulted in higher IC performance yield. Impact: The SoC yield ramp rate greatly exceeded the industry benchmark ramp rates, increased the capacity of the fabrication facility and enabled Toshiba to meet the market demand. We continue to work very closely with Toshiba on the next generation of this process and SoC.

CONEXANT SYSTEMS, INC. -- one of the world's leading pure-play communications IC producers with IC revenue in excess of \$2 billion.

Challenge:	Conexant sought to achieve consistently high yields of a specific product across existing internal and external manufacturing processes. This was exacerbated by the added complexities of disparate design rules in each of the facilities.
Solution:	We worked with Conexant to identify, quantify and prioritize yield loss components and their root causes to drive yield improvements for an archetypal product. These improvements were also expected to apply to other Conexant products. Our proprietary technology allowed our team to uncover the two major systematic causes of low yield for this product the first was an inconsistency in the design rules that specified how layers of metals were connected to each other, or borderless contacts, and the second was a problem in the transistor to transistor interconnect. We worked with Conexant to identify layout changes to compensate for process differences across the manufacturing facilities. Our team used our software simulation capability to predict the yield improvement and ensure that proposed changes were optimal.
Impact:	In three months, we increased yields dramatically for the archetypal product. In addition, the corrections implemented for the archetypal product were applied to many products in the 0.25 micron technology. We continue to work closely with Conexant on the next generation of its processes and products.

# SALES AND MARKETING

Our sales strategy is to pursue targeted accounts through a combination of our direct sales force and strategic alliances. To date, we have targeted leading IDMs to validate our solutions in leading technology and manufacturing environments and to establish credibility to support future sales and marketing efforts. We expect to extend these efforts to other IDMs and fabless semiconductor companies. For sales in the United States, we rely on our direct sales team, which primarily operates out of our San Jose, California

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headquarters. In Japan we use our direct sales team as well as Innotech Corporation, a large semiconductor sales and distribution company located in Japan. Innotech has been instrumental in providing introductions to key executives with some of our targeted customers, which has allowed us to establish direct relationships with these key executives. We expect to continue establishing strategic alliances with vendors in the electronic design automation software, capital equipment for IC production, silicon intellectual property and mask-making software segments to create and take advantage of co-marketing opportunities. We believe that these relationships will also serve as sales channels for our design-to-silicon yield solutions and to increase industry awareness of our solutions.

We strive to provide compelling value in our initial engagement to establish ourselves as a key vendor to our customers and solidify relationships at the executive level. Early in the solution implementation, our engineers establish relationships across the organization and gain a solid understanding of our customers' business issues. Our direct sales and solution implementation teams combine their efforts to deepen our customer relationships by expanding our penetration across the customer's products, processes and technologies. This close working relationship with the customer has the added benefit of helping us identify new product areas and technologies in which we should next focus our research and development efforts. We believe that our sales and marketing efforts will facilitate the adoption of our design-to-silicon yield solutions as the industry standard.

#### RESEARCH AND DEVELOPMENT

Our research and development focuses on rapidly developing and introducing new proprietary technologies, software products and enhancements to our existing design-to-silicon yield solutions. We use a rapid-prototyping paradigm in the context of the customer engagement to achieve these goals. In addition, we have a highly-qualified technical advisory board comprised of professors from Harvard University's Business School, the Massachusetts Institute of Technology, Carnegie Mellon University and the University of California, Berkeley to help us develop and guide our strategic development roadmap.

We have made and expect to continue to make substantial investments in research and development. The complexity of our design-to-silicon yield technologies requires expertise in physical IC design and layout, transistor design and semiconductor physics, semiconductor process integration, numerical algorithms, statistics, and software development. We believe that the multidisciplinary expertise of our team of scientists and engineers will continue to advance our market and technological leadership. We conduct extensive in-house training for our engineers in the technical areas, as well focusing on ways to enhance their client service skills. At any given time, about one quarter of our research and development engineers in a deliberate strategy to provide direct feedback between technology development and client needs. Our research and development expenses were approximately \$1.9 million in 1998, \$3.1 million in 1999, \$6.4 million in 2000 and \$2.7 million in the three months ended March 31, 2001.

## COMPETITION

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The semiconductor industry is highly competitive and characterized by rapidly changing design and process technologies, evolving standards, short product life cycles and decreasing prices. While the market for silicon infrastructure is in its infancy, it is rapidly evolving and we expect competition to develop and continue to increase. We believe a comprehensive solution to effectively close the design-to-silicon yield gap requires integration of design and manufacturing processes. Currently, we are the only provider of comprehensive commercial solutions for systematic IC yield and performance enhancement. We face indirect competition from the internal groups at IC companies that work on process integration, including groups at current customers such as Toshiba or Conexant, and at prospective customers. Some vendors to IC companies may also compete with us indirectly. For example, Cadence, a prominent electronic design automation vendor, has offerings that help enhance IC layout in ways that could result in improved yield. Providers of yield management software aimed at maintaining and improving yield in mass production, such as KLA-Tencor, although they can help us maintain yield gains achieved in integration and ramp, may increasingly seek to broaden their offering and compete with us. In addition to such indirect

competition, other potential sources of competition include: yield-management software vendors who could expand their offerings to include or increase design and process capabilities; electronic design automation vendors, who could expand their offerings to include process and manufacturing; and semiconductor process equipment vendors, who could expand their offerings to include design and other elements of process and manufacturing beyond their own equipment.

We believe that the principal factors affecting competition in our market are:

- demonstrated results and reputation;
- strength of core technology;
- ability to implement solutions for new technology and product generations;
- time to market; and
- strategic relationships.

Although we believe that our solutions compete favorably with respect to these factors, our market is relatively new and is evolving rapidly. We may not be able to maintain our competitive position against current and potential competitors, especially those with significantly greater resources.

#### INTELLECTUAL PROPERTY

Our future success and competitive position are dependent upon our continued ability to develop and protect proprietary software and other technologies. We rely primarily on a combination of contractual provisions, confidentiality procedures, trade secrets, and patent, copyright and trademark laws to protect our proprietary technologies and prevent competitors from using our technologies in their products. We have been issued one German patent and have seven patent applications currently pending in the United States. We intend to prepare additional patent applications for submission to the United States Patent and Trademark Office. In the future, we may seek additional patent protection when we feel it is necessary.

We license our products and technologies pursuant to non-exclusive license agreements which impose restrictions on customer use. In addition, we seek to avoid disclosure of our trade secrets, including, requiring employees, customers and others with access to our proprietary information to execute confidentiality agreements with us and restricting access to our source code. We also seek to protect our software, documentation and other written materials under trade secret and copyright laws. Despite this protection, unauthorized parties may copy aspects of our current or future software and other technologies or obtain and use information that we regard as proprietary.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights or positions. There are also numerous patents in the semiconductor industry and new patents are being issued at a rapid rate. It is also possible that third parties will claim that we have infringed their patents and current or future products. Any claims, with or without merit, could be time-consuming, result in costly litigation, cause delays, or require us to enter into royalty or licensing agreements, any of which could harm our business. Patent litigation in particular has complex technical issues and inherent uncertainties. In the event an infringement claim against us was successful and we could not obtain a license on acceptable terms or license a substitute technology or redesign to avoid infringement, our business would be harmed.

PDF Solutions(R), Circuit Surfer(R) and pdFab(R) are our registered trademarks and Characterization Vehicle(TM), CV(TM), pdEx(TM) and Optissimo(TM) are trademarks of PDF. All other brand names or trademarks appearing in this prospectus are the property of their respective holders.

## EMPLOYEES

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As of March 31, 2001, we had 159 employees, including 60 in client service teams, 68 in products and methods, 10 in sales and marketing and 21 in general and administrative functions. One hundred nine of these employees are located in San Jose, California, 15 are located in Texas and Virginia, 25 are located

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in Germany, 7 employees are located in Japan and 3 employees are located in Italy. Of our 159 total employees, 129 are engineers, 113 of which have advanced

#### degrees including 67 with Ph.Ds.

None of our employees is represented by a labor union or is subject to a collective bargaining agreement. We believe our relationship with our employees is good.

## LEGAL PROCEEDINGS

We are not currently party to any material legal proceedings. In May 2001, we were named as a defendant in a lawsuit claiming, among other things, that we misappropriated trade secrets in connection with hiring an employee. We are defending ourselves against the claims, which we believe to be without merit. We do not believe that this litigation, or resolution of this litigation, will have a material negative impact on our business.

## FACILITIES

Our principal executive offices are located in San Jose, California where we lease approximately 18,000 square feet under a lease that expires in October 2004 and have leased an additional 18,000 square feet under a lease that will expire in May 2003. We lease 5,418 square feet in Dallas, Texas under a lease that expires in July 2002. In addition, we lease 4,200 square feet in Munich, Germany, 1,600 square feet in Tokyo, Japan and 1,665 square feet in DesEnzano, Italy under leases that expire in June 2002, April 2002 and September 2006. We believe that our current facilities in San Jose are adequate to meet our needs through May 2003, at which time we will need to obtain additional space in the San Jose area, which we expect to be able to obtain when necessary.

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#### MANAGEMENT

## EXECUTIVE OFFICERS AND DIRECTORS

The names and ages of our executive officers and directors as of March 31, 2001 are as follows:

NAME	AGE	POSITION (S)
John K. Kibarian, Ph.D	37	Chief Executive Officer, President and Director
Thomas F. Cobourn, Ph.D	40	Vice President, Yield Analysis
David A. Joseph	47	Vice President, Products and Methods
P. Steven Melman	46	Chief Financial Officer and Vice
		President, Finance and Administration
Kimon Michaels, Ph.D	35	Vice President, Integration Practice and
		Director
P.K. Mozumder, Ph.D	38	Vice President, Integration Practice
W. Steven Rowe	51	Vice President, Human Resources
David Tarpley	55	Vice President, Worldwide Sales
B.J. Cassin	67	Director
Donald L. Lucas	71	Director
Lucio L. Lanza	56	Director

John K. Kibarian, Ph.D., one of our founders, has served as President since November 1991 and has served as our Chief Executive Officer since July 2000. Mr. Kibarian has served as a director since December 1992. Mr. Kibarian received a B.S. in Electrical Engineering, a M.S. E.C.E. and a Ph.D. E.C.E. from Carnegie Mellon University.

Thomas F. Cobourn, Ph.D., one of our founders, has served in Vice Presidential capacities since June 1992 including currently as Vice President, Yield Analysis. Mr. Cobourn received a B.S., Computer Science and Engineering from the University of Pennsylvania and a M.S. E.C.E. and Ph.D. E.C.E. from Carnegie Mellon University.

David A. Joseph has served as Vice President, Products and Methods since July 1999. He served as Vice President, Business Development from November 1998 through June 1999. From February 1978 to October 1998, Mr. Joseph served KLA/Tencor, a semiconductor manufacturing company, in various positions, including as Japan Business Manager, VP Customer Satisfaction and GM Yield Analysis Software. Mr. Joseph received a B.S. in Mathematical Science from Stanford University.

P. Steven Melman has served as Chief Financial Officer and Vice President, Finance and Administration since July 1998. From April 1997 to June 1998, Mr. Melman served as Vice President Finance and Administration with Animation Science Corporation, an animation company. From April 1995 to April 1997, he served as Vice President, Finance and Chief Financial Officer with Business Resource Group, a facilities management and commercial furnishings company. Mr. Melman received a B.S. in Business Administration from Boston University. Mr. Melman is a Certified Public Accountant.

Kimon Michaels, Ph.D., one of our founders, has served in Vice Presidential capacities since March 1993 including currently as Vice President, Integration Practice, and as a director since November 1995. He also served as Chief Financial Officer from November 1995 to July 1998. Mr. Michaels received a B.S. in Electrical Engineering, a M.S. E.C.E. and a Ph.D. E.C.E. from Carnegie Mellon University.

P.K. Mozumder, Ph.D. has served as Vice President, Integration Practice since May 1998. From June 1994 to May 1998, Mr. Mozumder served as a Branch Manager with Texas Instruments, Inc., a consumer electronics and semiconductor company. Mr. Mozumder received a B. Tech in Electrical Engineering from the Indian Institute of Technology in Bombay, India, and a M.S. E.C.E. and a Ph.D. E.C.E. from Carnegie Mellon University.

W. Steven Rowe has served as Vice President, Human Resources since February 2000. From June 1995 to February 2000, Mr. Rowe served as Vice President, Human Resources at Trident Microsystems, a

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multimedia semiconductor company. From May 1994 to June 1995, he served as Vice President, Human Resources at OPTi Inc., a semiconductor company. Mr. Rowe received a M.A. in Education Administration from San Jose State University, a M.A. in Speech Pathology from Chico State University and a J.D. from Lincoln University.

David Tarpley has served as Vice President, Worldwide Sales since November 1996. From 1995 through September of 1996, Mr. Tarpley served as Vice President, International Sales for Anagram, Inc., an Electronic Design Automation company. From 1993 to 1995, Mr. Tarpley served as Vice President, Worldwide Sales with HLD, Inc., an electronic design automation company. Mr. Tarpley received a B.S. in Business Administration from The University of California, Berkeley and an M.B.A. from The California State University Fullerton.

B.J. Cassin has served as a director since November 1995. Mr. Cassin has been a private venture capital investor since 1979. Previously, he co-founded Xidex Corporation, a manufacturer of data storage media in 1969. Mr. Cassin is chairman of the board of directors of Cerus Corporation, a medical device company and a director of Symphonix Devices, Inc., a medical device company. Mr. Cassin holds an A.B. in Economics from Holy Cross College.

Donald L. Lucas has served as a director since May 1999. He has been a venture capitalist since 1960. He also serves as a director of Cadence Design Systems, Inc., an electronic design automation company, Coulter Pharmaceutical, Inc., a pharmaceutical company, Macromedia, Inc., a software company, Oracle Corporation, an information management software company, Preview Systems, Inc., a infrastructure software company, Transcend Services, Inc., a medical services company, and Tricord Systems, Inc., a storage system management software company. Mr. Lucas holds a B.A. in Economics and an M.B.A. from Stanford University.

Lucio L. Lanza has served as a director since November 1995. Mr. Lanza has been managing partner of Lanza techVentures, a venture capital firm, since January 2000. From 1990 to December 2000, Mr. Lanza served with U.S. Venture Partners, a venture capital firm, including as a general partner from 1996 through December 2000. Mr. Lanza has served as chairman of the board of directors of Artisan Components, Inc., a semiconductor intellectual property company since November 1997. Our bylaws currently provide for a board of directors consisting of five members. Commencing upon completion of this offering, the board of directors will be divided into three classes, each serving staggered three-year terms:

- Class I directors will include Mr. Lucas and Mr. Cassin, and their terms will expire at the first annual meeting of stockholders following the date of this prospectus;
- Class II directors will include Mr. Lanza and Mr. Michaels, and their terms will expire at the second annual meeting of stockholders following the date of this prospectus; and
- Class III directors will include Mr. Kibarian, whose term will expire at the third annual meeting of stockholders following the date of this prospectus.

As a result, only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective terms.

Each officer is elected by the board of directors and serves at its discretion. Each of our officers and directors, other than nonemployee directors, devotes his or her full time to our affairs. Our nonemployee directors devote the amount of time to our affairs as is necessary to discharge their duties. There are no family relationships among any of our directors or officers.

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## BOARD COMMITTEES

We have established an audit committee and a compensation committee.

#### Audit Committee

The audit committee reviews our internal accounting procedures and considers and reports to the board of directors with respect to other auditing and accounting matters, including the selection of our independent auditors, the scope of annual audits, fees to be paid to our independent auditors and the performance of our independent auditors. The audit committee currently consists of Mr. Lucas, Mr. Lanza and Mr. Cassin.

### Compensation Committee

The compensation committee reviews and recommends to the board of directors the salaries, benefits and stock option grants of all employees, consultants, directors and other individuals compensated by us. The compensation committee also administers our stock option and other employee benefits plans. The compensation committee currently consists of Mr. Cassin and Mr. Lanza.

## DIRECTOR COMPENSATION

Our directors do not currently receive any compensation for serving on the board of directors, although they are reimbursed for reasonable travel expenses incurred in connection with attending board of directors and committee meetings. In March 2000, we issued options to purchase 50,000 shares of common stock to Mr. Lucas, at an exercise purchase price of \$1.50 per share, one-quarter of the shares vest on the 12 month anniversary of the vesting commencement date and 1/48 of the total number of shares subject to the option vest each month thereafter, provided that Mr. Lucas remains one of our directors. In July 2001, we issued options to purchase 50,000 shares of common stock to Mr. Lanza, at an exercise price of \$11.00 per share, one-half of which are vested and 1/48 of the total number of shares subject to the option vest each month thereafter, provided Mr. Lanza remains one of our directors. After the completion of this offering, any new directors will receive an initial option to purchase 30,000 shares of common stock and all our directors will receive on an annual basis options to purchase 7,500 shares of common stock. Please see "Management -- Benefit Plans -- 2001 Stock Plan."

# COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The compensation committee makes all compensation decisions. Our

compensation committee currently consists of Mr. Cassin and Mr. Lanza, neither of whom has ever been one of our officers or employees. Prior to the formation of the compensation committee in 1995, our board of directors made decisions relating to compensation of our executive officers. None of our executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more of its executive officers serving as a member of our board of directors or compensation committee.

## EXECUTIVE COMPENSATION

The following table sets forth information regarding the compensation that we paid during the fiscal years ended December 31, 1999 and 2000 to our Chief Executive Officer and our four other most highly compensated officers who earned more than \$100,000 during those fiscal years. All option grants were made under our 1997 Stock Plan. Amounts listed under "Other Annual Compensation" represent the dollar value of commissions earned. The amounts listed under "All Other Compensation" represent the dollar value of term life insurance paid by us on behalf of the named executive officer during the fiscal

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years ended December 31, 1999 and 2000. There is no cash surrender value under the life insurance policy.

#### SUMMARY COMPENSATION TABLE

					LONG-TERM	
					COMPENSATION	
					AWARDS	
		ANI	NUAL COMPE	NSATION		
					SECURITIES	
				OTHER ANNUAL	UNDERLYING	ALL OTHER
NAME AND PRINCIPAL POSITION	YEAR	SALARY	BONUS	COMPENSATION	OPTIONS	COMPENSATION
John K. Kibarian	2000	\$150,000	\$42,000		200,000	\$371
Chief Executive Officer and President	1999	120,000	15,000			321
David Tarpley	2000	100,240		\$160,288	26,666	329
Vice President, Worldwide Sales	1999	100,240		104,851	53,333	327
David A. Joseph	2000	175,000	40,000		53,333	371
Vice President, Products and Methods	1999	160,240	1,450		33,333	327
P.K. Mozumder	2000	160,000	37,500		40,000	371
Vice President, Integration Practice	1999	150,240	6,200			327
P. Steven Melman	2000	160,000	30,000		33,333	371
Chief Financial Officer and Vice	1999	150,240	4,600			327
President, Finance and						

Administration

#### Option Grants in 2000

The following table sets forth information with respect to stock options granted to our Chief Executive Officer and our four most highly compensated executive officers during the year ended December 31, 2000.

		INDIVIDUAL G	RANTS		DOWDNELSI DESI	TZABLE VALUE AT
	NUMBER OF SECURITIES UNDERLYING	PERCENT OF TOTAL OPTIONS GRANTED TO	EXERCISE OR BASE PRICE EXPIRATION		ASSUMED ANN STOCK PRICE AP	JAL RATES OF
NAME	OPTIONS GRANTED	EMPLOYEES IN FISCAL YEAR	(PER SHARE)	DATE	5%	10%
John K. Kibarian	200,000	7.6%	3.00	6/30/10	\$3,309,347	\$5,624,982
David Tarpley	26,666	1.0%	3.00	6/30/10	441,235	749,979
David A. Joseph	53,333	2.0%	3.00	6/30/10	882,487	1,499,986
P. K. Mozumder	40,000	1.5%	3.00	6/30/10	661,869	1,124,996
P. Steven Melman	33, 333	1.3%	3.00	6/30/10	551,552	937,488

We have never granted any stock appreciation rights. All option grants were made under our 1997 stock plan. The exercise price per share was equal to the fair market value of the common stock on the date of grant as determined by the board of directors. Percentage of total options is based on an aggregate of 2,647,019 shares of common stock granted under the 1997 Stock Plan in the year ended December 31, 2000.

The potential realizable value represents the hypothetical gain or option spread that would exist for the options in this table if the initial public offering price of \$12.00 for our common stock appreciates at assumed annual rates of 5% and 10% for the ten year term of such options. These assumed rates comply with the rules of the Securities and Exchange Commission and do not represent our estimate of future stock price. Actual gains, if any, on stock option exercises will be dependent on the future performance of our common stock.

Beginning on the vesting commencement date for each grant, the options shown in this table vest monthly at a rate of 1/24 of the total number of shares subject to the grant as long as the optionee remains an employee, consultant or director. The vesting commencement dates for the named executive officers are as follows: Mr. Kibarian -- June 30, 2000; Mr. Tarpley -- November 2, 2000; Mr. Joseph -- May 20, 2003; Mr. Mozumder -- May 19, 2002; and Mr. Melman -- July 16, 2002.

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#### 2000 Fiscal Year-End Option Values

The following table provides summary information with respect to our chief executive officer and our four other most highly compensated executive officers concerning:

- the shares of common stock acquired in 2000;
- the value realized upon exercise of stock options in 2000; and
- the number and value of unexercised options as of December 31, 2000.

The value realized was calculated by determining the difference between the fair market value of underlying securities, which we have based on the initial public offering price of \$12.00, and the exercise price.

	SHARES ACOUIRED ON	VALUE	UNDERLYING OPTI DECEMBE	SECURITIES UNEXERCISED DNS AT R 31, 2000	IN-THE-MONE	JNEXERCISED EY OPTIONS AT R 31, 2000
NAME	EXERCISE	REALIZED	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
John K. Kibarian	200,000	\$1,800,000				
David Tarpley	26,666	239,994				
David A. Joseph	53,333	479,997				
P. K. Mozumder	40,000	360,000				
P. Steven Melman	33,333	299,997				

Each of these executives early exercised his stock options under our early exercise program, which was terminated in October 2000, and executed a restricted stock purchase agreement granting us the right to repurchase any unvested shares at the exercise price upon the termination of his employment.

#### BENEFIT PLANS

### 1996 Stock Option Plan

Our 1996 Stock Option Plan, or the 1996 Plan, provides for the granting of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, or the Code, and for the granting to employees, directors and consultants of nonstatutory stock options. The 1996 Plan was approved by the board of directors in January of 1996 and by our stockholders in February of 1996. The board of directors approved an amendment to the 1996 Plan in August 1996 to allow grants to consultants, which amendment did not require stockholder approval. Unless terminated sconer, the 1996 Plan will terminate automatically in 2006. As of March 31, 2001, a total of 731,700 shares of common stock were reserved for issuance pursuant to the 1996 Plan of which options to purchase 15,282 were outstanding and none were available for grant.

The 1996 Plan may be administered by the board of directors or a committee of the board of directors, which committee shall, in the case of options intended to qualify as "performance-based compensation" within the meaning of

Section 162(m) of the Code, consist of two or more "outside directors" within the meaning of Section 162(m) of the Code. The Administrator has the power to determine the terms of the options granted, including the exercise price, the number of shares, the exercisability thereof, and the form of consideration payable upon exercise. In March 2000, the administrator amended the 1996 Plan exercise practices to allow for the early exercise of unvested shares by all optionees. In October 2000, the practice of allowing early exercise of unvested shares was terminated. The board of directors has the authority to amend, suspend or terminate the 1996 Plan, provided that the action may not adversely affect any share of common stock previously issued and sold or any option previously granted under the 1996 Plan.

Options granted under the 1996 Plan are not generally transferable by the optionee, and each option is exercisable during the lifetime of the optionee only by the optionee. Options granted under the 1996 Plan generally must be exercised within three months of the optionee's separation of service from PDF, or

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within twelve months of the optionee's termination by death or disability, but in no event later than the expiration of the option's ten year term. The exercise price of all incentive stock options granted under the 1996 Plan must be at least equal to the fair market value of the common stock on the date of grant. With respect to any participant who owns stock possessing more than 10% of the voting power of all classes of our outstanding capital stock, the exercise price of any incentive or nonstatutory stock option granted must equal at least 110% of the fair market value on the date of grant and the term of any incentive stock option must not exceed five years. The exercise price of a nonstatutory option granted to any other individual must equal at least 85% of the fair market value on the date of grant. The term of all other options granted under the 1996 Plan may not exceed ten years.

The 1996 Plan provides that in the event of a merger by us with or into another corporation or a sale of substantially all of our assets, each option shall be assumed or an equivalent option substituted by the successor corporation unless the administrator decides that the optionees shall have the right to exercise some or all of the unvested shares. If each outstanding option is made exercisable in lieu of substitution or assumption as described in the preceding sentence, the administrator shall notify the optionees that each option shall be exercisable for a period of thirty days from the date of such notice and that the option shall otherwise terminate upon the expiration of such period.

Following adoption of the 1997 Stock Plan in September 1997 by the board of directors, the 1996 Plan was effectively terminated and no additional grants could be issued under the 1996 Plan.

### 1997 Stock Plan

Our 1997 Stock Plan, or the 1997 Plan, provides for the granting of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and for the granting to employees, directors and consultants of nonstatutory stock options and stock purchase rights. The 1997 Plan was approved by the board of directors and stockholders in September 1997. The board of directors approved an amendment to the 1997 Plan in December 1999, and the stockholders approved this amendment in January of 2000. The board of directors approved the 1997 Plan in June 2000 and the stockholders approved the amendment in July 2000. Unless terminated sconer, the 1997 Plan will terminate automatically in 2007. As of March 31, 2001, a total of 5,601,632 shares of common stock were reserved for issuance pursuant to the 1997 Plan of which options to purchase 354,407 shares were outstanding and 1,395,117 were available for grant.

The 1997 Plan may be administered by the board of directors or a committee of the board of directors. The Administrator has the power to determine the terms of the options granted, including the exercise price, the number of shares, the exercisability thereof, and the form of consideration payable upon exercise. The board of directors has the authority to amend, suspend or terminate the 1997 Plan, provided that the action may not adversely affect any share of common stock previously issued and sold or any option previously granted under the 1997 Plan. On June 30, 2000, the board of directors formed a Special Option Committee to serve as Administrator under the 1997 Plan for the purposes of granting options to purchase up to 35,000 shares of common stock to any new, non-executive employees. The Special Option Committee consists of Mr. Kibarian and Mr. Melman.

Options and stock purchase rights granted under the 1997 Plan are not generally transferable by the optionee, and each option and stock purchase right is exercisable during the lifetime of the optionee only by the optionee. Options granted under the 1997 Plan must generally be exercised within three months of the optionee's separation of service from us, or within twelve months of the optionee's termination by death or disability, but in no event later than the expiration of the option's ten year term. Options granted under the 1997 Plan generally may be exercised only when vested; however, certain options have been or may be exercised immediately after the grant date, and to the extent the shares subject to the options are not vested as of the date of exercise, we retain a right to repurchase any shares that remain unvested at the time of the optionee's termination of employment by paying an amount equal to the exercise price times the number of unvested shares. Options granted under the 1997 Plan generally vest at the rate of 1/4 of the total number of shares subject to the options on the twelve month anniversary of the date of grant

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and 1/48 of the total number of shares subject to the options vest each month thereafter. In the case of stock purchase rights, unless the administrator determines otherwise, the Restricted Stock Purchase Agreement shall grant us a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's service for any reason, including death or disability. The purchase price for Shares repurchased pursuant to the Restricted Stock Purchase Agreement shall be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to us. The repurchase option shall lapse at a rate determined by the administrator, which is generally equal to 25% per year. The exercise price of all incentive stock options granted under the 1997 Plan must be at least equal to the fair market value of the common stock on the date of grant. The exercise price of all incentive stock options granted under the 1997 Plan must be at least equal to the fair market value of the common stock on the date of grant, and any nonstatutory option must have an exercise price at least equal to 85% of the fair market value of the common stock on the date of grant. With respect to any participant who owns stock possessing more than 10% of the voting power of all classes of our outstanding capital stock, the exercise price of any incentive or nonstatutory stock option or stock purchase rights granted must equal at least 110% of the fair market value on the date of grant for options and 100% of the fair market value on the date of grant in the case of stock purchase rights and the term of any incentive stock option must not exceed five years. The term of all other options granted under the 1997 Plan may not exceed ten years.

The 1997 Plan provides that in the event of a merger by us with or into another corporation or a sale of substantially all of our assets, each option shall be assumed or an equivalent option substituted by the successor corporation. If each outstanding option is not assumed or substituted as described in the preceding sentence, the administrator shall notify the optionees that each option shall terminate upon the consummation of the merger or sale of assets.

Effective as of the date of this prospectus, no new grants will be made from the 1997 Plan.

#### 2001 Stock Plan

Our 2001 Stock Plan, or the 2001 Plan, provides for the granting of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and for the granting to employees, directors and consultants of nonstatutory stock options and stock purchase rights. The 2001 Plan was approved by the board of directors in June of 2001 and by the stockholders in July of 2001. A total of 3,000,000 shares of common stock (subject to equitable adjustment in the event of a recapitalization, merger, spin-off or other similar event) has been reserved for issuance under the 2001 Plan, none of which have been issued as of the date of this offering. The number of shares reserved for issuance under the Purchase Plan will be increased on the first day of each of our fiscal years by the lesser of:

- 3,000,000 shares (subject to equitable adjustment in the event of a recapitalization, merger, spin-off or other similar event);

- 5% of our outstanding common stock on the last day of the immediately preceding fiscal year; or

- the number of shares determined by the board of directors.

The 2001 Plan may be administered by the board of directors or a committee of the board of directors, which committee shall, in the case of options intended to qualify as the "performance-based compensation" within the meaning of Section 162(m) of the Code, consist of two or more "outside directors" within the meaning of Section 162(m) of the Code. The board of directors administers the 2001 Plan with respect to awards granted to non-employee directors. Except with respect to the automatic grant of options to our non-employee directors, the administrator has the power to determine the terms of the options granted, including the exercise price, the number of shares, the exercisability thereof, and the form of consideration payable upon exercise. The board of directors has the authority to amend, suspend or terminate the 2001 Plan, provided that the action may not adversely affect any share of common stock previously issued and sold or any option previously granted under the 2001 Plan.

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Options and stock purchase rights granted under the 2001 Plan are not generally transferable by the optionee, and each option and stock purchase right is generally exercisable during the lifetime of the optionee only by the optionee. Options granted under the 2001 Plan must generally be exercised within three months of the optionee's separation of service, or within twelve months of the optionee's termination by death or disability, but in no event later than the expiration of the option's ten year term. Options granted under the 2001 Plan generally may be exercised only when vested, however certain options have been or may be exercised immediately after the grant date, and to the extent the shares subject to the options are not vested as of the date of exercise, we retain a right to repurchase any shares that remain unvested at the time of the optionee's termination of employment by paying an amount equal to the exercise price times the number of unvested shares. Options granted under the 2001 Plan generally vest at the rate of 1/4 of the total number of shares subject to the options on the twelve month anniversary of the date of grant and 1/48 of the total number of shares subject to the options vest each month thereafter. In the case of stock purchase rights, unless the administrator determines otherwise, the Restricted Stock Purchase Agreement shall grant us a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's service for any reason, including death or disability. The purchase price for Shares repurchased pursuant to the Restricted Stock Purchase Agreement shall be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to us. The repurchase option shall lapse at a rate determined by the administrator which is generally equal to 25% per year. The exercise price of all incentive stock options granted under the 2001 Plan must be at least equal to the fair market value of the common stock on the date of grant. The exercise price of nonstatutory stock options granted under the 2001 Plan is determined by the administrator. With respect to any participant who owns stock possessing more than 10% of the voting power of all classes of our outstanding capital stock, the exercise price of any incentive stock option or must equal at least 110% of the fair market value on the date of grant for options and the term of any incentive stock option must not exceed five years. The term of all other options granted under the 2001 Plan may not exceed ten vears.

The 2001 Plan provides for the automatic grant of nonstatutory stock options to nonemployee directors. The director option component will not become effective until completion of this offering. Each nonemployee director who first becomes a board member after the date of this prospectus will be granted options for 30,000 shares (subject to equitable adjustment in the event of a reorganization merger, spin-off or other similar event). In addition, each nonemployee director will be granted options for 7,500 shares (subject to equitable adjustment in the event of a reorganization merger, spin-off or other similar event) annually. These automatic grants shall vest in accordance with the vesting schedule set forth above, however, in the event of a change in control, these options shall become 100% vested.

Under the 2001 Plan, no individual shall receive options to purchase more than 1,000,000 shares in any fiscal year (2,000,000 shares in the first year of an individual's employment with us). No individual shall receive stock purchase rights covering more than 500,000 shares in any fiscal year (1,000,000 shares in

the first year of an individual's employment with us). These limits are subject to equitable adjustment in the event of a recapitalization, merger, spin-off or other similar event.

The 2001 Plan provides that in the event of a merger by us with or into another corporation or a sale of substantially all of our assets, each option shall be assumed or an equivalent option substituted by the successor corporation, unless the administrator decides in its sole discretion that optionees have the right to exercise some or all of the stock in lieu of substitution or assumption. If each outstanding option is not assumed or substituted as described in the preceding sentence, the administrator shall notify the optionees that each option shall be immediately exercisable and the option will terminate upon expiration of such period.

#### 2001 Employee Stock Purchase Plan

The 2001 Employee Stock Purchase Plan, or Purchase Plan, was adopted by the board of directors in June of 2001 and approved by the stockholders in July 2001. A total of 300,000 shares of common stock (subject to equitable adjustment in the event of a reorganization merger, spin-off or other similar event) has been reserved for issuance under the Purchase Plan, none of which have been issued as of the date of

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this offering. The number of shares reserved for issuance under the Purchase Plan will be increased on the first day of each of our fiscal years by the least of:

- 675,000 shares;

- 2% of our outstanding common stock on the last day of the immediately preceding fiscal year; or
- the number of shares (subject to equitable adjustment in the event of a reorganization, merger, spin off or other similar event) determined by the board of directors.

The Purchase Plan becomes effective on the date of this prospectus. Unless terminated earlier by the board of directors, the Purchase Plan shall terminate on June 30, 2011.

The Purchase Plan, which is intended to qualify under Section 423 of the Code, will be implemented by a series of overlapping offering periods of 24 months' duration, with new offering periods, other than the first offering period, commencing on January 1 and July 1 of each year. Each offering period will consist of four consecutive purchase periods of six months' duration, and at the end of each six month period an automatic purchase will be made for participants. The initial offering period is expected to commence on the date of this offering and end on June 30, 2003; the initial purchase period is expected to begin on the date of this offering. The Purchase Plan will be administered by the board of directors or by a committee appointed by the board. Our employees (including officers and employee directors), or of any of our majority-owned subsidiaries designated by the board, are eligible to participate in the Purchase Plan if we or our subsidiary employs them for at least 20 hours per week and at least five months per year. Under the Purchase Plan, eligible employees may purchase common stock through payroll deductions, which in any event may not exceed 10% of an employee's compensation, at a price equal to the lower of 85% of the fair market value of the common stock at the beginning of each offering period or at the end of each purchase period. Employees may reduce their participation in the Purchase Plan at any time during an offering period but can only increase or end their participation at the next offering period and participation ends automatically on termination of employment.

Under the Purchase Plan no employee shall be granted an option if immediately after the grant the employee would own stock and/or hold outstanding options to purchase stock equaling 5% or more of the total voting power or value of all classes of our stock or its subsidiaries. In addition, no employee shall be granted an option under the Purchase Plan if the option would permit the employee to purchase stock under all our employee stock purchase plans and our subsidiaries in an amount that exceeds \$25,000 of fair market value for each calendar year in which the option is outstanding at any time. If the fair market value of the common stock on a purchase date is less than the fair market value at the beginning of the offering period, each participant in the Purchase Plan shall automatically be withdrawn from the offering period as of the end of the purchase date and re-enrolled in the new twenty-four month offering period beginning on the first business day following the purchase date.

The Purchase Plan provides that in the event of our merger or consolidation with or into another corporation or a sale of all or substantially all of our assets, each right to purchase stock under the Purchase Plan will be assumed or an equivalent right will be substituted by the successor corporation unless the board of directors shortens any ongoing offering period so that employees' rights to purchase stock under the Purchase Plan are exercised prior to consummation of the transaction. The board of directors has the power to amend or terminate the Purchase Plan.

#### 401(k) PLAN

We sponsor a 401(k) plan in which eligible employees may participate. The 401(k) plan is intended to qualify under Sections 401(a) and 401(k) of the Code. Contributions to the 401(k) plan and income earned on such contributions are not taxable to employees until withdrawn from the 401(k) plan. Subject to restrictions imposed by the Code on highly compensated employees, employees generally may defer up to 15% of their pre-tax earnings up to the statutorily prescribed annual limit, which is \$10,500 for the 2001 calendar year, and to have the amount of such reduction contributed to the 401(k) plan. The 401(k) plan permits, but does not require, additional matching contributions from us to the 401(k) plan. Participants'

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salary reduction contributions are fully vested at all times. Each participant's interest in their employer discretionary contributions and matching contributions generally vest in accordance with a four-year graduated vesting schedule. Participants may receive loans and hardship distributions while in service and are eligible for a distribution from the 401(k) plan upon separation from service with us. All contributions are tax deductible by us. The trustee under the 401(k) plan, at the direction of participants, invests the assets of the 401(k) plan in any of seven designated investment options. To date, we have not made any matching contributions to the 401(k) plan. The 401(k) plan may be amended or terminated by us at any time, and in our sole discretion.

## CHANGE OF CONTROL ARRANGEMENTS

On July 9, 1998, we entered into a letter agreement with Mr. Melman to act as our Vice President, Finance and Administration and Chief Financial Officer. This letter agreement provides that in the event Mr. Melman is terminated without cause any time after his one-year anniversary with us and there is no change of control, Mr. Melman will receive six months accelerated vesting of shares purchased pursuant to an option or restricted stock purchase agreement. In the event of a change of control, Mr. Melman will receive 24 months accelerated vesting, regardless of whether his employment is terminated. Change of control is defined as an event whereby a party or group of parties, different from those in control of PDF at the time of Mr. Melman's offer, attains a majority voting right in PDF. Other than as described above, in general, our employees are not subject to written employment agreements.

## LIMITATION OF LIABILITY AND INDEMNIFICATION MATTERS

As permitted by the Delaware general corporation law, we have included a provision in our certificate of incorporation to eliminate the personal liability of our officers and directors for monetary damages for breach or alleged breach of their fiduciary duties as officers or directors, other than in cases of fraud or other willful misconduct.

In addition, our bylaws provide that we are required to indemnify our officers and directors even when indemnification would otherwise be discretionary, and we are required to advance expenses to our officers and directors as incurred in connection with proceedings against them for which they may be indemnified. We have entered into indemnification agreements with our officers and directors containing provisions that are in some respects broader than the specific indemnification provisions contained in the Delaware general corporation law. The indemnification agreements require us to indemnify our officers and directors against liabilities that may arise by reason of their status or service as officers and directors other than for liabilities arising from willful misconduct of a culpable nature, to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified, and to obtain our directors' and officers' insurance if available on reasonable terms. We expect to obtain directors' and officers' liability insurance effective upon completion of this offering.

At present, we are not aware of any pending or threatened litigation or proceeding involving any of our directors, officers, employees or agents in which indemnification would be required or permitted. We believe that our charter provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

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## RELATED-PARTY TRANSACTIONS

## SALES OF PREFERRED STOCK SECURITIES

On December 4, 1995, we sold 5,833,331 shares of Series A preferred stock at a price of \$0.60 per share to a group of private investors that included the directors, officers and 5% stockholders listed below. On August 4, 2000, we sold 350,872 shares of Series B preferred stock at a price of \$14.25 per share to a group of private investors that included the directors, officers and 5% stockholders listed below. Upon completion of this offering, each outstanding share of Series A preferred stock will automatically convert into one share of common stock and each outstanding share of Series B preferred stock will automatically convert into 1.425 shares of common stock. Listed below are the directors, executive officers, and stockholders who beneficially own 5% or more of our securities who participated in these financings. The Value of Stock at Initial Public Offering column includes the effect of additional shares to be issued to Series B preferred stockholders upon conversion into common stock in the amount of 37,278 shares to entities associated with U.S. Venture Partners and 13,420 shares to Donald L. Lucas.

	SERIES A PREFERRED	SERIES B PREFERRED	AGGREGATE CASH CONSIDERATION	VALUE OF STOCK AT INITIAL PUBLIC OFFERING PRICE
Entities associated with U.S. Venture Partners Telos Venture Partners, L.P B.J. Cassin Donald L. Lucas	2,500,000 2,500,000 541,666 125,000	87,718  31,578	\$2,750,000 1,500,000 325,000 524,986	\$31,499,952 30,000,000 6,499,992 2,039,976

U.S. Venture Partners IV, L.P., U.S.V.P. Entrepreneur Partners II, L.P., Second Ventures II, L.P. and 2180 Associates Fund are affiliated entities and together are considered a greater than 5% stockholder. Lucio L. Lanza, one of our directors, is a former partner of U.S. Venture Partners. Mr. Lanza disclaims any beneficial ownership of the securities held by those entities, except to the extent of his proportional interest in the entities. This table also includes 41,666 shares that are held in the name of Cassin Family Partners, A California Limited Partnership of which Mr. Cassin is a General Partner and 500,000 shares held in the name of The Cassin Family Trust U/D/T dtd 1/31/96. Mr. Lucas is the trustee of the Richard M. Lucas Foundation which holds 125,000 shares of Series A preferred stock. Mr. Lucas disclaims beneficial ownership of these shares except for 25,765 shares which the foundation has agreed to assign to him. This table also includes 21,052 shares of Series B preferred stock held in the name of Donald L. Lucas Profit Sharing Trust and 10,526 shares held in the name of Teton Capital Company, which are beneficially owned by Mr. Lucas. Mr. Lucas disclaims beneficial ownership of all shares held in the name of Teton Capital Company. The "Value of Stock at Initial Public Offering Price" column data is calculated based on the initial public offering price of \$12.00 per share.

### LOANS TO, AND OTHER ARRANGEMENTS WITH, OFFICERS AND DIRECTORS

We have an early exercise provision under our 1996 Stock Option Plan and 1997 Stock Plan which allows our optionholders and holders of stock purchase rights to purchase shares of stock underlying unvested options, subject to our own repurchase right. In addition, we have an employee loan program which allows employees to borrow the full exercise price of their options or stock purchase rights from us by signing a full recourse promissory note bearing interest at the applicable federal rate in the month of purchase. The following officers have participated in the loan program:

- In connection with his purchase of 1,264,096 shares of common stock on December 1, 1995, we loaned approximately \$15,000 to Thomas Cobourn under a four year, 5.83% promissory note. The term of this note was extended for two years in 1999 at a rate of 5.93%. In connection with his purchase of 26,666 shares of common stock on July 14, 2000, we loaned \$80,000 to Mr. Cobourn under a four year, 6.62% promissory note. These notes are full recourse notes secured by pledges of the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$104,000.

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- In connection with his purchase of 1,648,516 shares of common stock on December 1, 1995, we loaned approximately \$20,000 to Kimon Michaels under a four year, 5.83% promissory note. The term of this note was extended for two years in 1999 at a rate of 5.93%. In connection with his purchase of 40,000 shares of common stock on July 14, 2000, we loaned \$120,000 to Mr. Michaels under a four year, 6.62% promissory note. These notes are full recourse notes secured by pledges of the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$153,000.
- In connection with his purchase of 200,000 shares of common stock on August 25, 1998, we loaned approximately \$30,000 to P. Steven Melman under a four year, 5.47% promissory note. In connection with his purchase of 33,333 shares of common stock on July 14, 2000, we loaned \$100,000 to Mr. Melman under a four year, 6.62% promissory note. These notes are full recourse notes secured by pledges of the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$139,000.
- In connection with his purchase of 166,666 shares of common stock on October 5, 1998, we loaned \$25,000 to P.K. Mozumder under a four year, 5.47% promissory note. In connection with his purchase of 40,000 shares of common stock on July 13, 2000, we loaned \$120,000 to Mr. Mozumder under a four year, 6.62% promissory note. These notes are full recourse notes secured by pledges of the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$154,000.
- In connection with his purchase of 200,000 shares of common stock on December 4, 1998 we loaned \$75,000 to David A. Joseph under a four year, 4.46% promissory note. In connection with his purchase of 33,333 shares on September 20, 1999 we loaned \$12,500 to David Joseph under a four year, 4.46% promissory note and in connection with his purchase of 53,333 shares of common stock on July 14, 2000, we loaned \$160,000 to Mr. Joseph under a four year, 6.62% promissory note. These notes are full recourse notes secured by pledges of the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$264,000.
- In connection with his purchase of 116,666 shares of common stock on February 24, 2000, we loaned approximately \$61,000 to W. Steven Rowe under a four year, 6.69% promissory note. This note is a full recourse note secured by a pledge of the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$66,000.
- In connection with his purchase of 26,666 shares of common stock on July 13, 2000, we loaned \$80,000 to David Tarpley under a four year, 6.62% promissory note. This note is a full recourse note secured by a pledge of the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$84,000.
- In connection with his purchase of 200,000 shares of common stock on July 14, 2000, we loaned \$600,000 to John K. Kibarian under a four year, 6.62% promissory note. This note is a full recourse note secured by pledges of

the shares of common stock purchased. At March 31, 2001 his indebtedness plus accrued interest totaled approximately \$629,000.

- In connection with his purchase of 50,000 shares of common stock on July 24, 2001, we loaned approximately \$550,000 to Lucio L. Lanza under a four year, 7.75% promissory note. This note is a full recourse note secured by a pledge of the shares of common stock purchased.

#### OTHER TRANSACTIONS

We have granted options to some of our officers and directors. Please see "Management -- Executive Compensation," "Management -- Director Compensation" and "Principal Stockholders."

We have entered into indemnification agreements with each of our executive officers and directors. Please see "Management -- Limitation of Liability and Indemnification Matters."

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Holders of preferred stock are entitled to registration rights with respect to common stock issued or issuable upon conversion of the preferred stock. Please see "Description of Capital Stock -- Registration Rights."

We believe that all related-party transactions described above were made on terms no less favorable to us than could have been otherwise obtained from unaffiliated third parties.

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## PRINCIPAL STOCKHOLDERS

The following table sets forth information known to us regarding beneficial ownership of our common stock as of March 31, 2001 by:

- each person known by us to beneficially own more than 5% of the outstanding common stock;
- each of our executive officers listed on the Summary Compensation Table
  under "Management;"
- each of our directors; and
- all of our executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting or investment power with respect to securities. All shares of common stock subject to options exercisable within 60 days following March 31, 2001 are deemed to be outstanding and beneficially owned by the persons holding those options for the purpose of computing the number of shares beneficially owned and the percentage of ownership of that person. They are not, however, deemed to be outstanding and beneficially owned for the purpose of computing the percentage ownership of any other person. Except as otherwise indicated the address for each person listed as a director or officer is c/o PDF Solutions, Inc., 333 West San Carlos Street, Suite 700, San Jose, CA 95110. Unless otherwise indicated in the footnotes, each person or entity has sole voting and investment power, or shares such powers with his or her spouse, with respect to the shares shown as beneficially owned.

Percentage of beneficial ownership prior to this offering is based on 17,206,611 common stock outstanding as of March 31, 2001, after giving effect to the conversion of the outstanding preferred stock. Percentage of beneficial ownership after this offering is based on 22,206,611 shares of common stock to be outstanding after completion of this offering and completion of the concurrent private placement, assuming no exercise of the underwriters' over-allotment option.

	NUMBER OF	OUTSI	OF SHARES
BENEFICIAL OWNER	SHARES BENEFICIALLY OWNED	PRIOR TO THIS OFFERING	AFTER THIS OFFERING
DENEFICIAL OWNER	OWINED	OFFERING	OFFERING
5% STOCKHOLDERS: Funds affiliated with U.S. Venture Partners(1) 2180 Sand Hill Road Suite 300 Menlo Park, CA 94025	2,624,996	15.3%	11.8%
Telos Venture Partners, L.P.(2)	2,500,000	14.5	11.3
John K. Kibarian(3)	2,782,422	16.2	12.5
Lucio L. Lanza (4)	2,624,996	15.3	11.8
Kimon Michaels(5)	1,688,516	9.8	7.6
Thomas Cobourn (6)	1,290,762	7.5	5.8
B.J. Cassin(7) 3000 Sand Hill Road Building 3, Suite 210	541,666	3.1	2.4
Menlo Park, CA 94025			
David A. Joseph(8)	286,666	1.7	1.3
David Tarpley (9)	246,664	1.4	1.1
P. Steven Melman (10)	233,333	1.4	1.1
Donald L. Lucas (11)	219,998	1.3	*
Menlo Park, CA 94025			
P.K. Mozumder (12)	206,666	1.2	*
W. Steven Rowe (13)	116,666	*	*
All executive officers and directors as a group (11 persons)(14)	10,238,355	59.5	46.1

\* Less than 1%

- (1) U.S. Venture Partners IV, L.P., U.S.V.P. Entrepreneur Partners II, L.P., Second Ventures II, L.P. and 2180 Associates Fund are affiliated entities and together are considered a greater than 5% stockholder. The general partner of each of these entities is Presidio Management Group IV, L.P., or PMG. The general partners of PMG are William K. Bowes, Jr., Irwin Federman, Steven M. Krausz and Philip M. Young. Each of these persons may be deemed to share voting and dispositive control over the shares, but each disclaims beneficial ownership therein except to the extent of their pecuniary interest therein as a result of their respective interests in PMG. Lucio L. Lanza, one of our directors, is a former partner of U.S. Venture Partners. Mr. Lanza disclaims any beneficial ownership of the securities held by those entities, except to the extent of his proportional interest in the entities.
- (2) Voting and dispositive power over these shares is held by Telos Management LLC which is the general partner of Telos Venture Partners, L.P. The managing members of Telos Management LLC are Bruce Bourbon, Athanasios Kalekos and Paul Asel. Mr. Bourbon votes the shares after consultation with the other two managing members.
- (3) Includes 3,333 shares each issued in the names of Johanna Aznif Chilingarian, as custodian for Ani Maritsa Chilingarian under the Massachusetts Uniform Transfers to Minors Act and Johanna Aznif Chilingarian, as custodian for Berj Krikor Chilingarian under the Massachusetts Uniform Transfers to Minors Act, each of whom are family members of Mr. Kibarian. Mr. Kibarian disclaims

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beneficial ownership of these shares. Includes 162,501 unvested shares subject to our right to repurchase upon termination of employment.

- (4) Includes 2,624,996 shares of stock held by U.S. Venture Partners IV, L.P., U.S.V.P. Entrepreneur Partners II, L.P., Second Ventures II, L.P. and 2180 Associates Fund are all affiliates of U.S. Venture Partners, of which Mr. Lanza is a former partner. Mr. Lanza disclaims any beneficial ownership of the securities held by those entities, except to the extent of his proportional interest in the entities. Does not include 50,000 shares purchased by Mr. Lanza subsequent to March 31, 2001.
- (5) Includes 3,333 shares each issued in the names of Lee W. Michaels, William

N. Michaels, and Christine S. Michaels, each of whom is an adult family member of Mr. Michaels. Mr. Michaels disclaims beneficial ownership of these shares. Includes 25,001 unvested shares subject to our right to repurchase upon termination of employment.

- (6) Includes 66,667 shares held in the name of the Thomas F. Coburn 2001 Grantor Retained Annuity Trust dated June 25, 2001 and 16,667 unvested shares subject to our right to repurchase upon termination of employment.
- (7) Includes 41,666 shares held in the name of Cassin Family Partners, A California Limited Partnership and 500,000 shares held in the name of The Cassin Family Trust U/D/T dtd 1/31/96.
- (8) Includes 154,724 unvested shares subject to our right to repurchase upon termination of employment.
- (9) Includes 5,333 shares each issued in the names of Scott David Tarpley, Andrew Neil Tarpley and Jeffrey John Tarpley, each of whom is an adult child of Mr. Tarpley. Mr. Tarpley disclaims beneficial ownership of these shares. Includes 22,222 unvested shares subject to our right to repurchase upon termination of employment.
- (10) Includes 100,001 unvested shares subject to our right to repurchase upon termination of employment.
- (11) Includes 125,000 shares held by the Richard M. Lucas Foundation of which Mr. Lucas is a trustee. Mr. Lucas disclaims beneficial ownership of these shares except as to 25,765 shares which the foundation has agreed to assign to him. Also includes 21,052 shares held in the name of the Donald L. Lucas Profit Sharing Trust and 10,526 shares held in the name of Teton Capital Company. Also includes 37,500 unvested shares subject to our right to repurchase upon termination of service. Mr. Lucas disclaims beneficial ownership of all shares held in the name of Teton Capital Company.
- (12) Includes 88,613 unvested shares subject to our right to repurchase upon termination of employment.
- (13) Includes 85,070 unvested shares subject to our right to repurchase upon termination of employment.
- (14) Includes an aggregate of 692,298 unvested shares which are subject to our right to repurchase upon termination of employment or service.

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#### DESCRIPTION OF CAPITAL STOCK

Upon the completion of this offering, we will be authorized to issue 75,000,000 shares of common stock, \$0.00015 par value per share, and 5,000,000 shares of undesignated preferred stock, \$0.00015 par value per share. All currently outstanding shares of preferred stock will be converted into common stock upon the closing of this offering.

## COMMON STOCK

As of March 31, 2001, there were 17,206,611 shares of common stock outstanding, as adjusted to give effect to the automatic conversion of all outstanding shares of preferred stock upon completion of this offering, held of record by approximately 155 stockholders. Options and rights to purchase 369,689 shares of common stock were also outstanding. Additionally, we currently intend to grant options to purchase at least 650,000 shares to new and existing employees prior to completion of this offering. There will be 22,206,611 shares of common stock outstanding, assuming no exercise of the underwriter's overallotment option or exercise of outstanding options under our stock option plans after March 31, 2001, after giving effect to the sale of the shares in this offering and completion of the concurrent private placement.

The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by the board of directors out of funds legally available for that purpose. See "Dividend Policy." In the event of our liquidation, dissolution or winding, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to the prior distribution rights of any outstanding preferred stock. The common stock has no preemptive or conversion rights or other subscription rights. The outstanding shares of common stock are, and the shares of common stock to be issued upon completion of this offering will be, fully paid and non-assessable.

#### PREFERRED STOCK

Upon the closing of the offering, all outstanding shares of preferred stock will be converted into 6,333,318 shares of common stock and automatically retired. Each share of Series A preferred stock will be converted into one share of common stock and each share of Series B preferred stock will be converted into 1.425 shares of common stock. Thereafter, the board of directors will have the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock, \$0.00015 par value, in one or more series. The board of directors will also have the authority to designate the rights, preferences, privileges and restrictions of each such series, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series.

The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of us without further action by the stockholders. The issuance of preferred stock with voting and conversion rights may also adversely affect the voting power of the holders of common stock. In some circumstances, an issuance of preferred stock could have the effect of decreasing the market price of the common stock. As of the closing of the offering, no shares of preferred stock will be outstanding. We currently have no plans to issue any shares of preferred stock.

#### WARRANTS

At March 31, 2001, there were no warrants outstanding to purchase our common or preferred stock.

#### REGISTRATION RIGHTS

The holders of 12,416,644 shares of common stock (assuming the conversion of all outstanding preferred stock upon completion of this offering and completion of the concurrent private placement) or their transferees are entitled to rights with respect to the registration of such shares under the Securities

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Act. These rights are provided under the terms of an agreement between us and the holders of these securities. Subject to limitations in the agreement, the holders of at least 50% of these securities then outstanding may require, on two occasions beginning six months after the date of this prospectus, that we use our best efforts to register these securities for public resale if Form S-3 is not available. If we register any of our common stock either for our own account or for the account of other security holders, the holders of registrable securities are entitled to include their shares of common stock in that registration. A holder's right to include shares in an underwritten registration is subject to the ability of the underwriters to limit the number of shares included in this and other offerings, and in the case of our initial public offering, the underwriters may preclude any participation by holders of registrable securities. The holders of at least 50% of these securities then outstanding may also require us, not more than once in any twelve-month period, to register all or a portion of these securities on Form S-3 when the use of that form becomes available to us, provided, among other limitations, that the proposed aggregate selling price, net of any underwriters' discounts or commissions, would exceed \$1.0 million. Under the same agreement, Applied Materials has one right to require us to register one half of its shares on Form  $S\mathchar`-3$  when the use of that form becomes available to us, provided that it may only require us to do so if the proposed aggregate offering price, net of underwriters' discounts or commissions would exceed \$1.0 million. We will be responsible for paying all registration expenses, and the holders selling their shares will be responsible for paying all selling expenses.

DELAWARE ANTI-TAKEOVER LAW AND CHARTER AND BYLAW PROVISIONS

Provisions of Delaware law and our charter documents could make our acquisition and the removal of incumbent officers and directors more difficult. These provisions are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of us to negotiate with us first. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweighs the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms.

We are subject to the provisions of Section 203 of the Delaware law. In general, the statute prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date that the person became an interested stockholder unless, subject to exceptions, the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the stockholder. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior, did own, 15% or more of the corporation's voting stock. These provisions may have the effect of delaying, deferring or preventing a change in control of us without further action by the stockholders.

Our Amended and Restated Certificate of Incorporation provides that stockholder action can be taken only at an annual or special meeting of stockholders and may not be taken by written consent. The Bylaws provide that special meetings of stockholders can be called only by the board of directors, the chairman of the board, if any, the president and holders of 50% of the votes entitled to be cast at a meeting. Moreover, the business permitted to be conducted at any special meeting of stockholders is limited to the business brought before the meeting by the board of directors, the chairman of the board, if any, the president or any such 50% holder. The bylaws set forth an advance notice procedure with regard to the nomination, other than by or at the direction of the board of directors, of candidates for election as directors and with regard to business to be brought before a meeting of stockholders.

#### CONCURRENT PRIVATE PLACEMENT

On June 28, 2001, we entered into a common stock purchase agreement with Applied Materials, Inc., or Applied Materials, under which we agreed to sell to Applied Materials 500,000 shares of our common stock in a private placement concurrent with and conditioned upon the sale of shares in this offering. The 59

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price per share in the concurrent private placement will be equal to the public offering price on the cover page of the prospectus of \$12.00 per share.

Transfer Restrictions. Applied Materials has agreed not to sell, transfer, encumber or otherwise dispose of one half of the shares purchased in the concurrent private placement in a public or private sale for a minimum period of 12 months following the closing of the offering. The remaining shares purchased by Applied Materials in the concurrent private placement will be subject to transfer restrictions for a period ranging from two to seven years following the closing of the offering, depending upon the achievement of performance-based milestones in connection with anticipated commercial agreements.

Registration Rights. We have granted Applied Materials registration rights relating to one half of the shares of common stock they will purchase in the concurrent private placement. See "-- Registration Rights."

# TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the common stock is Equiserve Trust Company, N.A. The transfer agent's address is c/o Shareholder Services, 150 Royall Street, Canton, MA 02021.

Prior to this offering, there has been no market for our common stock. Future sales of substantial amounts of common stock in the public market could adversely affect prevailing market prices. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of certain contractual and legal restrictions on resale, sales of substantial amounts of our common stock in the public market after the restrictions lapse could adversely affect the prevailing market price and our ability to raise equity capital in the future.

Upon completion of the offering and the concurrent private placement, we will have outstanding 22,206,611 shares of common stock, assuming no exercise of outstanding options after March 31, 2001. Of these shares, the 5,000,000 shares sold in the offering and the concurrent private placement, plus any shares issued upon exercise of the underwriters' overallotment option, will be freely tradable without restriction under the Securities Act, unless purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act, which generally includes officers, directors or 10% stockholders.

The remaining 17,206,611 shares outstanding are "restricted securities" within the meaning of Rule 144 under the Securities Act. These shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144, 144(k) or 701 promulgated under the Securities Act, which are summarized below. Sales of these shares in the public market, or the availability of such shares for sale, could adversely affect the market price of the common stock.

Our stockholders have entered into lock-up agreements generally providing that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction which would have the same effect, or enter into swap, hedge or other arrangement that transfers, in whole or part, any of the economic consequences of ownership of our common stock, whether any such aforementioned transaction is to be settled by delivery of our common stock or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse First Boston Corporation for a period of 180 days after the date of this prospectus. As a result of these contractual restrictions, notwithstanding possible earlier eligibility for sale under the provisions of Rules 144, 144(k) and 701, shares subject to lock-up agreements will not be salable until such agreements expire or are waived. Taking into account the lock-up agreements, and assuming Credit Suisse First Boston Corporation does not release stockholders from these agreements, the following shares will be eligible for sale in the public market at the following times:

- Beginning on the effective date of this prospectus, only the shares sold in the offering will be immediately available for sale in the public market.
- Beginning 180 days after the effective date, approximately 15,715,207 shares will be eligible for sale pursuant to Rule 701 and pursuant to Rule 144.
- An additional 1,491,404 shares will be eligible for sale on various dates following the 181st day after the effective date of this offering, subject to compliance with the provisions of Rule 144 or Rule 701 or pursuant to a registration statement on Form S-8.
- A private placement of 500,000 shares will occur concurrent with the closing of this offering, one half of which will become eligible for sale in the public market beginning one year from the date of this prospectus pursuant to Rule 144. The remaining half of the shares purchased in the concurrent private placement will become eligible for sale as early as two years or as late as seven years following the closing of this offering. See "Description of Capital Stock -- Concurrent Private Placement -- Transfer Restrictions."

Outstanding options and rights to purchase an additional 369,689 shares plus at least an additional 650,000 options we currently intend to grant to new and existing employees prior to completion of this offering will be exercisable and eligible for sale on various dates following the 181st day after the effective date of this offering.

In general, under Rule 144 as currently in effect, and beginning after the expiration of the lock-up agreements, or 180 days after the date of this prospectus, of a person who has beneficially owned restricted securities for at least one year would be entitled to sell within any three-month period a number of shares that does not exceed the greater of: (1) one percent of the number of shares of common stock then outstanding, which will equal approximately 222,066 shares immediately after the offering; or (2) the average weekly trading volume of the common stock during the four calendar weeks preceding the sale. Sales under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us. Under Rule 144(k), a person who is not deemed to have been our affiliate at any time during the three months preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, is entitled to sell such shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144.

The holders of approximately 12,416,644 shares of our common stock or their transferees are also entitled to rights with respect to registration of their shares of common stock for offer or sale to the public. If the holders, by exercising their registration rights, cause a large number of shares to be registered and sold in the public market, the sales could have a material adverse effect on the market price for our common stock.

As a result of the lock-up agreements, all of our employees holding common stock or stock options may not sell shares acquired upon exercise until 180 days after the effective date. Beginning 180 days after the effective date, any of our employees, officers or directors or consultants who purchased shares pursuant to a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701. Rule 701 permits affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. Rule 701 further provides that non-affiliates may sell such shares in reliance on Rule 144 without having to comply with the holding period, public information, volume limitation or notice provisions of Rule 144.

In addition, we intend to file registration statements under the Securities Act as promptly as possible after the effective date to register shares to be issued pursuant to our employee benefit plans. As a result, any options exercised under any of our benefit plans after the effectiveness of such registration statement will also be freely tradable in the public market, except that shares held by affiliates will still be subject to the volume limitation, manner of sale, notice and public information requirements of Rule 144 unless otherwise resalable under Rule 701. As of March 31, 2001, there were outstanding stock purchase rights and options for the purchase of 369,689 shares, of which 43,852 shares were exercisable. No shares have been issued to date under our 2001 Employee Stock Purchase Plan and 2000 Stock Plan. See "Shares Eligible for Future Sale," "Management -- Benefit Plans" and "Description of Capital Stock -- Registration Rights."

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#### UNDERWRITING

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Under the terms and subject to the conditions contained in an underwriting agreement dated July 26, 2001, we have agreed to sell to the underwriters named below, for whom Credit Suisse First Boston Corporation, Robertson Stephens, Inc. and Dain Rauscher Incorporated are acting as representatives, the following respective numbers of shares of common stock:

UNDERWRITER	NUMBER OF SHARES
Credit Suisse First Boston Corporation Robertson Stephens, Inc. Dain Rauscher Incorporated Deutsche Banc Alex. Brown Inc.	1,189,000 861,000

Gerald Klauer Mattison & Co., Inc	20,000
Hoefer & Arnett, Inc	20,000
Invemed Associates LLC	40,000
Johnston, Lemon & Co. Incorporated	20,000
J.P. Morgan Securities Inc	40,000
Parker/Hunter Incorporated	20,000
PMG Capital	20,000
Prudential Securities Incorporated	40,000
Sanders Morris Harris	20,000
Sands Brothers & Co., Ltd	20,000
SG Cowen Securities Corporation	40,000
Tucker Anthony Incorporated	20,000
C.E. Unterberg, Towbin	40,000
Total	4,500,000
10041	========

The underwriting agreement provides that the underwriters are obligated to purchase all the shares of common stock in the offering if any are purchased, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

We have granted to the underwriters a 30-day option to purchase on a pro rata basis up to 675,000 additional shares from us at the initial public offering price less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of common stock.

The underwriters propose to offer the shares of common stock initially at the public offering price on the cover page of this prospectus and to selling group members at that price less a selling concession of \$0.51 per share. The underwriters and selling group members may allow a discount of \$0.10 per share on sales to other broker/dealers. After the initial public offering, the public offering price and concession and discount to broker/dealers may be changed by the representatives.

The following table summarizes the compensation and estimated expenses we will pay.

	PER S	SHARE	TOTAL		
	WITHOUT	WITH	WITHOUT	WITH	
	OVER-ALLOTMENT	OVER-ALLOTMENT	OVER-ALLOTMENT	OVER-ALLOTMENT	
Underwriting discounts and commissions paid					
by us	\$0.84	\$0.84	\$3,780,000	\$4,347,000	
Expenses payable by us	\$0.23	\$0.20	\$1,050,000	\$1,050,000	

The underwriters have informed us that they do not expect discretionary sales to exceed 5% of the shares of common stock being offered.

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In addition, Credit Suisse First Boston Corporation is acting as the placement agent for the concurrent private placement with Applied Materials, and will receive a customary fee for its services. See "Description of Capital Stock -- Concurrent Private Placement."

We have agreed that we will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act of 1933 (the "Securities Act") relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any such offer, sale, pledge, disposition or filing, without the prior written consent of Credit Suisse First Boston Corporation for a period of 180 days after the date of this prospectus. Our officers, directors and some of our other stockholders have agreed that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse First Boston Corporation for a period of 180 days after the date of this prospectus.

The underwriters have reserved for sale, at the initial public offering price up to 225,000 shares of the common stock for employees, directors and some other persons associated with us, who have expressed an interest in purchasing common stock in the offering. The number of shares available for sale to the general public in the offering will be reduced to the extent these persons purchase the reserved shares. Any reserved shares not so purchased will be offered by the underwriters to the general public on the same terms as the other shares.

We have agreed to indemnify the underwriters against liabilities under the Securities Act, or contribute to payments that the underwriters may be required to make in that respect.

Our common stock is listed for quotation on The Nasdaq Stock Market's National Market under the symbol "PDFS."

Prior to this offering, there has been no public market for our common stock. The initial public offering price was determined by negotiation between us and the underwriters and will not necessarily reflect the market price of the common stock following the offering. The principal factors considered in determining the public offering price included:

- the information in this prospectus and otherwise available to the underwriters;
- market conditions for initial public offerings;
- the history and the prospects for the industry in which we will compete;
- the ability of our management;
- the prospects for our future earnings;
- the present state of our development and our current financial condition;
- the recent market prices of, and the demand for, publicly traded common stock of generally comparable companies; and
- the general condition of the securities markets at the time of this offering.

We can offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

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In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934 (the "Exchange Act").

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which

creates a syndicate short position. 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 in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any short position by either exercising their over-allotment option and/or purchasing shares in the open market.

- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the 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. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying 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 in the offering.
- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on The Nasdaq National Market or otherwise and, if commenced, may be discontinued at any time.

A prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters participating in this offering. The representatives may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters that will make internet distributions on the same basis as other allocations. Credit Suisse First Boston Corporation may effect an on-line distribution through its affiliate, CSFBdirect Inc., an on-line broker/dealer, as a selling group member.

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### NOTICE TO CANADIAN RESIDENTS

## RESALE RESTRICTIONS

The distribution of the common stock in Canada is being made only on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of common stock are made. Any resale of the common stock in Canada must be made under applicable securities laws, which will vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the common stock.

## REPRESENTATIONS OF PURCHASERS

By purchasing common stock in Canada and accepting a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the common stock without the benefit of a prospectus qualified under those securities laws,
- where required by law, that the purchaser is purchasing as principal and

not as agent, and

- the purchaser has reviewed the text above under Resale Restrictions.

### RIGHTS OF ACTION (ONTARIO PURCHASERS)

The securities being offered are those of a foreign issuer and Ontario purchasers will not receive the contractual right of action prescribed by Ontario securities law. As a result, Ontario purchasers must rely on other remedies that may be available, including common law rights of action for damages or rescission or rights of action under the civil liability provisions of the U.S. federal securities laws.

# ENFORCEMENT OF LEGAL RIGHTS

All of the issuer's directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon the issuer or such persons. All or a substantial portion of the assets of the issuer and such persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against the issuer or such persons in Canada or to enforce a judgment obtained in Canadian courts against such issuer or persons outside of Canada.

## TAXATION AND ELIGIBILITY FOR INVESTMENT

Canadian purchasers of common stock should consult their own legal and tax advisers with respect to the tax consequences of an investment in the common stock in their particular circumstances and about the eligibility of the common stock for investment by the purchaser under relevant Canadian legislation.

## TAXATION AND ELIGIBILITY FOR INVESTMENT

Canadian purchasers of common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the common stock in their particular circumstances and with respect to the eligibility of the common stock for investment by the purchaser under relevant Canadian legislation.

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#### LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Orrick, Herrington & Sutcliffe LLP, Menlo Park, California. Peter Cohn, a partner of Orrick, Herrington & Sutcliffe LLP, is our Secretary. The underwriters are represented by Wilson Sonsini Goodrich & Rosati, Palo Alto, California. As of the completion of this offering, Orrick, Herrington & Sutcliffe LLP and partners in that firm beneficially own an aggregate of 14,996 shares of our common stock.

## EXPERTS

The Consolidated Financial Statements of PDF Solutions, Inc. as of December 31, 1999 and 2000 and for each of the three years in the period ended December 31, 2000, included in this prospectus and the related financial statement schedule included elsewhere in the registration statement have been audited by Deloitte & Touche LLP, independent auditors, as stated in their reports appearing herein and elsewhere in the registration statement, and have been so included in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

The financial statements of Applied Integrated Systems and Software Entwicklungs-, Produktions-und Vertriebs GmbH ("AISS") as of December 31, 1999 and for the year ended December 31, 1999, included in this prospectus have been audited by Deloitte & Touche GmbH Wirtschaftsprufungsgesellschaft, independent auditors, as stated in their report appearing herein, and have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

# WHERE TO FIND ADDITIONAL INFORMATION

We have filed with the Securities and Exchange Commission a Registration

Statement on Form S-1 under the Securities Act with respect to the common stock offered hereby. This prospectus is materially complete, although additional information is set forth in the Registration Statement and the exhibits and schedules. For further information with respect to us and the common stock offered hereby, reference is made to the Registration Statement and to the exhibits and schedules. With respect to each such document filed as an exhibit to the Registration Statement, reference is made to the exhibit for a more complete description of the matter involved. The Registration Statement and the exhibits and schedules may be inspected without charge at the Public Reference Room maintained by the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549, and at the regional offices of the Commission located at Seven World Trade Center, 13th Floor, New York, NY 10048, and the Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of all or any part of the Registration Statement may be obtained from the SEC's offices upon payment of fees prescribed by the SEC. You may obtain information regarding the operation of the Public Reference Room by calling 1-800-SEC-0330. The SEC also maintains a World Wide Web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the site is http://www.sec.gov.

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#### PDF SOLUTIONS, INC.

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#### INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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To the Board of Directors and Shareholders of PDF Solutions, Inc.

We have audited the accompanying consolidated balance sheets of PDF Solutions, Inc. and subsidiaries (collectively, the "Company") as of December 31, 1999 and 2000 and the related consolidated statements of operations, shareholders' deficiency, and cash flows for each of the three years in the period ended December 31, 2000. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 misstatement. 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, such consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 1999 and 2000 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2000, in conformity with accounting principles generally accepted in the United States of America.

/s/ DELOITTE & TOUCHE LLP

San Jose, California January 19, 2001 (July 6, 2001 as to the third paragraph of Note 12)

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# PDF SOLUTIONS, INC.

#### CONSOLIDATED BALANCE SHEETS

	DECEMBER 31,			PRO FORMA	
	1999	2000			
				DITED)	
				(NOTE 1)	
ASSETS					
Current assets:					
Cash and cash equivalents Accounts receivable, net of allowances of \$144,000 in	\$1,932,923	\$ 7,625,404	\$ 6,866,274		
1999, and 5192,000 in 2000 and 2001 Prepaid expenses and other current assets	58,714	576,250	586,251		
Total current assets	4 740 011		11 575 104		
Property and equipment, net					
Intangible assets, net					
Other assets.	01 /00	1,669,935 131,332	1,544,689		
Other assets	01,490				
Total assets	\$5,644,335		\$ 15,033,907		
LIABILITIES AND SHAREHOLDERS' EOUITY					
(DEFICIENCY)					
Current liabilities:					
Accounts payable	\$ 730 232	\$ 1 1/3 090	S 1 247 302		
Accrued compensation and related benefits					
Other accrued liabilities		984,645			
Taxes payable		15,397			
Deferred revenues		1,870,027			
Billings in excess of recognized revenue		1,052,513			
Notes payable		995,000			
Current portion of long-term debt					
Total current liabilities	2,588,249	8,444,596	8,197,994		

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Long-term debt	71,616	55,947	43,249	
Deferred tax liability		532,263	493,796	
Deferred rent		50,821	56,690	
Series A convertible preferred stock, \$0.00015 par value,				
5,833,333 shares authorized; shares issued and				
outstanding: 5,833,331 in 1999, 2000 and 2001; none pro				
forma (liquidation preference of \$3,500,000)	3,496,558	3,496,558	3,496,558	
Series B convertible preferred stock, \$0.00015 par value,	.,,	.,	., ,	
366,667 shares authorized; issued and outstanding: 350,872				
in 2000 and 2001; none pro forma (liquidation preference				
of \$5,000,000)		4,960,000	4,960,000	
Commitments and contingencies (Notes 4 and 12)				
Shareholders' equity (deficiency):				
Common stock, \$0.00015 par value, 33,333,333 shares				
authorized; shares issued and outstanding 7,326,539 in				
1999, 10,903,174 in 2000, 10,873,293 in 2001; 17,206,611				
pro forma	1,099	1,635	1,631	\$ 2,559
Additional paid-in capital	537,199	25,386,369	25,088,609	35,163,519
Deferred stock-based compensation	(43,406)	(11,882,070)	(9,087,360)	(9,087,360)
Notes receivable from shareholders	(225,261)	(5,645,632)	(5,577,757)	(5,577,757)
Accumulated deficit	(781,719)	(9,878,447)	(12,622,005)	(14,241,285)
Cumulative other comprehensive loss		(7,571)		
Total shareholders' equity (deficiency)	(512 099)	(2 025 716)	(2 214 390)	
focal shareholders equity (deficiency)	(312,088)		(2,214,380)	
Total liabilities and shareholders' equity				
(deficiency)	\$5,644,335	\$ 15,514,469	\$ 15,033,907	

See notes to consolidated financial statements.

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# PDF SOLUTIONS, INC.

# CONSOLIDATED STATEMENTS OF OPERATIONS

	YEARS ENDED DECEMBER 31,			THREE MONTHS ENDED MARCH 31,			
	1998	1999	2000	2000	2001		
				(UNAUD	 ITED)		
Revenue: Design-to-silicon yield solutions Gain share	\$6,227,249	\$10,566,597 1,257,000	\$15,538,325 4,597,000	\$ 2,193,674 1,500,000	\$ 5,752,838 1,781,134		
Total revenue		11,823,597	20,135,325	3,693,674	7,533,972		
Costs and expenses: Cost of design-to-silicon yield							
solutions Research and development Selling, general and	1,532,620 1,863,808	4,090,649 3,086,825	6,915,001 6,418,173	1,251,982 946,206	2,555,935 2,657,071		
administrative Offering costs Stock-based compensation	2,959,504 	4,294,521	7,332,857 1,257,617	1,445,587	2,454,384		
amortization*	61,317	68,282	7,292,300	458,358	2,556,866		
Total costs and expenses		11,540,277	29,215,948	4,102,133	10,224,256		
Income (loss) from operations Interest and other income	(190,000) 127,598	283,320 105,021	(9,080,623) 346,895	(408,459) 17,367	(2,690,284) 131,906		
Income (loss) before taxes Tax provision	(62,402) 341,492	388,341 533,087	(8,733,728) 363,000	(391,092) 107,000	(2,558,378) 185,180		
Net loss	\$ (403,894)	\$ (144,746)	\$(9,096,728)	\$ (498,092)	\$(2,743,558)		
Net loss per share basic and diluted (Note 1)	\$ (0.08)	\$ (0.02)	\$ (1.24)	\$ (0.07)	\$ (0.34)		
Shares used in computing basic and diluted net loss per share (Note 1)			7,356,221		8,064,375		
Unaudited pro forma not loss por							

Unaudited pro forma net loss per

share basic and diluted (Note 1)					\$ ====	(0.68)			\$ ==:	(0.19)
Shares used in computing unaudited pro forma basic and diluted net loss per share (Note 1)					- /	393,649 ======				4,397,693
*Stock-based compensation amortization: Cost of design-to-silicon yield										
solutions	\$	18,395	\$	20,485	\$ 1,	714,866	\$	42,254	\$	718,641
Research and development Selling, general and		42,922		47,797	4,	015,978		355,453		1,181,109
administrative					1,	561,456		60,651		657,116
	\$	61,317	\$	68,282	\$7 <b>,</b>	292,300	Ş	458,358	Ş	2,556,866
	==:		===		====		==:		==:	

See notes to consolidated financial statements.

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# PDF SOLUTIONS, INC.

# CONSOLIDATED STATEMENTS OF SHAREHOLDERS' DEFICIENCY

	COMMON STOCK		ADDITIONAL PAID-IN	DEFERRED STOCK	NOTES RECEIVABLE FROM	ACCUMULATED
	SHARES	AMOUNT	CAPITAL	COMPENSATION	SHAREHOLDERS	EARNINGS (DEFICIT)
Balances, January 1, 1998 Exercise of options Compensatory stock arrangements for	5,833,331 1,267,302	\$ 875 190	\$ 153,433 215,093	\$ (36,617)	\$ (39,011) (198,750)	\$ (233,079)
non-employees, primarily remeasurement Amortization of non-employee stock-			99,674	(99,674)		
based compensation				61,317		(403,894)
Balances, December 31, 1998 Collection of notes receivable from shareholders	7,100,633	1,065	468,200	(74,974)	(237,761)	(636,973)
Repurchase of common stock through					0,112	
cancellation of note receivable Exercise of options Compensatory stock arrangements for	(121,520) 347,426	(18) 52	(18,210) 50,495		18,228 (12,500)	
non-employees, primarily remeasurement Amortization of non-employee stock-			36,714	(36,714)		
based compensation				68,282		(144,746)
Balances, December 31, 1999 Collection of notes receivable from	7,326,539	1,099	537,199	(43,406)	(225,261)	(781,719)
shareholders. Exercise of options. Repurchase of common stock through	3,440,070	516	5,757,226		8,999 (5,478,370)	
cancellation of note receivable Compensatory stock arrangements for	(30,093)	(5)	(48,995)		49,000	
non-employees Remeasurement of compensatory stock			376,544	(376,544)		
arrangements for non-employees Cancellation of unvested			538,753	(538,753)		
non-employee options Compensatory stock arrangements for			(301,690)	301,690		
employees Reversal of employee stock-based compensation for cancelled			18,662,357	(18,662,357)		
shares Issuance of common stock upon			(145,000)	145,000		
exercise of warrants Amortization of employee stock-based	166,666	25	9,975			
compensation Amortization of non-employee stock-				6,641,620		
based compensation Net loss. Cumulative translation adjustment Comprehensive loss.				650,680		(9,096,728)
Balances, December 31, 2000 Collection of notes receivable from	10,903,174	1,635	25,386,369	(11,882,070)	(5,645,632)	(9,878,447)
shareholders*					7,875	
receivable* Exercise of options* Amortization of employee stock-based	(31,268) 1,387	(4)	(297,840) 80	237,844	60,000	

2,552,743	
4,123	
09 \$ (9,087,360)	\$(5,577,757)
	4,123 09 \$ (9,087,360)

(2,743,558)

\$(12,622,005)

	CUMULATIVE OTHER COMPREHENSIVE LOSS	TOTAL
Balances, January 1, 1998 Exercise of options Compensatory stock arrangements for non-employees, primarily	ş	\$ (154,399) 16,533
remeasurement Amortization of non-employee stock- based compensation		61,317
Net loss		(403,894)
Balances, December 31, 1998 Collection of notes receivable from shareholders		(480,443) 6,772
Repurchase of common stock through cancellation of note receivable Exercise of options		38,047
Compensatory stock arrangements for non-employees, primarily		
remeasurement Amortization of non-employee stock-		
based compensation Net loss		68,282 (144,746)
Balances, December 31, 1999 Collection of notes receivable from		(512,088)
shareholders		8,999
Exercise of options Repurchase of common stock through		279,372
cancellation of note receivable Compensatory stock arrangements for		
non-employees Remeasurement of compensatory stock		
arrangements for non-employees Cancellation of unvested		
non-employee options Compensatory stock arrangements for		
employees Reversal of employee stock-based compensation for cancelled		
shares Issuance of common stock upon		
exercise of warrants Amortization of employee stock-based		10,000
compensation Amortization of non-employee stock-		6,641,620
based compensation		650,680
Net loss Cumulative translation adjustment	(7,571)	
Comprehensive loss		(9,104,299)
Balances, December 31, 2000 Collection of notes receivable from	(7,571)	(2,025,716)
shareholders* Repurchase of common stock through cancellation of notes		7,875
receivable*		
Exercise of options* Amortization of employee stock-based		80
compensation* Amortization of non-employee stock-		2,552,743
based compensation* Net loss* Cumulative translation		4,123
adjustment*	(9,927)	() 752 4051
Comprehensive loss*		(2,753,485)
Balances, March 31, 2001*	\$(17,498)	\$(2,214,380)

\* Unaudited

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See notes to consolidated financial statements.

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	YEARS ENDED DECEMBER 31,			THREE MON MARCH	NTHS ENDED H 31,
	1998	1999	2000	2000	2001
				(UNAUI	DITED)
Operating activities:					
Net loss Adjustments to reconcile net loss to net cash provided by operating activities:	\$ (403,894)	\$ (144,746)	\$(9,096,728)	\$ (498,092)	\$(2,743,558)
Depreciation and amortization	240,953	303,546	833,499	98,234	309,744
Stock-based compensation amortization	61,317		7,292,300	458,358	2,556,866
Common stock issued for services Loss (gain) on the sale of property and	625				
equipment Deferred revenues	16,902	(1,157)	15,038 1,514,154	 663,260	2,306 352,562
Changes in assets and liabilities, net of effect of acquisition:	(507,505)	(132,030)	1,014,104	003,200	552,562
Accounts receivable		(699,014)			(172,433)
Prepaid expenses and other assets			(540,157)		
Accounts payable. Accrued compensation and related benefits.					
Billings in excess of recognized revenue Other accrued liabilities and taxes	2,597	(2,597)	1,209,487 1,052,513	(564,495)	141,187
payable	224,625	119,065	62,879	(78,909)	(212,348)
Net cash provided by (used in)					
operating activities	212,256	272,427	1,900,324	(440,226)	
Investing activities:					
Purchases of property and equipment	(280,758)	(549,615)	(1,203,330)	(198,746)	(412,131)
Proceeds from sale of equipment Acquisition of AISS, net of cash acquired		12,926	(225,330)		
Net cash used in investing activities	(280,758)	(536,689)	(1,428,660)	(198,746)	(412,131)
Financing activities: Exercise of stock options and warrants Proceeds from the sale of preferred stock	15,908	38,047			80
Collection of notes receivable from shareholders		6,772	8,999		7,875
Principal payments on long-term debt		(3,018)		(15,713)	
Net cash provided by financing					
activities	15,908	41,801	5,228,388	15,057	1,813
Effect of exchange rate changes on cash			(7,571)		(9,927)
Net increase (decrease) in cash and cash					
equivalents Cash and cash equivalents, beginning of period	(52,594) 2,207,978		5,692,481 1,932,923		7,625,404
Cash and cash equivalents, end of period	\$2,155,384			\$1,309,009	
Noncash investing and financing activities: Common stock issued for notes receivable	\$ 198,750	\$ 12,500	\$ 5,478,370	ş	ş
Property acquired under capital lease	\$	\$ 90,013	ş	\$	\$
Notes payable issued to acquire AISS	\$	\$	\$ 995,000	\$	\$
Supplemental disclosure of cash flow information					
Cash paid during the year for: Taxes	\$ 341,492	\$ 403,087	\$ 582,000	\$ 100,000	\$ 100,000
Interest	\$	\$ 677	\$ 5,137	\$ 1,099	\$ 1,211

See notes to consolidated financial statements.

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### PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

# 1. BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

PDF Solutions, Inc. (the "Company"), a California corporation, was

incorporated in November 1992 and provides comprehensive infrastructure technologies and services to improve yield and optimize performance of integrated circuits. The Company's approach includes manufacturing simulation and analysis, combined with yield improvement methodologies to increase product yield and performance.

Basis of Presentation -- The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries after the elimination of all significant intercompany balances and transactions.

Significant 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, liabilities, revenues and expenses. A significant portion of the Company's revenues require estimates in regards to total costs which may be incurred and revenues earned. Actual results could differ from these estimates.

Certain Significant Risks and Uncertainties -- The Company operates in the dynamic semiconductor and software industry, and accordingly, can be affected by a variety of factors. For example, management of the Company believes that changes in any of the following areas could have a significant negative effect on the Company in terms of its future financial position, results of operations and cash flows: ability to obtain additional financing; regulatory changes; fundamental changes in the technology underlying software technologies; market acceptance of the Company's solutions; development of sales channels; litigation or other claims against the Company; the hiring, training and retention of key employees; successful and timely completion of development efforts; and new product introductions by competitors. Due to protracted delays in the Company's planned initial public offering, the Company expensed offering costs of \$1,257,617 in the quarter ended December 31, 2000.

Concentration of Credit Risk -- Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. The Company maintains its cash and cash equivalents with high credit quality financial institutions. The Company primarily sells its products to companies in Japan and North America. The Company does not require collateral or other security to support accounts receivable. To reduce credit risk, management performs ongoing credit evaluations of its customers' financial condition. The Company maintains allowances for potential credit losses.

Cash Equivalents -- The Company considers all highly liquid debt instruments purchased with a remaining maturity of three months or less to be cash equivalents.

Accounts Receivable -- Accounts receivable include amounts that are unbilled at the end of the period. Unbilled accounts receivable are determined on an individual contract basis and were approximately \$0, \$365,000 and \$194,000 at December 31, 1999 and 2000 and March 31, 2001, respectively.

Property and equipment -- Property and equipment are stated at cost and are depreciated using the straight-line method over the estimated useful lives of the related asset. The estimated useful lives are as follows:

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# PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

Intangible Assets -- Intangible assets are related to the business acquisition discussed in Note 2. Amortization is recorded on a straight-line

#### basis over a period of four years.

Impairment of Long-Lived Assets -- In accordance with Statement of Financial Accounting Standards (SFAS) No. 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of, the Company evaluates its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When the sum of the undiscounted future net cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount, an impairment loss would be measured based on the discounted cash flows compared to the carrying amount. No impairment charge has been recorded in any of the periods presented.

Notes Receivable from Shareholders -- The notes receivable from shareholders are full recourse notes issued in exchange for common stock. Notes outstanding at December 31, 2000 and March 31, 2001, bear interest at 4.46% to 6.69% per annum. The notes are generally payable over periods of two to four years.

Revenue Recognition -- The Company derives revenue from two sources: design-to-silicon yield solutions and gain share. The Company recognizes revenues in accordance with the provisions of American Institute of Certified Public Accountants Statement of Position ("SOP") 97-2, Software Revenue Recognition, as amended, and SOP 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts.

Design-to-Silicon Yield Solutions -- Design-to-silicon yield solutions revenue is derived from solution implementations, software licenses and software support and maintenance. Revenue recognition for each element of design-to-silicon yield solutions is summarized as follows:

Solution Implementations -- Revenue under contracts for solution implementation services is recognized as the services are performed using the cost-to-cost percentage of completion method of contract accounting. Losses on solution implementation contracts are recognized when determined. Revisions in profit estimates are reflected in the period in which the conditions that require the revision become known and are estimable.

Software Licenses -- The Company has entered into a few multi-year time based licenses, generally three years. Revenue under arrangements which require the Company to provide support and maintenance over a period of time, where vendor-specific objective evidence of fair value does not exist to allocate a portion of the total fee to the undelivered elements, are recognized ratably over the term of the agreement. No revenue under arrangements with extended payment terms has been recognized in excess of amounts due.

Other license fees are recognized on the residual value method: (i) when an agreement has been signed, the software has been delivered, the license fee is fixed or determinable and collection of the fee is probable or (ii) as a component of a related solution implementation contract.

Software Support and Maintenance -- Amounts allocated to undelivered support and maintenance are based on vendor specific objective evidence, generally negotiated renewal rates. Revenue from allocated support and maintenance and renewals is recognized ratably over the term of the support and maintenance contract, generally one year.

Gain Share -- Gain share revenue represents profit sharing and performance incentives earned based upon its customer reaching certain defined operational levels. Upon achieving such operational levels, the Company receives either a fixed fee and/or royalties based on the units sold by the F-8

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#### PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001

(INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS

customer. Due to the uncertainties surrounding attainment of such operational levels, the Company recognizes gain share revenue (to the extent of completion of the related solution implementation contract) upon receipt of performance reports or other related information from the customer supporting the determination of amounts and probability of collection.

Software Development Costs -- Costs for the development of new software products and substantial enhancements to existing software products are expensed as incurred until technological feasibility has been established, at which time any additional costs would be capitalized in accordance with Statement of Financial Accounting Standards (SFAS) No. 86, Computer Software to be Sold, Leased or Otherwise Marketed. Because the Company believes its current process for developing software is essentially completed concurrently with the establishment of technological feasibility, no costs have been capitalized to date.

Research and Development -- Research and development expenses are charged to operations as incurred.

Stock-Based Compensation -- The Company accounts for stock-based compensation in accordance with the provisions of Accounting Principles Board Opinion No. 25 ("APB No. 25"), Accounting for Stock Issued to Employees, and complies with the disclosure provisions of Statement of Financial Accounting Standards No. 123 ("SFAS No. 123"). Deferred compensation recognized under APB No. 25 is amortized to expense using the graded vesting method. The Company accounts for stock options and warrants issued to non-employees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force No. 96-18 under the fair value based method.

Net Loss per Share -- Basic net loss per share excludes dilution and is computed by dividing net loss by the weighted average number of common shares outstanding for the period (excluding shares subject to repurchase). Diluted net loss per share was the same as basic net loss per share for all periods presented since the effect of any potentially dilutive securities is excluded as they are anti-dilutive because of the Company's net losses.

Unaudited Pro Forma Net Loss per Share -- Pro forma basic and diluted net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding for the period (excluding shares subject to repurchase) and the weighted average number of common shares resulting from the assumed conversion, from their respective issuance dates, of outstanding shares of Series A and Series B convertible preferred stock which will occur upon the closing of the planned initial public offering. The computation does not include the effect of a one-time dividend charge expected to be recorded upon conversion of the Series B convertible preferred stock (see Note 12).

Unaudited Pro Forma Information -- Upon the closing of the planned initial public offering, the outstanding shares of Series A and Series B convertible preferred stock will convert into an aggregate of 6,333,318 shares of common stock. The pro forma balance sheet presents the Company's balance sheet as if this had occurred at March 31, 2001 (see Note 12).

Unaudited Interim Financial Information -- The interim financial information as of March 31, 2001 and for the three months ended March 31, 2000 and 2001 is unaudited and has been prepared on the same basis as the audited financial statements. In the opinion of management, such unaudited financial information includes all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the interim information. Operating results for the three months ended March 31, 2001 are not necessarily indicative of the results that may be expected for the year ended December 31, 2001.

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED) Foreign Currency Translation -- The functional currency of the Company's foreign subsidiaries is the local currency for the respective subsidiary. The assets and liabilities are translated at the period-end exchange rate, and statements of operations are translated at the average exchange rate during the year. Gains and losses resulting from foreign currency translations are included as a component of other comprehensive income.

Comprehensive Income -- Statement of Financial Accounting Standards (SFAS) No. 130, Reporting Comprehensive Income, requires that an enterprise report, by major components and as a single total, the change in its net assets during the period from nonowner sources. For 1998 and 1999, comprehensive loss was equal to net loss. Comprehensive loss for the year ended December 31, 2000 and the three months ended March 31, 2001 is presented within the statement of shareholders' deficiency and is comprised entirely of cumulative translation adjustment.

Recently Issued Accounting Standards -- In June 1998, the Financial Accounting Standards Board (FASB) issued SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities. This statement requires companies to record derivatives on the balance sheet as assets or liabilities measured at fair value. Gains or losses resulting from changes in the values of those derivatives would be accounted for depending on the use of the derivative and whether it qualifies for hedge accounting. The Company adopted SFAS No. 133, as amended, on January 1, 2001. The adoption of this statement did not have an effect on the Company's financial position, results of operations or cash flows as the Company had no stand-alone or embedded derivatives at December 31, 2000 and had not historically entered into any derivative transactions to hedge currency or other exposures.

As a matter of policy, the Company does not currently enter into transactions involving derivative financial instruments. In the event the Company does enter into such transactions in the future, such items will be accounted for in accordance with SFAS No. 133, in which case the Company will formally document all relationships between hedging instruments and hedged items, as well as its risk-management objective and strategy for undertaking such hedge transactions.

In September 2000, the FASB issued SFAS No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. SFAS No. 140 replaces SFAS No. 125, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. It revises the standards for accounting for securitizations and other transfers of financial assets and collateral and requires certain disclosures, but it carries over most of SFAS No. 125's provisions without reconsideration. The Company has adopted the applicable disclosure requirements of SFAS No. 140 in its consolidated financial statements as of December 31, 2000. The Company is currently evaluating the impact of adopting the remaining provisions of SFAS No. 140 which will be effective for transactions entered into after March 31, 2001.

#### 2. BUSINESS COMBINATION

On April 27, 2000, the Company acquired all of the outstanding common stock of AISS, a German company, for \$1.25 million, consisting of \$995,000 in notes payable and \$255,000 in cash. AISS develops software and provides yield management services to the semiconductor industry. The note bears interest at 7% per annum payable quarterly with principal due on April 27, 2001.

The acquisition was accounted for using the purchase method and the operating results of AISS have been included in the consolidated statements of operations since the date of acquisition. The excess purchase price (including costs of acquisition) over the fair value of the tangible assets and liabilities

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

assumed, totaled \$2,007,994 and represents acquired technology, employee workforce and goodwill which is being amortized on a straight line basis over a

period of four years. Amortization expense totaled \$338,059 and \$125,246 for the year ended December 31, 2000 and the three months ended March 31, 2001, respectively.

The fair value of the assets acquired and liabilities assumed were as follows (in thousands):

Cash. Accounts receivable. Other assets. Property and equipment. Acquired technology. Employee workforce. Goodwill. Accrued acquisition cost. Less liabilities assumed. Deferred tax liability.	\$ 30 386 27 46 662 540 807 (113) (509) (626)	
	\$1,250	

Had the acquisition taken place at the beginning of fiscal 1999 and 2000 respectively, the unaudited pro forma results of operations would have been as follows for the years ended December 31, 1999 and 2000 (in thousands, except per share data):

	1999	2000
	(UNAU	JDITED)
Net revenues		
Net loss per share basic and diluted	(0.06)	(1.24)

The pro forma results of operations give effect to certain adjustments, including amortization of purchased intangibles and goodwill, interest charges on the note issued in connection with the acquisition, and the elimination of sales between the Company and AISS.

The pro forma amounts are based on certain assumptions and estimates and do not necessarily represent results which would have occurred if the acquisition had taken place on the basis assumed above, nor are they indicative of results of future combined operations.

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## PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

3. PROPERTY AND EQUIPMENT

Property and equipment consist of:

DECEMBE	R 31,	
		MARCH 31,
1999	2000	2001
		(UNAUDITED)

Computer equipment	\$ 884,276	\$ 1,810,385	\$ 2,039,465
Software	355,687	506,838	737,192
Furniture, fixtures, and equipment	351,803	428,381	460,718
Construction in progress		80,968	
Accumulated depreciation	1,591,766	2,826,572	3,237,375
	(769,740)	(1,265,170)	(1,450,646)
	\$ 822,026	\$ 1,561,402	\$ 1,786,729

### 4. LEASE COMMITMENTS

Equipment with a net book value of \$87,747 and \$71,469, respectively, at December 31, 1999 and 2000 (net of accumulated amortization of \$2,266 and \$21,067) has been leased under capital leases which expire in 2004. The Company leases administrative and sales offices and other equipment under noncancelable operating leases which contain various renewal options and require payment of common area costs, taxes and utilities, when applicable. These operating leases expire from 2001 to 2006.

Future minimum lease payments under capital and noncancelable operating leases at December 31, 2000 are as follows:

	YEAR ENDING DECEMBER 31,	CAPITAL LEASES		PERATING LEASES
2002 2003 2004 2005		\$ 18,706 18,706 18,706 15,262 		905,939 817,885 779,120 667,698 12,838 12,838
Total future minimum le	ase payments	71,380	\$3	,196,318
-	g interest (ranging from 7.32% to	(10,090)		
	minimum lease payments	61,290 (14,290)		
Long-term portion		\$ 47,000		

Rent expense was approximately \$220,226, \$379,364 and \$906,015 in 1998, 1999 and 2000, respectively.

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#### PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

5. BORROWING ARRANGEMENTS

Line of Credit

The Company's German subsidiary has a secured line of credit with a bank of approximately \$65,000. Borrowings under the line of credit are for working capital requirements and other general corporate purposes and bear interest at 9.5%. At December 31, 2000 and March 31, 2001, no amounts were outstanding under the agreement.

Long-term debt consists of:

	DECEMBER	MARCH 31,	
	1999	1999 2000	
			(UNAUDITED)
Term debt (interest at 6.4%) Capital leases (see Note 4)	\$ 86,995	\$ 16,148 61,290	\$ 13,467 57,829
Total Current portion	86,995 (15,379)	77,438 (21,491)	71,296 (28,047)
Long-term portion	\$ 71,616	\$ 55,947 ======	\$ 43,249

Future payment requirements of term debt at December 31, 2000 are as follows:

# YEAR ENDING DECEMBER 31,

2001 2002 2003	7,201
	\$16,148

## 6. CONVERTIBLE PREFERRED STOCK

### Convertible Preferred Stock

The Company had 5,833,331 shares of Series A convertible preferred stock outstanding at December 31, 1999 and 2000 and March 31, 2001. In August 2000, the Company issued 350,872 shares of Series B convertible preferred stock which were outstanding at December 31, 2000 and March 31, 2001. The significant terms of the Series A and Series B convertible preferred stock are as follows:

- Each share is convertible into one share of common stock (subject to adjustment for events of dilution). See Note 12.
- Each share will automatically convert in the event of a public offering in which the Company receives proceeds equal to or greater than \$7,500,000 and a price per share equal to or greater than \$14.25. See Note 12.
- Each share has voting rights equivalent to the number of shares of common stock into which it is convertible.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

- In the event of liquidation or winding up of the Company, the holders of Series A and Series B convertible preferred stock shall receive \$0.60 per share and \$14.25 per share, respectively, plus all accrued but unpaid dividends. A sale of substantially all of the Company's assets or a change in control is treated as a deemed liquidation.

- In the event the Board of Directors declares dividends payable on the then outstanding common stock, the holders of Series A and Series B preferred stock shall receive \$0.03 per share and \$1.14 per share, respectively. The right to such dividends are not cumulative.
- The Series A convertible preferred stock shareholders, voting separately as a class, shall elect two members of the Board of Directors. Additionally, the holders of common stock and Series A preferred stock voting collectively as a class shall elect one member of the Board of Directors.

## 7. SHAREHOLDERS' EQUITY

Common Stock -- Common stock issued to the founders and certain other employees are subject to repurchase agreements whereby the Company has the option to repurchase the unvested shares upon termination of employment at the original issue price. The Company's repurchase right generally lapses over four years. At December 31, 2000, 2,944,947 shares of common stock were subject to repurchase by the Company.

During 1998, the Company issued 4,166 shares of common stock to consultants for services rendered. The fair value of the common stock of \$625, based on the then fair market value of common stock of \$0.15 per share, was recognized as general and administrative expense at the date of issuance.

The Company has reserved shares of common stock for issuance as follows at December 31, 2000:

Conversion of preferred stock Issuance and exercise of options	
	7,950,396

Stock Plans -- Under the Company's 1996 and 1997 Stock Plans ("the Plans"), the Company may grant options to purchase up to 6,333,332 shares of common stock (731,700 from the 1996 Plan and 5,601,632 from the 1997 Plan) to employees, directors and consultants at prices not less than the fair market value at the date of grant for incentive stock options and not less than 85% of fair market value for nonstatutory stock options. These options generally expire ten years from the date of grant and become vested and exercisable ratably over a four-year period. Certain option grants provide for the immediate exercise by the optionee with the resulting shares issued subject to a right of repurchase by the Company which lapses based on the original vesting provisions. At December 31, 2000 and March 31, 2001 1,395,117 shares were available for future grant under the Plans.

At December 31, 1998, 1999 and 2000 and March 31, 2001 the Company's outstanding options include 67,660, 67,660, 0, and 0 shares, respectively, which had been granted outside of the Plans.

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### PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

Additional information with respect to options under the Plans, including options granted outside the Plans, is as follows:

	NUMBER OF OPTIONS	OPTION PRICE PER SHARE
Outstanding, January 1, 1998 Granted (weighted average fair value of \$0.05 per share)	1,025,314 1,665,617	0.06
Exercised	(1,267,302)	
Canceled	(65,194)	
Outstanding, December 31, 1998 (417,123 shares vested and exercisable at a weighted average exercise price of \$0.06		
per share)	1,358,435	0.12
Granted (weighted average fair value of \$0.11 per share)	497,656	
ExercisedCanceled	(347,426) (107,986)	
Cancered	(107,900)	0.10
Outstanding, December 31, 1999 (558,272 shares vested and exercisable at a weighted average exercise price of \$0.13		
per share)	1,400,679	0.20
Granted (weighted average fair value of \$7.16 per share)	2,647,019	2.73
Exercised	(3,440,070)	
Canceled	(236,552)	0.39
Outstanding, December 31, 2000 (24,971 shares vested and exercisable at a weighted average exercise price of \$0.22		
per share)	371,076	4.43
Exercised*	(1,387)	0.06
Outstanding, March 31, 2001 (43,852 shares vested and		
exercisable at a weighted average exercise price of \$0.60		
per share)*	369,689	\$4.45

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# \* Unaudited

Additional information regarding options outstanding as of December 31, 2000 is as follows:

	OPT	IONS OUTSTANDIN	G	OPTIONS EX	ERCISABLE
		WEIGHTED AVERAGE REMAINING	WEIGHTED AVERAGE EXERCISE	NUMBER VESTED	WEIGHTED AVERAGE EXERCISE
EXERCISE	NUMBER	CONTRACTUAL	PRICE	AND	PRICE
PRICES	OUTSTANDING	LIFE (YEARS)	PER SHARE	EXERCISABLE	PER SHARE
\$ 0.06 - \$ 0.15	30,681	7.0	\$ 0.10	15,055	\$0.11
0.38 - 0.95	28,737	8.4	0.38	9,916	0.39
1.50 - 3.75	127,329	9.4	1.84		
4.50 - 11.25	146,330	9.6	6.40		
12.00 - 15.00	37,999	9.7	12.08		
\$ 0.06 - \$15.00	371,076	9.2	\$ 4.43	24,971	\$0.22
				======	

Statement of Financial Accounting Standards No. 123 ("SFAS 123"), Accounting for Stock-Based Compensation, requires the disclosure of pro forma net loss as if the Company had adopted the fair value method. Under SFAS 123, the fair value of stock-based awards to employees is calculated through the use of option pricing models, even though such models were developed to estimate the fair value of freely

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# PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001

## (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

tradable, fully transferable options without vesting restrictions, which significantly differ from the Company's stock option awards. These models also require subjective assumptions, including expected time to exercise, which affect the calculated values.

The weighted average fair value of the Company's stock-based awards to employees was estimated using the minimum value method and assuming no dividends will be declared and the following additional assumptions:

	DECEMBER 31,		
	1998	1999	2000
Estimated life (in years) Risk-free interest rate			

For pro forma purposes, the estimated fair value of the Company's stock-based awards to employees is amortized using the accelerated method over the options' vesting period. The Company's pro forma results are as follows (in thousands):

	DECEMBER 31,			
	1998	2000		
Net loss:				
As reported	,	,		
Pro forma Basic and diluted net loss per share:	(448)	(198)	(9,839)	
As reported	\$(0.08)	\$(0.02)	\$ (1.24)	
Pro forma	(0.09)	(0.03)	(1.34)	

## Stock-Based Compensation

Through December 31, 1999, non-employee options and warrants were valued or revalued, respectively, using the Black-Scholes pricing model with the following weighted average assumptions; contractual life of 10 years; risk free interest rates ranging from 4.6% to 6%; volatility of 40% or 50%; and no dividends during the expected term. Non-employee options and warrants during the year ended December 31, 2000 were valued or revalued, respectively, using the Black-Scholes pricing model with the following weighted average assumptions: contractual life of 10 years; risk free interest rates of 6.7%; volatility of 70%; and no dividends during the expected term. The value of deferred stock-based compensation related to unvested awards at December 31, 2000 is subject to adjustment based upon the future value of the Company's common stock.

## COMMON STOCK OPTIONS

During the years ended December 31, 1998, 1999 and 2000 the Company granted nonstatutory options to consultants and advisory board members ("non-employees") to purchase 27,466, 5,000 and 41,533 shares, respectively. These options had weighted average exercise prices of \$0.15 per share, \$0.39 per share and \$1.50 per share, respectively, and vesting periods, which approximated the period of service, of immediate to five years. These options were originally valued at \$2,554, \$1,537 and \$376,544, respectively. The values attributable to these options have been amortized over the service period on a graded vesting method and the vested portion of these options were remeasured at each vesting date. No options related to non-employees were cancelled for the periods ended December 31, 1998 and 1999. For the year ended December 31, 2000, 117,293 non-employee options were cancelled.

### PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

During 1998, the Company sold 266,666 shares of common stock to a consultant at \$0.15 per share. The Company retained the right to repurchase the shares at the original issue price in the event of termination of service. Such repurchase right lapsed over a period of four years. The Company recorded additional stock-based compensation expense over the service period for the difference between the purchase price and the fair value of the Company's common stock on the date the repurchase right lapsed. During 1999, the Company terminated its remaining repurchase rights and recorded non-employee stock-based compensation of \$57,500 with respect to such shares.

During the year ended December 31, 2000, the Company issued 2,605,486 common stock options to employees at a weighted average exercise price of \$2.73 per share. The weighted average exercise price was below the weighted average deemed fair value of \$9.89 per share. The cumulative deferred stock-based compensation with respect to these grants totaled \$18,662,357 and is being amortized to expense on a graded vesting method over the four year vesting period of the options through September 2004. During the year ended December 31, 2000, the cancellation of 17,333 of these common stock options resulted in the reversal of \$145,000 of employee stock-based compensation.

During the three months ended March 31, 2001, the Company did not issue any common stock options. The Company repurchased 31,268 shares of common stock through the cancellation of notes receivable which resulted in the reversal of \$237,844 of employee stock-based compensation.

## COMMON STOCK WARRANTS

During 1996, the Company issued warrants to purchase 200,000 shares of the Company's common stock at \$0.06 per share to acquire software from AISS. The warrants were originally valued at \$8,286. The value attributable to these warrants has been amortized over the vesting period of four years, which approximated the useful life of the software, and the vested portion of this warrant was remeasured at each vesting date. In connection with the acquisition of AISS on April 27, 2000, warrants to purchase 33,334 shares were cancelled. No warrants were outstanding at December 31, 2000.

Amortization of employee and non-employee stock-based compensation totaled \$61,317, \$68,282, \$7,292,300 and 2,556,866 in 1998, 1999, 2000 and the three months ended March 31, 2001, respectively.

Unvested non-employee options and warrants are as follows as of:

	UNVESTED	OPTIONS AND WARRANTS
	NUMBER	WEIGHTED AVERAGE EXERCISE PRICE PER SHARE
December 31, 1998 December 31, 1999	257,695 169,382	\$0.06 \$0.06
December 31, 2000	4,861	\$0.06
March 31, 2001 (Unaudited)	2,778	\$0.06

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### PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS

ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

## 8. NET LOSS PER SHARE

The following is a reconciliation of the numerators and denominators used in computing basic and diluted net loss per share (in thousands):

	YEARS ENDED DECEMBER 31,			THREE MONTHS ENDED MARCH 31,		
			2000		2001	
				(UNAUD		
Net loss (numerator), basic and diluted			\$(9,097) =======			
Shares (denominator):						
Weighted average common shares outstanding Weighted average common shares	6,222	7,229	9,445	7,483	10,884	
outstanding subject to repurchase	(1,278)	(1,143)	(2,089)	(686)	(2,819)	
Shares used in computation, basic and diluted	4,944	6,086	7,356	6,797	8,065	
Net loss per share basic and diluted	\$ (0.08)	\$ (0.02)	\$ (1.24)	\$ (0.07)	\$ (0.34)	
Shares used in computation basic and diluted Weighted average Series A convertible			7,356		8,065	
preferred stock outstanding Weighted average Series B convertible			5,833		5,833	
preferred stock outstanding			205		500	
Shares used in computing pro forma per share amounts on an as converted						
basis basic and diluted			13,394		14,398	
Pro forma net loss per share on an as converted basis basic and diluted			\$ (0.68) ======		\$ (0.19) ======	

Pro forma net loss per share assumes that the conversion of all shares of Series A and Series B convertible preferred stock into common stock, which occurs upon the consummation of an initial public offering. This computation does not include the effect of a one-time dividend charge expected to be recorded upon conversion of the Series B convertible preferred stock (see Note 12).

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## PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

For the above mentioned periods, the Company had securities outstanding which could potentially dilute basic earnings per share in the future, but were excluded in the computation of diluted net loss per share in the periods presented, as their effect would have been anti-dilutive. Such outstanding securities consist of the following (in thousands):

YEARS ENDED DECEMBER 31,

------

	1998	1999	2000	2000	2001
				(UNAUD	ITED)
Convertible preferred stock	5,833	5,833	5,977	5,833	6,184
Shares of common stock subject to repurchase	1,278	1,143	2,089	686	2,819
Outstanding options	957	1,433	457	1,061	370
Warrants	200	200	64	200	

## 9. TAX PROVISION

The tax provision in 1998 and 1999 was \$341,492 and \$533,087, respectively, and primarily represents withholding tax on revenues from foreign customers. The tax provision for the year ended December 31, 2000 of \$363,000 includes withholding tax on revenues from foreign customers of \$100,000 and foreign and U.S. income tax of \$(50,000) and \$313,000, respectively. The tax provision for the three months ended March 31, 2001 of \$185,000 includes withholding tax on revenues from foreign customers of \$100,000 and U.S. income tax of \$100,000 and \$313,000, respectively. The tax provision for the three months ended March 31, 2001 of \$185,000 includes withholding tax on revenues from foreign customers of \$100,000 and foreign and U.S. income tax of \$15,000 and \$70,000, respectively.

During fiscal 1998 and 1999 all income (loss) before taxes was derived from U.S. operations. During the year ended December 31, 2000 and the three months ended March 31, 2001, respectively, income (loss) before taxes was \$(8.8 million) and \$(2.6 million) from U.S. operations and \$38,000 and \$91,000 from foreign operations.

Deferred income taxes reflect the tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as net operating loss and tax credit carryforwards.

The components of the net deferred tax liability is comprised of (in thousands):

	DECEMBER 31,				
	1998 1999		2000	MARCH 31, 2001	
				(UNAUDITED)	
Net operating loss carryforward	\$ 172	\$ 38	\$	\$	
Research and development credit carryforward	35		63	177	
Foreign tax credit carryforward	365	765	544	644	
Accruals deductible in different periods	(152)	(129)	1,078	1,105	
Stock-based compensation			324	324	
Valuation allowances	(420)	(674)	(2,009)	(2,250)	
Intangible assets			(532)	(494)	
	\$	\$	\$ (532)	\$ (494)	
			=======		

The Company has established a valuation allowance against certain deferred tax assets due to the uncertainty surrounding the realization of such assets. Annually, management evaluates the recoverability of the deferred tax assets and the level of the valuation allowance. At such time as it is determined that it is more likely than not that deferred tax assets are realizable the valuation allowance will be reduced.

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## PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

The amount of income tax recorded differs from the amount using the statutory federal income tax rate (35%) for the following reasons (in thousands):

		ECEMBER	THREE MONTHS ENDED MARCH 31,	
	1998 1999 2000		2001	
				(UNAUDITED)
Federal statutory tax benefit	\$(22)	\$136	\$(3,057)	\$(895)
State tax expense	1	3	1	1
Stock compensation expense			2,316	895
Offering costs			440	
Meals and entertainment	8	2	4	1
Tax credits	(35)		(751)	(214)
Foreign tax, net		130	83	115
Valuation allowances	363	254	1,335	241
Other	26	8	(8)	41
Total	\$341	\$533	\$ 363	\$ 185
				=====

At December 31, 2000, the Company had foreign tax credit carryforwards of approximately \$544,000 available to offset future federal income taxes which begin to expire in 2001. The extent to which the credit carryforwards can be used to offset future taxable income and tax liabilities, respectively, may be limited, depending on the extent of ownership changes within any three-year period as provided in the Tax Reform Act of 1986 and the California Conformity Act of 1987.

# 10. CUSTOMER AND GEOGRAPHIC INFORMATION

The Company operates in one segment. The Company had net revenues from individual customers in excess of 10% of net revenues as follows:

	YEARS ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,		
CUSTOMER	1998			2000	2001
				(UNAUD	ITED)
Α	66%	53%	32%	35%	31%
В	16%	19%			
C		15%	27%	39%	15%
D			15%	14%	17%
Ε			10%	11%	48
G			6%		20%

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# PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

The Company had accounts receivable from individual customers in excess of 10% of gross accounts receivable as follows:

	DEC	DECEMBER 31,		MARCH 31,
CUSTOMER	1998	1999	2000	2001
				(UNAUDITED)

63%	47%	25%	54%
	15%	13%	6%
	23%	24%	17%
		13%	1%
	11%		
	 	15% 23% 	63%         47%         25%            15%         13%            23%         24%             13%            11%

Revenues from customers by geographic area are as follows (in thousands):

	YEARS ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,		
	1998	1999	2000	2000	2001
				(UNAUI	DITED)
Japan United States Europe	5,125 1,102 	10,684 1,140 	13,209 6,235 691	2,733 952 9	4,974 2,208 352

The Company's long-lived assets were located primarily in North America as of December 31, 1999. As of December 31, 2000 and March 31, 2001, long-lived assets related to AISS, located in Germany, totaled \$1.8 million and \$1.7 million, respectively, of which \$1.7 million and \$1.5 million relates to acquired intangibles (see Note 2). The majority of the Company's remaining long-lived assets are in the United States.

## 11. EMPLOYEE BENEFIT PLAN

During 1999, the Company established a 401(k) tax-deferred savings plan, whereby eligible employees may contribute up to 15% of their eligible compensation with a maximum amount subject to IRS guidelines in any calendar year. Company contributions are discretionary; no such Company contributions have been made since inception of this plan.

### 12. SUBSEQUENT EVENTS

In May 2001, the Company was named as a defendant in a lawsuit claiming, among other things, that it misappropriated trade secrets in connection with hiring an employee. The Company is defending itself against the claims, which it believes to be without merit. The Company does not believe that this litigation, or resolution of this litigation, will have a material negative impact on its consolidated financial position or results of operations.

On June 28, 2001, the Company entered into a common stock purchase agreement with Applied Materials, Inc., or Applied Materials, under which the Company agreed to sell Applied Materials 500,000 shares of common stock (or such lesser amount of shares having a maximum aggregate purchase price of \$10.0 million) in a private placement concurrent with and conditioned upon the sale of shares in the planned initial public offering. The price per share in the concurrent private placement will be equal to the offering price in the planned initial public offering.

On July 6, 2001, the Company amended and restated its articles of incorporation to effect a two-for-three reverse stock split of the Company's common and preferred stock. All share and per share amounts F-21

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## PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) YEARS ENDED DECEMBER 31, 1998, 1999 AND 2000 AND THREE MONTHS ENDED MARCH 31, 2000 AND 2001 (INFORMATION AS OF MARCH 31, 2001 AND FOR THE THREE MONTHS ENDED MARCH 31, 2000 AND 2001 IS UNAUDITED)

reflected in the consolidated financial statements have been restated to give effect to the two-for-three reverse stock split.

On July 6, 2001, the Company also amended and restated its articles of incorporation to provide for the automatic conversion of all outstanding Series

A and Series B convertible preferred stock upon consummation of a public offering in which the Company receives proceeds equal to or greater than \$7,500,000; provided that in the event the public offering price is less than \$14.25 per share, the Series B preferred stock will be converted into an aggregate of 499,987 shares of common stock. Based on an assumed initial public offering price of \$12.00 per share, the Company expects to record a one time dividend charge of \$1,619,000 upon consummation of the planned initial public offering, representing the fair value of additional shares expected to be issued to the Series B convertible preferred stockholders in excess of the shares issuable pursuant to the original terms of the Series B convertible preferred stock. The effects of such additional shares have been reflected in the accompanying unaudited pro forma balance sheet.

On June 12, 2001, the Board of Directors approved, and on July 6, 2001, the shareholders approved, the following actions to occur prior to or concurrent with the effectiveness of the Company's planned initial public offering:

- Reincorporation of the Company in the State of Delaware;
- Increase in the authorized shares of common stock to 75,000,000 shares, par value \$0.00015 per share, and creation of a new series of preferred stock with 5,000,000 shares authorized;

– Termination of the 1996 and 1997 Stock Option Plans as to future option grants;

- Adoption of the 2001 Stock Plan -- 3,000,000 shares of common stock will be reserved for issuance under the 2001 Stock Plan. On January 1 of each year, starting with the year 2002, the number of shares in the reserve will automatically increase by 5% of the total number of shares of common stock that are outstanding at that time; and

- Adoption of the 2001 Employee Stock Purchase Plan -- Under the purchase plan, eligible employees are allowed to have salary withholdings of up to 10% of their compensation to purchase shares of common stock at a price equal to 85% of the lower of the market value of the stock on the first date immediately before the first day of the applicable offering period or the fair market value on the purchase date. The initial offering period commences upon the effective date for the initial public offering of the Company's common stock. For the first offering period, shares of common stock may be purchased at a price equal to 85% of the lower of the price per share in the initial public offering or the market value on the purchase date. The Company has initially reserved 300,000 shares of common stock under this plan, plus an annual increase to be added each January beginning with the year 2002 equal to the lesser of (i) 675,000 shares, or (ii) 2% of the shares of common stock outstanding at that time.

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# INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of Applied Integrated Systems & Software Entwicklungs-, Produktions- und Vertriebs GmbH:

We have audited the accompanying balance sheet of Applied Integrated Systems & Software Entwicklungs-, Produktions- und Vertriebs GmbH as of December 31, 1999, and the related statements of income, shareholders' equity, and cash flows for the year ended December 31, 1999. 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 audit.

We conducted our audit 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 misstatement. 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 audit provides a reasonable basis for our opinion. In our opinion, such financial statements present fairly, in all material respects, the financial position of Applied Integrated Systems & Software Entwicklungs-, Produktions- und Vertriebs GmbH as of December 31, 1999, and the results of its operations and its cash flows for the year ended December 31, 1999, in conformity with accounting principles generally accepted in the United States of America.

/s/ DELOITTE & TOUCHE GmbH
/s/ Wirtschaftsprufungsgesellschaft

Munich, Germany July 26, 2000

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APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

# BALANCE SHEETS

	DECEMBER 31, 1999	MARCH 31, 2000
		(UNAUDITED)
ASSETS		
Current assets:		
Cash. Accounts receivable. Prepaid expenses. Other assets. Current deferred taxes.	DM 377,539 331,700 1,421 21,065 72,129	DM 11,858 763,830  18,801 74,729
Total current assets Equipment, furniture, and fixtures, net Intangible assets, net Other assets	803,854 102,389 14,053 18,144	869,218 106,280 12,391 
Total assets		DM 987,889
LIABILITIES & SHAREHOLDERS' EQUITY (DEFICIENCY)		
Current liabilities: Short term portion of long term borrowings Bank overdraft Accounts payable Accrued taxes Deferred revenue Accrued expenses and other liabilities	DM 14,069  118,654 8,154 10,000 433,455	DM 14,294 415,741 111,726 92,350 12,000 423,740
Total current liabilities Long term borrowings Deferred tax liability Shareholders' equity (deficiency): Registered capital Less: subscribed capital.	584,332 33,620 31,154 51,000 (25,500)	1,069,851 29,961 21,432 51,000 (25,500)
Registered capital paid in Retained earnings (distributions to shareholders in excess of earnings to date)	25,500 263,834	·
Total shareholders' equity (deficiency)	289,334	(133,355)
Total liabilities and shareholders' equity (deficiency)	DM 938,440	DM 987,889

See notes to financial statements.

# APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

# INCOME STATEMENTS

	YEAR ENDED DECEMBER 31,	THREE MONT MARCH	31,	
		1999	2000	
		UNAUD		
Revenues: Services License	DM1,914,145 837,962	DM 378,322 440,424	125,815	
		818,746		
Costs and expenses: Cost of services Research and development expenses Sales and marketing expenses General and administrative expenses	1,056,259 510,768 325,487 576,654	249,408 66,659 78,458 126,692	35,155 45,087	
Total costs and expenses	2,469,168	521,217		
Operating income Other income Interest income Interest expenses	282,939 775 4,430	297,529	92,304 1,096 1,725 (6,839)	
Income before income taxes Provision for income taxes			88,286 (42,395)	
Net income	DM 182,180	DM 135,539	DM 45,891	

See notes to financial statements.

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# APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

# STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIENCY)

	REGISTERED CAPITAL - PAID IN	ADDITIONAL PAID IN CAPITAL	RETAINED EARNINGS (DEFICIENCY)	TOTAL SHAREHOLDERS EQUITY (DEFICIENCY)
Balance, January 1, 1999 Net income and total comprehensive	DM25,500	DM	DM 201,654	DM 227,154
income Distributions			182,180 (120,000)	182,180 (120,000)
Balance, December 31, 1999 Net income and total comprehensive	25,500		263,834	289,334
income* Additional paid in capital			45,891	45,891
resulting from sale of PDF shares to shareholders*		70,753		70,753
Distributions*		(70,753)	(468,580)	(539,333)
Balance, March 31, 2000*	DM25,500	DM	DM(158,855)	DM(133,355)

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# \* Unaudited

See notes to financial statements.

# APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

# STATEMENTS OF CASH FLOWS

	YEAR ENDED	THREE MON MARCH	31,
	DECEMBER 31, 1999	1999	2000
		(UNAUD	
Operating activities:	DM 102 100	DM 125 520	DM 45 001
Net income Adjustments to reconcile net income to net cash provided by (used in) operating activities:	DM 182,180	DM 135,539	DM 45,891
Depreciation and amortization	140,206	20,237	23,645
Deferred income taxes Changes in operating assets and liabilities:	(47,839)	(13,137)	(2,600)
Accounts receivable	(211,151)	(399,522)	(432,130)
Prepaid expenses and other assets	25,798	(111,210)	
Accounts payable Other accrued liabilities and income taxes	31,793	11,024	
payable	(48,606)	24,309	(2,504)
Deferred revenues	3,800	1,000	2,000
Net cash provided by (used in) operating			
activities	76,181	(331,760)	(368,942)
Investing activities:			
Equipment additions	(178,473)	(115 <b>,</b> 598)	(25,874)
Payment to exercise warrants			(20,320)
Net cash used in investing activities	(178,473)	(115,598)	
Financing activities:			
Shareholder distributions	(120,000)	= 0 . 0 0 0	(539 <b>,</b> 333)
Proceeds from borrowings	59,900	59,900	10.101
Repayments of borrowings Proceeds from sale of PDF stock to	(12,211)	(2,233)	(3,434)
shareholders			176,481
Bank overdraft		(270)	415,741
Net cash provided by (used in) financing			
activities	(72,311)	57 <b>,</b> 397	49,455
Net decrease in cash	(174,603)	(389,961)	(365,681)
Cash at beginning of period	552,142	552,142	377,539
Cash at end of period	DM 377,539	DM 162,181	DM 11,858
Supplemental cash flow information:			
Cash payments for interest	DM 8,086	DM 562	DM 6,839
Cash payments for income taxes	148,954	27,590	
1 4 · · · · · · · · · · · · · · · · · ·	· <b>,</b> · · · -	,	- ,

See notes to financial statements.

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APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

NOTES TO FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 1999 AND THREE MONTHS ENDED MARCH 31, 2000 (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

NOTE 1: NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Applied Integrated Systems and Software Entwicklungs-, Produktions- und Vertriebs GmbH (the "Company" or "AISS") was founded on February 24, 1989 and develops software tools for the semiconductor industry.

# UNAUDITED INTERIM FINANCIAL INFORMATION

The interim financial information as of March 31, 2000 and for the three months ended March 31, 1999 and 2000 is unaudited and has been prepared on the same basis as the audited financial statements. In the opinion of management, such unaudited financial information includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the interim information. The operating results for the three months ended March 31, 2000 are not necessarily indicative of the results that may be expected for the full fiscal year.

## USE OF ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("US GAAP") requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Despite management's best effort to establish good faith estimates and assumptions, actual results could differ from those estimates.

### REVENUE RECOGNITION

Revenue from services, primarily consulting and research and development arrangements, is recognized as the related services are performed. Software license and maintenance revenue is recognized in accordance with the provisions of Statement of Position No. 97-2 "Software Revenue Recognition." License fees are recognized when an agreement has been signed, the software has been delivered, the license fee is fixed or determinable and collection of the fee is probable and vendor-specific objective evidence of fair value exists to allocate a portion of the total fee to any undelivered elements of the arrangement, or over the license term. Maintenance obligations generally call for the Company to provide technical support and software updates to customers. Maintenance to be provided within one year included in an initial license fee is recognized together with the license fee and the estimated cost of providing such service is accrued. Revenue under other maintenance contracts is deferred and recognized ratably over the term of the maintenance contract, which is generally one year.

# COST OF SERVICES

Cost of professional services and maintenance consists primarily of salaries and benefits, including cost of services provided by third party consultants engaged by the Company.

## CERTAIN SIGNIFICANT RISKS AND UNCERTAINTIES

The Company operates in the software industry and can be affected by a variety of factors. For example, management of the Company believes that changes in any of the following areas could have a significant negative effect on the Company in terms of its future financial position, results of operations

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# APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 1999 AND THREE MONTHS ENDED MARCH 31, 2000 (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

and cash flows: ability to obtain additional financing; regulatory changes; fundamental changes in the technology underlying software products; market acceptance of the Company's products under development; development of sales channels; litigation or other claims against the Company; the hiring, training and retention of key employees; successful and timely completion of product development efforts; and new product introductions by competitors. Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of account receivables. The Company performs ongoing credit evaluations of its customers.

# FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying amount of cash, accounts receivable, accounts payable and borrowings approximates fair value due to the short-term nature of these instruments. The fair value of the warrants as of December 31, 1999 was approximately DM170,000.

## EQUIPMENT, FURNITURE AND FIXTURES

Equipment, furniture and fixtures are recorded at cost less accumulated depreciation. Depreciation is provided on the straight-line method over the estimated useful lives (three to ten years) of the related assets.

## OTHER ASSETS

Long-term assets include warrants for the purchase of 300,000 shares of PDF Solutions, Inc. ("PDF") common stock at DM 0.06 per share. These warrants were obtained from PDF in an agreement dated September 17, 1996 related to the use of one of the Company's software products. The warrants vested 25% after one year and at a rate of one forty-eighth per month thereafter. The value of the warrants was recorded as license revenue of DM 18,144 which approximated the estimated fair value of the warrants at the date of issuance under the Black-Scholes pricing model with the following assumptions: contractual life of 10 years; risk-free interest rate of 6.0%; volatility of 50% and no dividends during the expected term. The vested warrants at December 31, 1999 totaled 243,750 shares which increased to 249,999 in January 2000. In January 2000, the Company exercised the vested warrants (see Note 5). In connection with the acquisition of the Company by PDF on April 27, 2000 (see Note 9), the Company agreed to the cancellation of the remaining 50,001 warrants, of which 18,750 had vested through the date of acquisition.

## RESEARCH AND DEVELOPMENT

Research and development costs are expensed as incurred. The cost of developing new software products and enhancements are expensed as research and development costs as incurred because the Company believes that establishment of technological feasibility occurs concurrently with the date of general release of related products.

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## APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 1999 AND THREE MONTHS ENDED MARCH 31, 2000 (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

## INTANGIBLE ASSETS

Intangible assets represent internal use software and are recorded at cost and are amortized over periods ranging from three to five years. Accumulated amortization was approximately DM19,186 at December 31, 1999.

## INCOME TAXES

The Company provides for deferred income taxes resulting from temporary differences between the valuation of assets and liabilities in the financial statements and the carrying amounts for tax purposes. Such differences are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse.

## EARNINGS PER SHARE

The Company is organized as a GmbH and has no tradable shares. Earnings per share has not been calculated.

### COMPREHENSIVE INCOME

SFAS No. 130, "Reporting Comprehensive Income," requires that an enterprise report, by major components and as a single total, the change in its net assets during the period from nonowner sources. Comprehensive income was equal to net income for all periods presented.

# IMPAIRMENT OF LONG-LIVED ASSETS

In accordance with Statement of Financial Accounting Standards (SFAS) No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," the Company evaluates its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. No impairment charge has been recorded in any of the periods presented.

## NEW ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." The Statement establishes accounting and reporting standards requiring that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. The Statement requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met. Special accounting for qualifying hedges allows a derivative's gains and losses to offset related results on the hedged item in the income statement, and requires that a company must formally document, designate, and assess the effectiveness of transactions that receive hedge accounting. SFAS 133 is effective for fiscal years beginning after June 15, 2000 and must be applied to instruments issued, acquired or substantively modified after December 31, 1997. The Company does not expect the adoption of the accounting pronouncement to have a material effect on its financial position, results of operations or cash flows.

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APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 1999 AND THREE MONTHS ENDED MARCH 31, 2000 (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

NOTE 2: EQUIPMENT, FURNITURE AND FIXTURES

Equipment, furniture and fixtures at December 31 consist of:

## NOTE 3: BORROWINGS

The Company has a DM 150,000, secured line of credit with a bank. Borrowings under the line of credit are for working capital requirements and other general corporate purposes and bear an interest rate of 9.5 percent. The credit agreement is secured by the shareholders of the Company. At December 31, 1999, the Company did not have any amounts outstanding under the agreement.

The Company borrowed DM 59,900 at approximately 6.4 percent in January 1999 to finance the acquisition of an automobile. The term of the financing was for a term of approximately four years. The required reductions in principle in the next three years are as follows:

2001. 2002	,
	DM47,689

## NOTE 4: ACCRUED EXPENSES AND OTHER LIABILITIES

Accrued expenses and other liabilities at December 31, 1999 consisted of the following:

## NOTE 5: SHAREHOLDERS' EQUITY (DEFICIENCY)

The registered capital of the Company amounted to DM 51,000 as of December 31, 1999, of which DM 25,500 has been paid in by the company's shareholders.

On January 4, 2000, the Company exercised the warrants for shares in PDF Solutions Inc. that were issued on September 17, 1996. At the date the warrants were exercised, the Company paid DM 20,320 for the 249,999 shares. The shareholders of the Company then purchased these warrants from the Company for DM 176,408. The after tax gain related to this related party transaction was recorded as a contribution to additional paid in capital. The additional paid in capital was repaid to the shareholders in March 2000.

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APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 1999 AND THREE MONTHS ENDED MARCH 31, 2000 (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

NOTE 6: INCOME TAXES

Federal corporation income tax is levied at 40 percent and a solidarity surcharge is levied on the federal corporate tax rate. The solidarity tax rate was 5.50 percent in 1999. Upon distribution of retained earnings to shareholders, the corporation tax rate on the distributed earnings is reduced to 30 percent.

German trade income tax is levied at a rate of approximately 19.7 percent. This tax can be deducted from the corporation tax.

The significant components of the net deferred tax asset at December 31, 1999 which reflect the tax effects of the Company's temporary differences are as follows:

NET DEFERRED TAX ASSETS CURRENT:	
Vacation accrual	DM38,102
Warranty accrual	27,004
Deferred revenue	5,358
Other	1,665
	72,129
NET DEFERRED TAX LIABILITY NON-CURRENT:	
Capital expenditures reserve	21,432
Warrants	9,722

	31,154
Net deferred tax asset	DM40,975

The provision for income taxes consists of the following:

The provision for income taxes differs from the amounts computed by applying the Federal corporation income tax rate to income before income taxes, as follows:

Amounts computed by applying Federal statutory rate	DM112,023	40.0%
Trade tax, net of Federal income taxes	31,870	11.4%
Solidarity tax	3,733	1.3%
Credit for dividend distribution		(17.8)%
0		

ther	43	
	DM 97,877	34.9%
		=====

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# APPLIED INTEGRATED SYSTEMS AND SOFTWARE GmbH ENTWICKLUNGS-, PRODUKTIONS- UND VERTRIEBS GmbH

NOTES TO FINANCIAL STATEMENTS (CONTINUED) YEAR ENDED DECEMBER 31, 1999 AND THREE MONTHS ENDED MARCH 31, 2000 (INFORMATION AS OF MARCH 31, 2000 AND FOR THE THREE MONTHS ENDED MARCH 31, 1999 AND 2000 IS UNAUDITED)

# NOTE 7: OPERATING LEASES

The Company leases certain facilities and equipment under noncancelable operating lease arrangements. Rent expense is reflected on a straight-line basis over the term of the lease. Future minimum rental payments at December 31, 1999 under these leases, which expire in the first quarter of 2002, are as follows:

2000	DM112,000
2001	112,000
2002	10,000
Total	DM234,000

Total rent expense under all operating leases was approximately DM 91,560 for the year ended December 31, 1999.

# NOTE 8: BUSINESS SEGMENT

The Company operates in one industry segment consisting of developing, distribution, and maintenance for software, computer hardware and technical supply. The company's operations are primarily in Germany.

The following customers, a German electronics company and PDF Solutions, Inc., accounted for 53% and 33% of the net revenues of the Company in 1999, respectively.

# NOTE 9: SUBSEQUENT EVENT

On April 27, 2000, the Company was acquired by PDF Solutions Inc., a U.S. company, for approximately DM 2,647,375 (US\$1,250,000). PDF Solutions provides comprehensive infrastructure technologies and services to improve yield and optimize performance of integrated circuits.

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# PDF SOLUTIONS, INC.

## UNAUDITED PRO FORMA CONSOLIDATED STATEMENTS OF OPERATIONS

On April 27, 2000, the Company acquired all of the outstanding common stock of Applied Integrated Systems and Software GmbH ("AISS"), a German company, for \$1.25 million, consisting of \$995,000 in notes payable and \$255,000 in cash. AISS develops software and provides yield management services to the semiconductor industry. The acquisition is accounted for using the purchase method and the Company's consolidated financial statements reflect the results of operations of AISS from the date of acquisition. The aggregate purchase price was allocated to the assets and liabilities acquired based on their fair value at date of acquisition. The total consideration (including costs of acquisition) exceeds the fair value of the net tangible assets and liabilities assumed by \$2.0 million, which was allocated: \$662,000 to acquired technology, \$540,000 to employee workforce and \$807,000 to goodwill which are being amortized over a period of four years.

The accompanying unaudited pro forma consolidated financial statements are presented in accordance with Article 11 of Regulation S-X.

The accompanying unaudited pro forma consolidated statements of operations give effect to the acquisition of AISS as if it had occurred on January 1, 2000, by consolidating the results of operations of AISS with PDF for the year ended December 31, 2000.

The unaudited pro forma consolidated information is presented for illustrative purposes only, and is not necessarily indicative of the operating results or financial position that would have occurred if the transaction had been consummated at the dates indicated, nor is it necessarily indicative of future operating results or the financial position of the combined companies.

The unaudited pro forma consolidated financial statements should be read in conjunction with the historical financial statements of the Company and AISS.

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## PDF SOLUTIONS, INC.

# UNAUDITED PRO FORMA CONSOLIDATED STATEMENTS OF OPERATIONS YEAR ENDED DECEMBER 31, 2000

	PDF	AISS(1) JANUARY 1, 2000 TO APRIL 27, 2000	PRO FORMA ADJUSTMENTS	NOTES	PRO FORMA
Revenue:					
Design-to-silicon yield					
solutions	\$15,538,325	\$481,508	\$ (159,465)	(2)	\$15,860,368
Gain share	4,597,000				4,597,000
Total revenue	20,135,325	481,508	(159,465)		20,457,368
Costs and expenses:					
Cost of design-to-silicon yield					
solutions	6,915,001	205,930	(76,543)	(2)	7,044,388
Research and development	6,418,173	44,457	(82,922)	(2)	6,379,708
Selling, general and					
administrative	7,332,857	128,288	163,686	(3)	7,624,831

Offering costs Stock-based compensation	1,257,617				1,257,617
amortization	7,292,300				7,292,300
Total costs and expenses	29,215,948	378,675	4,221		29,598,844
Income (loss) from operations Interest income and other	(9,080,623) 346,895	102,833 (331)	(163,686) (23,216)	(4)	(9,141,476) 323,348
Income (loss) before taxes Tax provision (benefit)	(8,733,728) 363,000	102,502 29,969	(186,902) (80,549)	(5)	(8,818,128) 312,420
Net income (loss)	\$(9,096,728)	\$ 72,533	\$ (106,353)		\$(9,130,548)
Pro forma net loss per share basic and diluted(6)	\$ (1.24) 				\$ (1.24)
Shares used in computing pro forma basic and diluted net loss per share(6)	7,356,221				7,356,221

See notes to unaudited pro forma consolidated statements of operations.

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# PDF SOLUTIONS, INC.

NOTES TO UNAUDITED PRO FORMA CONSOLIDATED STATEMENTS OF OPERATIONS

The following pro forma adjustments have been made to the unaudited pro forma consolidated statements of operations:

- Amount translated from DM to US dollars using average annual exchange rate of DM1.998/\$ for the period January 1, 2000 to April 27, 2000, respectively.
- 2. Reflects the elimination of sales representing research and development services performed by AISS for the Company.
- 3. Reflects the amortization of intangible assets totaling \$2.0 million resulting from the acquisition on a straight line basis over four years.
- 4. Reflects interest charges on the notes payable issued in connection with the acquisition at the stated interest rate of 7%.
- 5. Reflects the net tax benefit of the pro forma adjustments at the statutory tax rate for the respective tax jurisdictions.
- 6. On July 6, 2001, the Company amended and restated its articles of incorporation to effect a two-for-three reverse stock split of the Company's common and preferred stock. The pro forma net loss per share -- basic and diluted and shares used in computing pro forma basic and diluted net loss per share have been restated to give effect to the two-for-three reverse stock split.

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[PDF Solutions, Inc. Logo]