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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

(mark one)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2003

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ___ to _____

000-31311
(Commission file number)

PDF SOLUTIONS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**25-1701361**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
333 West San Carlos Street, Suite 700 San Jose, California	**95110**
(Address of Registrant's principal executive offices)	(Zip Code)

(408) 280-7900
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Class	Name of Each Exchange on Which Registered
None	None

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, $0.00015 par value

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes ☑ No ☐

The aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately $121,150,177 as of the last business day of the Registrant's most recently completed second quarter, based upon the closing sale price on the Nasdaq National Market reported for such date. Shares of Common Stock held by each officer and director and by each person who owns 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

There were 25,479,186 shares of the Registrant's Common Stock issued and outstanding as of March 8, 2004.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates information by reference from the definitive Proxy Statement for our Annual Meeting of Stockholders to be held on May 19, 2004.

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PART I

Item 1. Business.

Some of the statements contained or incorporated by reference in this Annual Report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Words such as "will," "anticipate," "continue," "could," "projected," "expects," "believes," "intends" and "assumes" and similar expressions are used to identify forward-looking statements. These statements are made based upon current expectations and projections about our business and the semiconductor industry and assumptions made by our management are not guarantees of future performance, nor do we assume any obligation to update such forward-looking statements after the date this report is filed. Our actual results could differ materially from those projected in the forward-looking statements for many reasons, including the risk factors listed in Part II, Item 7., "Management's Discussion & Analysis of Financial Conditions and Results of Operations — Certain Risks that May Affect Our Future Results." All forward-looking statements in this report are based on information available to us at the date of this report and we assume no obligation to update any such statements.

The following information should be read in conjunction with the Consolidated Financial Statements and notes thereto included in the Annual Report. All references to fiscal year apply to our fiscal year which ends on December 31.

Business Overview

Our technologies and services enable semiconductor companies to improve the yield and performance of integrated circuits, or ICs, by integrating the design and manufacturing processes. We believe that our solutions improve a semiconductor company's time-to-market, yield and ultimately product profitability. Our solutions combine proprietary manufacturing process simulation software, yield and performance modeling software, design-for-manufacturability (DFM) software, test chips, a proprietary electrical wafer test system, yield and performance enhancement methodologies, yield management systems, and professional services. We analyze yield loss mechanisms to identify, quantify and correct the issues that cause yield loss, as an integral part of the IC design process. This drives IC design and manufacturing improvements that enable our customers to have higher initial yields and achieve and exceed targeted IC yield and performance throughout 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.

The result of implementing our solutions is the creation of value that can be measured based on improvements to our customers' actual yield. We align our financial interests with the yield and performance improvements realized by our customers, and receive revenue based on this value. To date, we have sold our technologies and services to semiconductor companies including leading integrated device manufacturers, fabless semiconductor companies and foundries. The key benefits of our solution to our customers are:

Faster Time to Market. Our solutions are designed to 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, decreasing 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 high initial yields. Our solutions are designed to decrease design and process iterations, reduce our customers' up-front costs and accelerate time to market, and thus provide 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 solutions are designed to enable our customers to isolate and eliminate remaining yield issues to achieve cost efficient volume manufacturing. 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 solutions enable our customers to quickly reach cost efficient volume, so that they are able to increase margins, improve their competitive position, and capture higher market share.

Increased Manufacturing Efficiencies. Our solutions for product design, product introduction and yield ramp are designed to allow our customers to achieve a higher final yield and therefore a lower cost of goods sold. In addition, our solutions are designed to provide our customers with the ability to proactively monitor process health to avoid potential yield problems.

Our objective is to provide the industry standard in technologies and services for integrating IC designs and manufacturing processes. To achieve this objective, we intend to:

Extend Our Technology Leadership Position. We intend to extend our technology leadership position by leveraging our experienced engineering staff and codifying the knowledge that we acquire in our solution implementations. For example, during 2003 we announced our DFM solution, which delivers the knowledge and benefits obtained from our extensive process characterization expertise to designers of ICs. In addition, we intend to selectively acquire complementary businesses and technologies to increase the scope of our solutions. For example, during 2003 we acquired IDS Software Systems, Inc., positioning ourselves to establish a de-facto standard for a yield management system by building on an installed base of more than 1,000 seats. Further, by adding the *data* POWER product to our solution, we strengthened the technology available to our professional services teams. We will continue to make investments in the development of proprietary methodologies and technologies, including manufacturing process simulation software, yield and performance modeling software, and yield management system (YMS) software, to accommodate our customers' increasingly complex semiconductor needs.

Leverage Our Gain Share Business Model. We intend to expand the gain share component of our customer contracts. We believe this approach helps us to form collaborative and longer-term relationships by aligning our financial success with that of our customers. 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 generate market-driven improvements that add value to our solutions. As our gain share customers succeed in improving their yield and performance while reducing costs, we believe that we will generate expanded relationships with these customers and new customer accounts based on these successes.

Focus on Key IC Product Segments. We intend to focus our solution on high-volume, high-growth IC product segments such as system-on-a-chip, consumer, communications networking, graphics and high-performance central processing units. As a result, we will expand our solution for technology drivers such as low-k dielectrics, copper, embedded DRAM, and 300mm wafer fabs, which are all somewhat new and relatively complex manufacturing 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. We intend to continue to extend and enhance our relationships with companies at various stages of the design-to-silicon process, such as manufacturing equipment vendors, electronic design automation vendors, silicon intellectual property providers, semiconductor foundries, and contract test and assembly houses. 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 and to increase industry awareness of our solutions.

Industry Background

Rapid technological innovation, with correspondingly short product life cycles, now fuels the economic growth of the semiconductor industry. Previously, companies could afford to take months, or years in some cases, to integrate new IC designs with manufacturing processes. With historically longer product life cycles, IC companies ramped production slowly, produced at high volume once products hit their prime, and slowly reduced production volume when price and demand started to decrease near the end of a product's life cycle. Now, companies often 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 revenue.

Increased IC complexity and compressed product lifecycles create significant challenges to achieving competitive initial yields and optimized performance. Yield is the percentage of ICs produced that meet customers' specifications, and initial yield is specifically the percentage of good ICs produced when volume production first commences. For example, it is not uncommon for an initial manufacturing run to yield only 20%, meaning 80% of

the ICs produced are 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 from random contamination in the IC manufacturing process. As the semiconductor industry moved to 130-nanometer process technology and beyond, the dominant factor of yield loss with nanometer-era 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.

Semiconductor manufacturers have traditionally addressed systematic and performance yield loss reactively and almost exclusively by trial-and-error adjustments to the manufacturing process during volume production, an inefficient and time consuming approach.

Disaggregation of the semiconductor industry has further complicated IC companies' ability to minimize systematic and performance yield losses. Historically, leading semiconductor companies designed, manufactured and tested their ICs internally, thus retaining process-design integration know-how. Today, the industry is comprised of separate organizations, as well as separate companies, that specialize in a particular phase of designing and manufacturing ICs. This has fragmented the knowledge related to the integration of IC design and manufacturing and resulted in great difficulty in making designs compatible with a manufacturing process prior to volume production.

Technology

We have developed proprietary technologies for yield simulation, analysis and improvement. We continually enhance our core technologies through the codification of knowledge that we gain in our solution implementations. Our technology includes:

- Algorithms and software, such as:
  - 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;
  - algorithms that compute an overall yield impact matrix for design as a function of layout elements and manufacturing yield models;
  - hierarchical representation of the layout, which encompasses layout manufacturing process proximity effects and minimizes the time necessary for computation of systematic yield prediction;
  - statistical process and device simulation, including simulation of circuit performance as a function of manufacturing process variations;
  - algorithms for efficient storage, rapid retrieval, merging and statistical analysis of very large and disparate manufacturing data sets;
  - algorithms for the visualization of spatial manufacturing data, including wafer map and defect data;
  - algorithms for web-based reporting of manufacturing data analysis;
  - algorithms for the optimization of reticle shot maps to improve the number of good die per wafer and or the throughput of the lithography cell; and
  - algorithms for the optimization of die placement on the wafer to improve the throughput of the test cell.
- Characterization Vehicle ® test chip designs and layouts, which are used to characterize the process, and establish fail-rate information needed to calibrate manufacturing yield models and build yield impact matrices;
- A highly parallel electrical functional-test system, comprised of hardware and software designed to provide an order-of-magnitude reduction in the time required to test our Characterization Vehicle test chips; and

• Methodologies that our implementation teams use as guidelines to drive our customers' adoption of our CV™ test chips and technologies, 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 solutions consist of integration engineering services, proprietary software and other technologies. We tailor our solution to our customers' specific business issues by offering one or more of the following solutions:

Manufacturing Process Solutions. IC manufacturing process development typically involves three sequential phases: research and development to establish unit manufacturing processes, such as units for the metal chemical mechanical polishing (CMP) or lithography processes; integration of these unit processes into functional modules, such as metal or contact modules; and a yield ramp of lead products through the entire manufacturing line. We offer solutions targeted to each of these phases that are designed to accelerate the efficiency of yield learning, by shortening the learning cycle, learning more per cycle and reducing the number of silicon wafers required. Our targeted offerings include:

- *Process R&D*: Our process R&D solutions are designed to help customers increase the robustness of their manufacturing processes by characterizing and reducing the variability of unit processes and device performance with respect to layout characteristics within anticipated process design rules.

- *Process Integration and Yield Ramp*: Our process integration and yield ramp solutions are designed to enable our customers to more quickly ramp the yield of new products early in the manufacturing process by characterizing the process-design interactions within each key process module, simulating product yield loss by process module, and prioritizing quantitative yield improvement by design blocks in real products.

Product Engineering Solutions. In IC manufacturing, product engineering binds design, manufacturing and test together to ensure reliable shipment of packaged parts, not only during initial product insertion, but also during yield ramp and volume production. Our product engineering solutions are focused on product yield and performance, and are designed to enable high insertion yields and rapid ramps to mature yield in volume manufacturing. We deliver these solutions through a combination of software and services targeted as follows:

- *Product Engineering Software*: Our product engineering software enables our customers to optimize the manufacturability of high-volume products for yield and performance. Our yield management system handles large sets of yield data from multiple sites and locations, allowing engineers to focus on yield improvements, not data gathering. Optional software modules allow for rapid yield signature detection, characterization and diagnosis at all levels of map analysis from memory bits to wafers to final packaged parts with die ID traceability.

- *Product Signature Analysis and Product Yield Ramp Services*: Our product engineering services are designed to leverage our product engineering software through proprietary methods that tailor our solutions based on customer-specific criteria for maximum potential benefit. Since each semiconductor company organizes product engineering differently, these services are necessary to deliver the full capability of our collective experience, which is embedded in our software, technology and methods. These services are designed to seamlessly integrate with our manufacturing process solutions.

Design-for-Manufacturability (DFM) Solutions. Our DFM solutions are designed to enable our customers to optimize yields within the design cycle before a design is sent to the mask shop to more quickly and cost-effectively manufacture IC products. We target these solutions to customers' requirements by providing the following:

- *Logic DFM* Solutions. These solutions include software, intellectual property and services designed to make yield improvements by trading off density or performance, for example, in the logic portions of an IC design. Our software helps designers optimize the yield of the logic portion by using process specific yield models and technology files that include yield enhanced extensions to intellectual property design building block elements.

- *Circuit Level DFM* Solutions. These solutions include software and services designed to anticipate the effects of process variability during analog/mixed signal/RF circuit design to optimize the manufacturability of each block given a pre-characterized manufacturing process.

- *Memory DFM* Solutions. These solutions include software and services designed to optimize the memory redundancy and bit cell usage given a pre-characterized manufacturing process.

Each of our solutions incorporate the use of various elements of our software and other technologies depending on the customers' needs. In general, our professional service teams select from our following products:

Characterization Vehicle (CV) infrastructure. Our test chip design engineers develop a design of experiments, or DOE, to determine how IC design building blocks interact with the manufacturing process. Our CV software utilizes the DOE, as well as a library of building blocks that we know has potential yield and performance impact, to generate CV test chip layouts. Our CV infrastructure includes:

- *CV Test Chips.* Our priority test chips are run through the manufacturing process with intentional process modifications to explore the effects of potential process improvements given natural manufacturing variations.

- *pdCV™ Analysis Software.* Our proprietory software is then used to accumlate data from our CV test chips, enabling models of the performance effects of process variations on these design building blocks to be generated for use with our Yield Ramp Simulator software.

- *pdFasTest™ Electrical Wafer Test System.* Our proprietory system enables fast defect characterization of manufacturing processes. This automated system provides parallel functional testing, thus minimizing the time required to perform millions of electrical measurements to test our CV test chips.

Yield Ramp Simulator® (YRS ®) Software. Our YRS software analyzes an IC design to compute its systematic and random yield loss. YRS software allows design attribute extraction and feature-based yield modeling. YRS software takes as input a layout that is typically in industry standard format and proprietary yield models generated by running our CV test chips. YRS software is designed to estimate the yield loss due to optical proximity effects, etch micro-loading, dishing in chemical mechanical polishing, and other basic process issues.

Circuit Surfer® Software. Our Circuit Surfer software estimates the parametric performance yield and manufacturability of analog/mixed-signal/RF blocks in a design, such as RF transmission, PLLs/DLLs and logic critical paths. Using our Circuit Surfer software, a design engineer is able to estimate how manufacturing process variations will impact circuit performance and yield and then optimizes the circuit to reduce or eliminate the impact of those variations.

pDfx™ Environment. Our pDfx environment improves the manufacturability of ICs by providing process-aware DFM. The environment includes software and a technology kit to optimize yield, performance, power and area trade-offs within the design flow before the IC is released to manufacturing. In this manner, customers can further optimize designs for yield within their specific guidelines.

*data*POWER™ *YMS Platform.* Our *data*POWER yield management software platform collects yield data, stores it in databases and allows product engineers to identify and analyze production yield issues using proprietary yield analysis software tools. *data*POWER software contains powerful visualization and reporting tools that are flexible to address customers' requirements. Our YMS is designed to handle very large data sets, to efficiently improve productivity, yield and time-to-market at our customers' sites.

WAMA™ (WAfer MApping) Software Suite. Our *WAMA* software enables the optimization and trade-off of yield and throughput based on proprietary wafer-level analyses applied to optimizing the placement of die on the wafer. *WAMA* software is designed to be compatible with major steppers, scanners and probers. We have designed *WAMA* software to integrate seamlessly into our customers' lines, requiring no changes to the mask-set or manufacturing process.

With the exception of *data*POWER, *WAMA* and pDfx, the primary distribution method for our software and technologies is through our manufacturing process solutions although, we have in the past and may in the future separately license these and other technologies. Though *data*POWER, *WAMA* and pDfx are primarily licensed separately, they may also be distributed within our Design-to-Silicon-Yield solutions.

Customers

Our current customers are primarily integrated device manufacturers, or IDMs, but also include fabless semiconductor design companies and foundries. Our customers' targeted product segments vary significantly, including microprocessors, graphics, memory and communications. We believe that the adoption of our solutions by such companies validates the application of our Design-to-Silicon-Yield solutions to the broader market.

Toshiba Corporation, Sony Corporation, Matsushita Electric Industrial Co., and Epson Corporation represented 25%, 15%, 13% and 11%, respectively, of our total revenue for the year ended December 31, 2003. Toshiba, Matsushita and Sony represented 25%, 22% and 17%, respectively, of our total revenue for the year ended December 31, 2002. Toshiba and Matsushita represented 34% and 29%, respectively, of our total revenue for the year ended December 31, 2001. No other customer accounted for 10% or more of our revenue in years 2003, 2002 and 2001.

Sales And Marketing

Our sales strategy is to pursue targeted accounts through a combination of our direct sales force and strategic alliances. For sales in the United States, we rely on our direct sales team, which primarily operates out of our San Jose, California headquarters. In Japan, we use our direct sales team as well as Innotech Corporation, a semiconductor sales and distribution company located in Japan. In Taiwan and China we use Marketech International Corporation as a sales representative for our *data*POWER and *WAMA* software products. We expect to continue to establish 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.

During 2003, we derived 70% of our revenue from customers based in Japan as compared to 71% of our total revenue from customers in Japan in the year ended December 31, 2002 and 77% in the year ended December 31, 2001. Approximately 22% of our revenue was derived from customers located in the United States in the year ended December 31, 2003 as compared to 13% and 14%, respectively, in the years ended December 31, 2002 and December 31, 2001.

We strive to provide value in our initial engagement to solidify relationships at the executive level. Early in the solution implementation, our engineers seek to establish relationships in the organization and gain an 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.

Research And Development

Our research and development focuses on developing and introducing new proprietary technologies, software products and enhancements to our existing solutions. We use a rapid-prototyping paradigm in the context of the customer engagement to achieve these goals.

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 our team of engineers will continue to advance our market and technological leadership. We conduct in-house training for our engineers in the technical areas, as well as focusing on ways to enhance client service skills. At any given time, about one quarter of our research and development engineers are operating in the field, partnered with solution implementation engineers in a deliberate strategy to provide direct feedback between technology development and customer needs. Our research and development expenses were approximately $18.4 million, $15.2 million and $12.2 million in 2003, 2002 and 2001, respectively.

Competition

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 process-design integration technologies and services is in its early stages, it is rapidly evolving and we expect competition to develop and continue to increase. We believe the solution to address IC companies needs requires a unified system of yield models, design analysis software, CV test chips and yield management software. Currently, we are the only provider of commercial solutions for integrating design and manufacturing processes. We face indirect competition from internal groups at IC companies that use an incomplete set of components that are not optimized to accelerate process-design integration. Some providers of yield management software, inspection equipment, or electronic design automation may seek to broaden their product offerings and compete with us.

However, we do face competition for some of the point applications of our solutions. Specifically there are several suppliers of yield management systems, such as KLA-Tencor and Yield Dynamics. While we currently face no direct competition for our DFM solutions, there are alternative offerings from electronic design automation companies.

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

- demonstrated results and reputation;
- strength of existing customer relationships;
- breadth and effectiveness of sales channel;
- 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 systems, methods and technologies and prevent competitors from using our systems, methods and technologies in their products. As of December 31, 2003 we have been issued 3 U.S. patents and 1 German patent and have 18 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 on 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.

Characterization Vehicle®, Circuit Surfer®, Optissimo®, PDF Solutions®, Yield Ramp Simulator® and YRS® are our registered trademarks, and CV™ *data*POWER™, Design-to-Silicon-Yield™, pdFasTest™, pDfx™ and *WAMA*™ are our trademarks. All other brand names and trademarks appearing in the document are the property of their respective holders.

Employees

As of December 31, 2003, we had 262 employees, including 90 on client service teams, 117 in research and development, 25 in sales and marketing and 30 in general and administrative functions. 194 of these employees are

located in San Jose/San Diego, California, 22 are located in Texas and other parts of the United States, 25 are located in Germany, 8 are located in Japan, 12 are located in Italy, and one employee is located in the Netherlands. Of our 262 total employees, 210 are engineers, 160 of which have advanced degrees including 89 with Ph.Ds.

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

Executive Officers

The following table and notes set forth information about our executive officers as of December 31, 2003:

Name	Age	Position
John K. Kibarian, Ph.D.	39	Chief Executive Officer, President and Director
P. Steven Melman	49	Chief Financial Officer and Vice President, Finance and Administration
David A. Joseph	50	Chief Strategy Officer
Rebecca Baybrook, Ph.D.	52	Vice President, Human Resources
Michael Buehler-Garcia	46	Vice President, Marketing
Thomas F. Cobourn, Ph.D.	43	Vice President, Yield Analysis
Cees Hartgring, Ph.D.	50	Vice President, Worldwide Sales and Strategic Business Development
Andre Hawit	42	Vice President, Software Development
James Jensen	51	Co-Vice President, Client Services
Kimon Michaels, Ph.D.	37	Co-Vice President, Client Services and 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.

P. Steven Melman has served as Chief Financial Officer and Vice President, Finance and Administration since July 1998. Prior to joining PDF, 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.

David A. Joseph has served as Chief Strategy Officer since April 2003. Mr. Joseph served as Executive Vice President Sales, Marketing, and Business Development from August 2001 through March 2003. He served as Vice President, Products and Methods from July 1999 through August 2001 and as Vice President, Business Development from November 1998 through June 1999. Prior to joining PDF, 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.

Rebecca Baybrook has served as Vice President, Human Resources since May 2002. Prior to joining PDF, from September 2001 to April 2002, Ms. Baybrook served as Sr. Director, Human Resources for Vitria Technologies, an integrated software company. From October 1999 to July 2001 she served as Director, Human Resources for 3Com, a telecommunications company. From January 1986 to September 1999, Ms. Baybrook served as Assistant Vice President of Human Resources for Knight Ridder, Inc. Ms. Baybrook received B.A. degree from Westmont College and a Ph.D. in Organizational Psychology from University of South Florida.

Michael Buehler-Garcia has served as Vice President of Marketing since March 2003. Prior to joining PDF, from May 2000 to February 2003, Mr. Buehler-Garcia held various positions at Chartered Semiconductor Manufacturing, a semiconductor foundry company, most recently as Vice President of Business Development and Worldwide Marketing. From January 1996 to April 2000, he was Group Director of Strategic Relationship Marketing at Cadence Design Systems, an electronic design automation company. From 1981 to 1996 he held various positions in the space and technology group and semiconductor unit of Motorola. Mr. Buehler-Garcia has a B.S. in Mechanical Engineering and Energy Systems from Arizona State 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.

Cees Hartgring Ph.D., has served as Vice President, Worldwide Sales and Strategic Business Development since April 2003. Mr. Hartgring served as Vice President of Sales from September 2002 through March 2003. Prior to joining PDF, from May 2000 to August 2001, he served as President and CEO of Trimedia Technologies, a Philips Semiconductor spinout. From August 1990 to April 2000, he held various executive positions at Philips Semiconductor most recently as Vice President and General Manager of the Trimedia business unit. Mr. Hartgring has an undergraduate degree from the Technical University Delft and a M.S.E.E. and a Ph.D. in Electrical Engineering and Computer Science from UC Berkeley.

Andre Hawit has served as Vice President, Software Development since September 2003. Prior to joining PDF, Mr. Hawit was the founder of IDS Software Systems Inc. a yield management systems software and solutions company. From October 1991 through August 2003, he held various positions within IDS including President and Chief Executive Officer, and most recently as Chief Technology Officer. Mr. Hawit received a B.S. in Electronics and Computer Engineering from San Francisco State University and an MBA from National University School of Business.

James Jensen has served as Co-Vice President, Client Services since November 2003. Mr. Jensen served as Director of Business Development, Integrated Yield Ramp Solutions, from March 2002 through October 2003. Prior to joining PDF, from July 1996 through February 2002, he served as General Manager of a semiconductor fabrication facility of Texas Instruments, a semiconductor products company. From November 1989 through June 1996, Mr. Jensen served as Fabrication Operations Director for Silicon Systems Inc., a semiconductor products company. Mr. Jensen received a B.S. in Physics from the University of Utah and a M.S. in Management from Purdue University.

Kimon Michaels, Ph.D., one of our founders, has served as Co-Vice President, Client Services since November 2003, and has been a Director since November 1995. From March 1993 through October 2003, he served in various Vice Presidential capacities. 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.

Available Information

Our Internet website address is www.PDF.com. You may obtain, free of charge on our Internet website, copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. The information we post is intended for reference purposes only; none of the information posted on our website is part of this report or incorporated by reference herein.

Item 2. Properties.

Our principal executive offices are located in San Jose, California where we lease approximately 40,600 square feet under two leases, one for 39,100 and the other for 1,500 square feet which expire in January 2008 and October 2004, respectively. We lease 11,200 square feet of office and laboratory space in San Diego, California under a lease that expires in March 2008. We lease 5,100 square feet in Dallas, Texas under a lease that expires in May 2005. We lease 9,500 square feet in Foster City, California under two leases of 6,500 and 3,000 square feet that expire in November 2004 and September 2007, respectively. In addition, we lease 11,000 square feet in Munich, Germany, 1,600 square feet in Tokyo, Japan and 3,500 square feet in Desenzano, Italy under leases that expire in January 2007, April 2004, and December 2008, respectively. We believe our existing facilities and those in negotiation are adequate to meet our current needs and are being utilized in line with our past experience.

Item 3. 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. This litigation was settled by all parties in the quarter ended June 30, 2002. All expenses related to the lawsuit have been reflected in our current financial statements.

Item 4. Submission of Matters to a Vote of Security Holders.

None.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.

Our common stock has traded on the Nasdaq National Market under the symbol "PDFS" since our initial public offering on July 26, 2001. As of March 8, 2004 we had approximately 225 stockholders of record and the closing price of our common stock was $11.37 per share as reported by the Nasdaq National Market.

The following table sets forth for the periods indicated the high and low closing sale prices for our common stock as reported by the Nasdaq National Market:

2003	High	Low
First Quarter	$ 7.60	$ 5.24
Second Quarter	$13.15	$ 6.39
Third Quarter	$13.75	$ 9.31
Fourth Quarter	$15.10	$10.97

2002	High	Low
First Quarter	$20.50	$13.05
Second Quarter	$17.18	$ 6.53
Third Quarter	$ 8.00	$ 4.95
Fourth Quarter	$ 9.10	$ 5.46

The information under the heading "Equity Compensation Plan Information" in our definitive Proxy Statement for our 2004 Annual Meeting of Stockholders to be held on May 19, 2004, to be filed with the SEC (our "Proxy Statement"), is incorporated into Item 5. of this report by reference.

No cash dividends were declared or paid in 2003 or 2002. We currently intend to retain all available funds to finance future internal growth and product development and do not anticipate paying any cash dividends on our common stock for the foreseeable future.

Use of Proceeds

Our first registration statement, filed on Form S-1 (Registration No. 333-43192) related to our initial public offering was declared effective by the SEC on July 26, 2001. There has been no change to the disclosure contained in our report on Form 10-Q for the quarter ended September 30, 2003 with respect to the use of proceeds generated by our initial public offering.

Recent Sales of Unregistered Securities

During the three months ended September 30, 2003, we issued 2,000,000 shares of common stock to the holders of common stock of IDS, effective September 24, 2003, in connection with our acquisition of IDS. As a result of our acquisition of IDS, each issued and outstanding share of IDS common stock was converted into the right to receive $1.52 in cash and 0.132 of a share of PDF common stock. We issued such shares, without registration under the Securities Act of 1933, in reliance upon the exemption set forth in Section 3(a)(10) of the Securities Act of 1933.

Item 6. Selected Financial Data.

The following selected financial information has been derived from the audited consolidated financial statements. The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes to those statements included herein and in Part II of this Form 10-K, respectively.

	Year Ended December 31,				
	2003(1)	2002	2001	2000	1999
	(In thousands, except per share data)				
Consolidated Statements Of Operations Data:					
Revenue:					
Design-to-silicon-yield solutions	$35,629	$33,685	$28,115	$16,673	$11,118
Gain share	6,897	10,039	8,733	4,597	1,257
Total revenue	42,526	43,724	36,848	21,270	12,375
Costs and expenses:					
Cost of design-to-silicon-yield solutions:					
Direct costs of design-to-silicon-yield solutions	14,412	14,986	13,219	8,050	4,642
Amortization of acquired core technology	2,168	164	164	—	—
Research and development	18,441	15,247	12,196	6,418	3,087
Selling, general and administrative	12,459	10,188	10,505	7,332	4,295
Offering costs	—	—	—	1,258	—
Stock-based compensation amortization*	1,755	2,711	7,371	7,293	68
Amortization of other acquired intangible assets	547	—	337	—	—
Write-off of in-process research and development	800	—	—	—	—
Total costs and expenses	50,582	43,296	43,792	30,351	12,092
Income (loss) from operations	(8,056)	428	(6,944)	(9,081)	283
Interest and other income, net	1,195	1,549	1,232	347	105
Income (loss) before taxes	(6,861)	1,977	(5,712)	(8,734)	388
Income tax provision (benefit)	(2,345)	1,453	(1,840)	363	533
Net income (loss)	(4,516)	524	(3,872)	(9,097)	(145)
Preferred dividend	—	—	(1,619)	—	—
Net income (loss) attributable to common stockholders	$ (4,516)	$ 524	$ (5,491)	$ (9,097)	$ (145)
Net income (loss) per share:					
Basic	$ (0.19)	$ 0.02	$ (0.38)	$ (1.24)	$ (0.02)
Diluted	$ (0.19)	$ 0.02	$ (0.38)	$ (1.24)	$ (0.02)
Weighted average common shares:					
Basic	23,278	21,962	14,425	7,356	6,086
Diluted	23,278	23,199	14,425	7,356	6,086
*Stock-Based Compensation Amortization:					
Cost of design-to-silicon-yield solutions	$ 345	$ 826	$ 1,996	$ 1,715	$ 20
Research and development	1,099	1,341	3,227	4,016	48
Selling, general and administrative	311	544	2,148	1,562	—
	$ 1,755	$ 2,711	$ 7,371	$ 7,293	$ 68

	December 31,				
	2003(1)	2002	2001	2000	1999
	(In thousands)				
Consolidated Balance Sheets Data:					
Cash and cash equivalents	$ 39,110	$71,490	$70,835	$ 7,626	$1,933
Working capital	42,613	73,569	69,994	3,708	2,153
Total assets	123,967	89,047	83,316	15,514	5,644
Convertible preferred stock	—	—	—	8,457	3,497
Total shareholders' equity (deficiency)	106,552	78,742	72,884	(2,026)	(512)

(1) In May 2003, we completed our acquisition of certain assets and liabilities of WaferYield, Inc., which related to certain wafer shot map optimization technology. The aggregate purchase price was $4.1 million, which included cash payments of $2.6 million and the recognition of $1.5 million in other liabilities associated with future payments that are contingent upon the attainment of certain revenue performance objectives.

In September 2003, we completed our acquisition of IDS which developed and sold yield management software applications and services. The aggregate purchase price was $51.0 million which included the payment in cash of $23.0 million, the issuance of 2.0 million shares of PDF common stock valued at $25.0 million, the assumption of stock options valued at $1.7 million and acquisition costs of $1.3 million.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Forward-Looking Statements

You should read the following discussion in conjunction with our consolidated financial statements and notes set forth under "Item 8. Financial Statements and Supplementary Data" and "Certain Risks Which May Affect Our Future Results" included in this Item 7. The results described below are not necessarily indicative of the results to be expected in any future period. Certain statements in this discussion and analysis, including statements regarding our strategy, financial performance and revenue sources, are forward-looking statements based on current expectations and entail various risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements, including those described in "Certain Risks Which May Affect Our Future Results" and elsewhere in this Form 10-K.

Overview

Our technologies and services enable semiconductor companies to improve the yield and performance of integrated circuits, or ICs, by integrating the design and manufacturing processes. We believe that our solutions improve a semiconductor company's time-to-market, yield and ultimately product profitability. Our solutions combine proprietary manufacturing process simulation software, yield and performance modeling software, design-for-manufacturability software, test chips, a proprietary electrical wafer test system, yield and performance enhancement methodologies, yield management systems, and professional services. We analyze yield loss mechanisms to identify, quantify and correct the issues that cause yield loss, as an integral part of the IC design process. This drives IC design and manufacturing improvements that enable our customers to have higher initial yields and achieve and exceed targeted IC yield and performance throughout 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. The result of implementing our solutions is the creation of value that can be measured based on improvements to our customers' actual yield. We align our financial interests with the yield and performance improvements realized by our customers, and receive revenue based on this value. To date, we have sold our technologies and services to semiconductor companies including leading integrated device manufacturers, fabless semiconductor companies and foundries.

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 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, or AISS, now operating as PDF Solutions, GmbH, which continues to develop software and provide development services to the semiconductor industry. In July 2001, we completed the initial public offering of our common stock. In 2003, we further enhanced our product and service offerings through the acquisition of IDS Software Systems, Inc. and through the purchase of certain assets and liabilities of WaferYield, Inc.

Industry Trend

Demand for consumer electronics continues to drive technological innovation as the need for products which have greater performance, lower power consumption, reduced costs and smaller size continues to grow with each new product generation. To meet this demand, IC manufacturers and designers are constantly challenged to improve the overall performance of ICs by designing and manufacturing ICs with more embedded applications to create greater functionality. As a result, in 2003 more and more companies expanded or advanced their design and manufacturing processes to develop and produce deep submicron ICs containing component sizes measured at 130 nanometers and below. As this trend continues, companies will continually be challenged to improve process capabilities to optimally produce ICs with minimal systematic and yield loss, which is driven by the lack of compatibility between the design and its respective manufacturing process. Historically, yield loss was predominantly the result of random contamination, or defect limited yield, within the IC manufacturing process. We believe as volume production of deep submicron ICs continues to grow, the difficulties of integrating IC designs with their

respective processes will create a greater need for our products and services that address the performance yield loss issues the semiconductor industry is facing today and will face in the future.

Financial Highlights

During 2003, we continued to see greater adoption of our products and services through the expansion of our customer base both domestically and internationally. During 2003, we achieved better penetration into U.S.-based semiconductor companies as evidenced by revenues from domestic customers accounting for 22% of total revenue in 2003 compared to 13% of total revenue in 2002. Revenue from Design-to-Silicon-Yield solutions increased to $35.6 million in 2003 compared to $33.7 million in 2002. This increase was the result of an increase in the number of integration and yield ramp engagements as well as increased sales of our software products primarily associated with new products obtained from the acquisition of IDS. Gain share revenue decreased to $6.9 million in 2003 compared to $10.0 million in 2002. This decrease was primarily the result of a transition from older gain share contracts whose gain share periods had expired, coupled with lower production volumes by our customers at newer technology nodes. Our gain share revenue may continue to fluctuate from quarter to quarter as a result of each customer's contractual performance measures for achieving gain share as well as each customer's production volumes in any given period. During 2003, we reported a net loss of $4.5 million compared to net income of $524,000 in 2002. The net loss during 2003 was primarily attributable to increased operating expenses. Research and development expenses grew to $18.4 million in 2003 from $15.2 million in 2002, a result of increased personnel-related expenses primarily driven by our two acquisitions. Selling, general and administrative expenses increased to $12.5 million in 2003 from $10.2 million in 2002 as a result of increased sales representative commissions and other personnel-related costs. We recorded additional acquisition related charges during 2003 associated with our acquisitions of IDS and certain assets from WaferYield, including an increase in the amortization of core technology of $2.0 million, the write-off of in-process research and development of $800,000 and amortization of other acquired intangible assets of $547,000. These increased expenses were partially offset by a more favorable effective tax rate as we recorded a tax benefit during 2003. We will continue to monitor and control costs, relative to our revenue growth.

Acquisitions

On May 31, 2003, we completed our acquisition of certain assets and liabilities of WaferYield, which primarily included WaferYield's proprietary shot map *WAMA*™ technology and related business. The *WAMA* product offering is designed to optimize semiconductor wafer shot maps to help semiconductor companies achieve greater yield and net die per wafer, higher stepper throughput and reduced probe test cost. We believe that this acquisition adds to our product offering and our capabilities in enabling semiconductor companies to improve yield and performance of ICs. The aggregate purchase price was $4.1 million, which included cash payments of $2.6 million and the recognition of $1.5 million in other liabilities associated with future payments that are contingent upon the attainment of certain revenue performance objectives.

On September 24, 2003, we completed our acquisition of IDS. IDS developed and licensed yield management software applications and provided services to enable customers to efficiently gather, retrieve and analyze manufacturing data, identifying areas for yield improvement. We believe that our acquisition of IDS will provide our customers with greater capabilities for managing product yield improvement through the use of the acquired technology and services. The aggregate purchase price was $51.0 million which included the payment in cash of $23.0 million, the issuance of 2.0 million shares of our common stock valued at $25.0 million, the assumption of stock options valued at $1.7 million and acquisition costs of $1.3 million. In connection with the acquisition, $1.0 million in cash and 400,000 shares of common stock have been held in escrow as security against certain financial contingencies. Cash payments held in escrow, less any amounts deducted to satisfy contingencies, will be released no later than the 24-month anniversary following the completion of the acquisition. Fifty percent of the shares held in escrow, less any amounts deducted to satisfy contingencies, shall be released upon the 12-month anniversary of the acquisition and the remaining shares shall be released upon the 24-month anniversary of the acquisition. In connection with the acquisition, we recorded $39.9 million in goodwill, net of subsequent adjustments, reflecting the excess of the purchase paid over the identifiable assets assumed in the acquisition.

It is our strategic objective to provide industry standard technologies and services to integrate IC designs and manufacturing processes. With over 30 semiconductor companies as customers and an installed base of over 1000 *data*POWER users, the acquisition of IDS not only provides us with future revenue streams through the existing product offerings while strengthening the technology available to our professional services teams, but also positions us to establish a de-facto standard for yield management systems in the semiconductor industry. The acquisition broadens our reach into fabrication facilities, providing visibility, analysis capability and data collection from assembly and test equipment on a standardized platform from which we can offer additional standard PDF applications. We believe that the collective technology base will also create a substantial market opportunity to address the needs of product engineers who, in our opinion, represent a largely underserved segment, since they are not normally within the organizations served either by the equipment or EDA companies. Nonetheless, the needs of the product engineer, and the financial impact of their work, are dramatically increasing with the further disaggregation of the industry combined with increasing product-specific yield and performance sensitivities at advanced technology nodes. We believe the IDS acquisition allows us, in the longer term, to provide products and services to fulfill this need.

Critical Accounting Policies

Financial Reporting Release No. 60 requires all companies to include a discussion of critical accounting policies or methods used in the preparation of financial statements. Note 1 of the notes to the consolidated financial statements includes a summary of the significant accounting policies and methods used in the preparation of our consolidated financial statements. The following is a brief discussion of the more significant accounting policies and methods that we use.

General

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Our preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We based our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. The most significant estimates and assumptions relate to revenue recognition, software development costs, recoverability of goodwill and acquired intangible assets, estimated useful lives of acquired intangibles and the realization of deferred tax assets. Actual amounts may differ from such estimates under different assumptions or conditions.

Revenue Recognition

We derive revenue from two sources: Design-to-Silicon-Yield solutions and gain share. We recognize revenue in accordance with the provisions of American Institute of Certified Public Accountants Statement of Position ("SOP") No. 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts* and SOP No. 97-2, *Software Revenue Recognition*, as amended.

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 as follows:

Solution Implementations — We generate a significant portion our revenue from fixed-price contracts delivered over a specific period of time. These contracts require the accurate estimation of the cost to perform obligations and the overall scope of each engagement. 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 revisions become known and can be estimated. If we do not accurately estimate the resources required or the scope of work to be performed, or do not manage the projects properly within the planned period of time or satisfy our obligations under contracts, resulting contract margins could be materially different than those anticipated when the contract was executed. Any such reductions in contract margin could have a material negative impact on our operating results.

On occasion, we have licensed our software products as a component of our fixed price solutions implementations. In such instances, the software products are licensed to the customer over the specified term of the agreement with support and maintenance to be provided over the license term. Under these arrangements, where vendor-specific objective evidence of fair value does not exist to allocate a portion of the total fee to the undelivered elements, revenue is recognized ratably over the term of the agreement. Costs incurred under these arrangements are deferred and recognized in proportion to revenue recognized under these arrangements.

Software Licenses — We have also licensed our software products separate from our solution implementation services. In such cases revenue is recognized under the residual method when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) the fee is fixed or determinable, (iv) collectibility is probable and the arrangement does not require services that are essential to the functionality of the software. When arrangements include multiple elements such as support and maintenance, consulting (other than for our fixed price solution implementations), installation and training services, revenue is allocated to each element of a transaction based upon its fair value as determined by our vendor specific objective evidence (VSOE). VSOE is generally established for maintenance based upon negotiated renewal rates while VSOE for consulting, installation and training services is established based upon our customary pricing for such services when sold separately. Revenue from support and maintenance services is recognized ratably over the term of the support and maintenance contract, generally one year, while revenue from consulting, installation and training services is recognized as the services are performed. When VSOE does not exist to allocate a portion of the total fee to the undelivered elements revenue is recognized ratably over the term of the underlying element for which VSOE does not exist. No revenue has been recognized under arrangements with extended payment terms in excess of amounts due.

Gain Share — Gain share revenue represents profit sharing and performance incentives earned based upon our customers reaching certain defined operational levels. Upon achieving such operational levels, we receive either a fixed fee and/or variable fee based on the units sold by the customer. Due to the uncertainties surrounding attainment of such operational levels, we recognize gain share revenue (to the extent of completion of the related solution implementation contract) upon receipt of performance reports or other related information from our customers supporting the determination of amounts and probability of collection. Our continued receipt of gain share revenue is dependent on many factors which are outside our control, including among others, continued production of the related ICs by our customers, sustained yield improvements by our customers and our ability to enter into new Design-to-Silicon-Yield solutions contracts containing gain share provisions.

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 we believe our current process for developing software is essentially completed concurrently with the establishment of technological feasibility, no costs have been capitalized to date.

Goodwill and Acquired Intangible Assets

As of December 31, 2003, we had $63.5 million of goodwill and intangible assets. In assessing the recoverability of our goodwill and intangible assets, we must make assumptions regarding estimated future cash flows and other factors. If these estimates or their related assumptions change in the future, we may be required to record impairment charges for these assets. We evaluate goodwill for impairment pursuant to the provisions of SFAS No. 142, *Goodwill and Other Intangible Assets*. As of December 31, 2003, we completed our annual testing requirements and determined that the carrying value of goodwill had not been impaired.

We are currently amortizing our acquired intangible assets over estimated useful lives of periods ranging from 1 to 4 years, which is based on the estimated period of benefit to be delivered from such assets. However, a decrease in the estimated useful lives of such assets will cause additional amortization expense or an impairment of such asset in future periods.

Realization of Deferred Tax Assets

Realization of deferred tax assets is dependent on our ability to generate future taxable income and utilize tax planning strategies. We have recorded a deferred tax asset in the amount that is more likely than not to be realized based on current estimations and assumptions. We evaluate the valuation allowance on a quarterly basis. Any resulting changes to the valuation allowance will result in an adjustment to income in the period the determination is made.

Results of Operations

The following table sets forth, for years indicated, the percentage of total revenue represented by the line items reflected in our consolidated statements of operations:

	Years Ended December 31,		
	2003	2002	2001
Revenue:			
Design-to-silicon-yield solutions	84%	77%	76%
Gain share	16	23	24
Total revenue	100	100	100
Costs and expenses:			
Cost of design-to-silicon-yield solutions:			
Direct costs of design-to-silicon-yield solutions	34	34	36
Amortization of acquired core technology	5	—	—
Research and development	44	35	33
Selling, general and administrative	29	24	29
Stock-based compensation amortization	4	6	20
Amortization of other acquired intangible assets	1	—	1
Write-off of in-process research and development	2	—	—
Total costs and expenses	119	99	119
Income (loss) from operations	(19)	1	(19)
Interest and other income	3	3	3
Income (loss) before taxes	(16)	4	(16)
Income tax (benefit) provision	(6)	3	(5)
Net income (loss)	(10)	1	(11)
Preferred dividends	—	—	(4)
Net income (loss) attributable to common stockholders	(10)%	1%	(15)%

Years Ended December 31, 2003 and 2002

Revenue	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Design-to-silicon-yield solutions	$35,629	$33,685	$ 1,944	6%	84%	77%
Gain share	6,897	10,039	(3,142)	(31)%	16%	23%
Total	$42,526	$43,724	$(1,198)	(3)%	100%	100%

Design-to-Silicon-Yield Solutions. Design-to-Silicon-Yield solutions revenue is derived from solution implementations, software licenses and software support and maintenance. The increase in Design-to-Silicon-Yield solutions revenue of $1.9 million in 2003 compared to 2002 was attributable to a greater number of solution implementations as well as an increase in sales of our software applications primarily from newer products obtained in our acquisition of IDS.

Gain Share. Gain share revenue represents profit sharing and performance incentives earned based upon our customer reaching certain defined operational levels. This decrease in gain share revenue of $3.1 million in 2003 compared to 2002 was primarily the result of a transition from older gain share contracts whose gain share periods had expired, coupled with lower production volumes by our customers at newer technology nodes. Our gain share

revenue may continue to fluctuate from period to period. Our continued receipt of gain share revenue is dependent on many factors which are outside our control, including among others, continued production of ICs by our customers, sustained yield improvements by our customers and our ability to enter into new Design-to-Silicon-Yield solutions contracts containing gain share provisions.

Cost of Design-to-Silicon-Yield Solutions	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Direct costs of design-to-silicon-yield solutions	$14,412	$14,986	$ (574)	(4)%	34%	34%
Amortization of acquired core technology	2,168	164	2,004	1,222%	5%	0%
Total	$16,580	$15,150	$ 1,430	9%	39%	34%

Direct Costs of Design-to-Silicon-Yield Solutions. Direct costs of Design-to-Silicon-Yield solutions consist of material, labor and overhead costs associated with solution implementations. Costs include purchased material, employee compensation and benefits, travel and facilities related costs. The decrease in the direct costs of Design-to-Silicon-Yield solutions of $574,000 in 2003 compared to 2002 was primarily attributable to better utilization of client services resources and a more favorable mix of Design-to-Silicon-Yield solutions revenue elements including software license and maintenance revenue which generally have lower associated costs. If we do not accurately estimate the resources required or the scope of work to be performed, or we do not manage the projects properly within the planned period of time or satisfy our obligations under contracts, resulting contract margins could be materially different than those anticipated when the contract was executed. Any such reductions in contract margin could have a material negative impact on our operating results.

Amortization of Acquired Core Technology. The increase in amortization of acquired core technology of $2.0 million in 2003 compared to 2002 was primarily attributable to the recognition and amortization of acquired core technology associated with our acquisitions of IDS and WaferYield during 2003. We anticipate amortization of acquired core technology to be $5.3 million in 2004, $5.2 million in 2005, $5.2 million in 2006 and $3.2 million in 2007.

Research and Development	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Research and development	$18,441	$15,247	$ 3,194	21%	44%	35%

Research and Development. Research and development expenses consist primarily of personnel related costs to support product development activities, including compensation and benefits, outside development services, travel and facilities cost allocations. The increase in research and development expenses of $3.2 million in 2003 compared to 2002 was primarily due to increased personnel related expenses as a result of our acquisitions of IDS and WaferYield and expansion of development activities in Europe. We anticipate that we will continue to commit considerable resources to research and development in the future and that these expenses may increase in absolute dollars.

Selling, General and Administrative	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Selling, general and administrative	$12,459	$10,188	$ 2,271	22%	29%	24%

Selling, General and Administrative. Selling, general and administrative expenses consist primarily of compensation and benefits for sales, marketing and general and administrative personnel in addition to outside sales commissions, legal and accounting services, marketing communications, travel and facilities cost allocations. The

increase in selling, general and administrative expenses of $2.3 million in 2003 as compared to 2002 was primarily due to an increase in personnel related expenses, particularly in sales and marketing functions primarily as a result of the acquisitions of IDS and WaferYield. We expect that selling, general and administrative expenses will increase in absolute dollars to support increased selling and administrative efforts in the future.

Stock-Based Compensation Amortization	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Stock-based compensation amortization	$ 1,755	$ 2,711	$ (956)	(35)%	4%	6%

Stock-Based Compensation Amortization. The Company amortizes deferred stock based compensation to expense under Accounting Principles Board Opinion No. 25 ("APB No. 25") *Accounting for Stock Issued to Employees,* using the graded vesting method which results in higher amortization expense during the initial period following the respective option grants. The decrease in stock-based compensation amortization of $956,000 in 2003 compared to 2002 was primarily the result of a decrease in amortization on stock options granted prior to our initial public offering of $1.5 million, due to the effects of the graded vesting method of amortization, partially offset by the recognition of a $227,000 stock compensation charge associated with certain stock options granted to non-employees and stock compensation expense of $344,000 associated with unvested stock options assumed in connection with our acquisition of IDS. We anticipate amortization of stock-based compensation to continue to decrease in future periods.

Amortization of Other Acquired Intangible Assets	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Amortization of other acquired intangible assets	$ 547	$ —	$ 547	—	1%	—%

Amortization of Other Acquired Intangible Assets. Amortization of other acquired intangible assets increased $547,000 as a result of the recognition and amortization of acquired other intangible assets associated with our acquisition of IDS. There was no such intangible assets recognized prior to 2003 and accordingly there was no amortization expense recognized for the comparable period in 2002. We anticipate amortization of other acquired intangible assets to continue to decrease in future periods.

Write-off of In-process Research and Development	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Write-off of in-process research and development	$ 800	$ —	$ 800	—	2%	—%

Write-off of In-process Research and Development. Write-off of in-process research and development of $800,000 in 2003 was related to the acquisition of IDS and was associated with acquired technology that had not reached technological feasibility and for which there was no alternative future use. Through the use of an independent valuation specialist, we determined the fair value of the acquired in-process technology by estimating the cash flows related to projects under development and the estimated revenues and operating profits related to those projects. The resulting estimated cash flows were discounted to their net present value. We expect the acquired in-process technology to be developed into commercially feasible products in the future. However, there

can be no assurance as to when such products will become commercially feasible or if they will reach commercial feasibility at all.

Interest and Other Income, Net	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Interest and other income, net	$ 1,195	$ 1,549	$ (354)	(23)%	3%	3%

Interest and Other Income, Net. The decrease in interest and other income, net of $354,000 in 2003 compared to 2002 was primarily due to interest earned on lower average cash and cash equivalent balances resulting from payments in connection with the acquisition of WaferYield and IDS and lower interest rates.

Provision (Benefit) for Income Taxes	2003	2002	$ Change	% Change	2003 % of Revenue	2002 % of Revenue
(In thousands, except for %'s)						
Provision (benefit) for income taxes	$(2,345)	$ 1,453	$(3,798)	(261)%	(6)%	3%

Provision (Benefit) for Income Taxes. The decrease from a tax provision to a tax benefit was primarily due to the shift from income before taxes to a loss before taxes which resulted in a reduction in our effective tax rate due to the realization of foreign and domestic tax credits.

Years Ended December 31, 2002 and 2001

Revenue	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Design-to-silicon-yield solutions	$33,685	$28,115	$ 5,570	20%	77%	76%
Gain share	10,039	8,733	1,306	15%	23%	24%
Total	$43,724	$36,848	$ 6,876	19%	100%	100%

Design-to-Silicon-Yield Solutions. The increase in design-to-silicon-yield solutions revenue of $5.6 million in 2003 compared to 2002 was attributable to a greater number of solution implementations as well as an increase in the average revenue per solution implementation.

Gain Share. The increase in gain share of $1.3 million in 2002 compared to 2001 was attributable to attaining gain share from a larger number of existing customer solution implementations.

Cost of Design-to-Silicon-Yield Solutions	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Direct costs of design-to-silicon-yield solutions	$14,986	$13,219	$ 1,767	13%	34%	36%
Amortization of acquired core technology	164	164	—	—	0%	0%
Total	$15,150	$13,383	$ 1,767	13%	34%	36%

Direct Cost of Design-to-Silicon-Yield Solutions. The increase in direct cost of design-to-silicon-yield solutions revenue of $1.8 million in 2002 compared to 2001 was primarily due to a greater number of solution implementations as well an increase in the average revenue per solutions implementation.

Amortization of Acquired Core Technology. Amortization of acquired core technology remained consistent from period to period as there were no technology purchases or deemed impairments of previously acquired technology during the period.

Research and Development	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Research and development	$15,247	$12,196	$ 3,051	25%	35%	33%

Research and Development. The increase in research and development expenses of $3.1 million in 2002 compared to 2001 was primarily due to increases in personnel related costs and non-recurring engineering expenses for the joint development of new products under a collaborative business arrangement.

Selling, General and Administrative	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Selling, general and administrative	$10,188	$10,505	$ (317)	(3)%	24%	30%

Selling, General and Administrative. The decrease in selling, general and administrative expenses of $317,000 in 2002 compared to 2001 was primarily due to lower sales commissions and reduced professional services expenses.

Stock-Based Compensation Amortization	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Stock-based compensation amortization	$ 2,711	$ 7,371	$(4,660)	(63)%	6%	20%

Stock-Based Compensation Amortization. The decrease in stock-based compensation amortization of $4.7 million in 2002 compared to 2001 was primarily due to the effects of the graded vesting method of amortization resulting in higher amortization expense during the initial period following the respective option grants.

Amortization of Other Acquired Intangible Assets	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Amortization of other acquired intangible assets	$ —	$ 337	$ 337	—	0%	0%

Amortization of Other Acquired Intangible Assets. The decrease in amortization of other acquired intangible assets of $337,000 in 2002 compared to 2001 is a result of our adoption of SFAS No. 142 in January of 2002 as we ceased amortizing goodwill associated with prior business combinations.

Interest and Other Income, Net	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Interest and other income, net	$ 1,549	$ 1,232	$ 317	26%	3%	3%

Interest and Other Income, Net. The increase in interest and other income, net of $317,000 in 2002 compared to 2001 was primarily due to interest earned on higher average cash and cash equivalent balances in 2002 resulting from proceeds received from our initial public offering and concurrent private placement in the third quarter of 2001.

Provision (Benefit) for Income Taxes	2002	2001	$ Change	% Change	2002 % of Revenue	2001 % of Revenue
(In thousands, except for %'s)						
Provision (benefit) for income taxes	$1,453	$(1,840)	$3,293	(179)%	3%	(5)%

Provision (Benefit) for Income Taxes. The increase in provision for taxes of $3.3 million in 2002 compared to 2001 was primarily due to increased profitability. In addition, prior to 2001, we had established a valuation allowance against certain deferred tax assets due to the uncertainty surrounding the realization of such assets. During the fourth quarter of 2001, it was determined that a deferred tax asset valuation allowance was no longer necessary based on our evaluation of current evidence and its effect on our estimate of future earnings. Accordingly, we reversed our deferred tax valuation allowance of $2.1 million in the fourth quarter of fiscal 2001.

Liquidity and Capital Resources

Net cash used in operating activities was $6.8 million for the year ended December 31, 2003 compared to net cash provided by operating activities of $1.0 million for the year ended December 31, 2002. After adjusting the net loss of $4.5 million by the amortization of acquired intangible assets of $2.7 million, depreciation and amortization of $2.1 million, stock based compensation of $1.8 million, the write-off of in-process engineering of $800,000, as a result of our acquisition of IDS, and the change in deferred taxes of $3.5 million, our adjusted results used approximately $600,000 in cash. This use of cash was broadened by increases in accounts receivable of $3.5 million, prepaid expenses and other assets of $1.0 million and decreases in deferred revenue of $2.2 million. The increase in accounts receivable was due to increased billings, in accordance with contract terms, at the end of the fiscal year. The increase in prepaid expenses and other assets was primarily the result of increases in deferred contract costs and prepaid support on internal software tools. The decrease in deferred revenue was the result of recognition of deferred revenue in the current year.

Net cash used in investing activities was $29.3 million for the year ended December 31, 2003 compared to $2.9 million for the year ended December 31, 2002. Net cash used in investing activities consisted of $24.3 million paid in connection with our acquisition of IDS, $2.6 million paid in connection with our acquisition of WaferYield and $2.4 million associated with the purchases of property and equipment.

Net cash provided by financing activities was $3.8 million for the year ended December 31, 2003 compared to $2.5 million for the year ended December 31, 2002. Net cash provided by financing activities for the year ended December 31, 2003 was primarily the result of repayment of employee notes receivable of $2.0 million, proceeds from purchases under the employee stock purchase plan of $1.2 million and cash proceeds from the exercise by employees of stock options under the 2001 Stock Plan of $681,000.

As of December 31, 2003, working capital was $42.6 million, compared with $73.6 million as of December 31, 2002. Cash and cash equivalents as of December 31, 2003 were $39.1 million, compared to $71.5 million as of December 31, 2002, a decrease of $32.4 million. The decrease in working capital was mainly attributable to cash paid in connection with the acquisitions of IDS and WaferYield. We expect to experience growth in our operating expenses, 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 use cash resources to fund potential investments in, or acquisitions of, complementary products, technologies or businesses. We believe that our existing cash resources and anticipated funds from operations will satisfy our cash requirements to fund our operating activities, capital expenditures and other obligations for at least the next twelve months. However, in the event that during such period, or thereafter, we are not successful in generating sufficient cash flows from operations we may need to raise additional capital through private or public financings, strategic relationships or other arrangements, which may not be available to us on acceptable terms or at all.

We do not have any off-balance sheet arrangements, investments in special purpose entities or undisclosed borrowings or debt, other than operating leases on our facilities. Additionally, we have not entered into any derivative contracts. As of December 31, 2003 we had no foreign currency contracts outstanding.

We lease our facilities under operating lease agreements that expire at various dates through 2012. The following table represents our future minimum annual lease payments (in thousands):

Year Ending December 31,	Amount
2004	$ 2,723
2005	2,380
2006	2,391
2007	2,423
2008	775
Thereafter	1,680
Total	$12,372

On May 31, 2003, in conjunction with our acquisition of WaferYield, we recognized $1.5 million in other liabilities associated with future payments that are contingent upon the attainment of certain revenue performance objectives. The agreement also requires additional payments in the event we achieve further performance objectives as specified in the agreement, up to an additional payments of $3.5 million.

Euro-Currency

The Single European Currency, or Euro, was introduced on January 1, 1999, and we began doing business denominated in the Euro on January 1, 2002. This adoption did not have a material effect on our business.

Recent Accounting Pronouncements

In July 2002, the Financial Accounting Standards Board ("FASB") issued SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*. SFAS No. 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and replaces Emerging Issues Task Force ("EITF") Issue No. 94-3, *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring)* and must be applied beginning January 1, 2003. SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than when the exit or disposal plan is approved. We adopted SFAS No. 146 on January 1, 2003. The adoption of this statement did not have an effect on our financial position and operating results.

In November 2002, the FASB issued FASB Interpretation ("FIN") No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*. FIN No. 45 requires companies to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. Guarantees in existence at December 31, 2003 are grandfathered for the purposes of recognition and would only need to be disclosed. We adopted FIN No. 45 on January 1, 2003. The adoption of this statement did not have an effect on our financial position and operating results.

We generally provide a warranty to our customers that our software will perform substantially in accordance with documented specifications typically for a period of 90 days following delivery of the product. We also indemnify certain customers from third-party claims of intellectual property infringement relating to the use of our products. Historically, costs related to these guarantees have not been significant. We are unable to estimate the maximum potential impact of these guarantees on our future results of operations.

In May 2003, the EITF reached a consensus on EITF Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*. This issue addresses certain aspects of the accounting by a vendor for arrangements under which it will perform multiple revenue-generating activities. In some arrangements, the different revenue-generating activities (deliverables) are sufficiently separable and there exists sufficient evidence of their fair values to separately account for some or all of the deliverables (that is, there are separate units of accounting). In other arrangements, some or all of the deliverables are not independently functional, or there is not sufficient evidence of their fair values to account for them separately. This issue addresses when and, if so, how an arrangement involving multiple deliverables should be divided into separate units of accounting. This issue does not change otherwise applicable revenue recognition criteria. The guidance in this issue is effective for revenue arrangements entered into

in periods beginning after June 15, 2003. The adoption of EITF No. 00-21 did not have an effect on our financial position and results of operations.

The FASB issued FIN No. 46, *Consolidation of Variable Interest Entities*, in January 2003, and a revised interpretation of FIN No. 46 ("FIN No. 46-R") in December 2003. FIN No. 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. We do not expect the adoption of FIN No. 46-R to have an impact on our financial position, results of operations or cash flows.

CERTAIN RISKS WHICH MAY AFFECT OUR FUTURE RESULTS

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 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 primarily large integrated device manufacturers, or IDMs. We will need to target as new customers additional IDMs, fabless semiconductor companies and foundries, as well as 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; and
- our customers' concern about our ability to keep highly competitive information confidential.

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 or an adverse change in any of our large customers' businesses;
- 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.

Our gain share revenue is dependent on factors outside of our control, including the volume of integrated circuits, or ICs, our customers are able to sell to their customers.

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. Further, our customers may implement changes to their manufacturing processes during the gain share period, which could negatively affect yield results, which is beyond our control. 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 or who makes unplanned changes to their processes. Since we currently work on a small number of large projects, any product that does not achieve commercial viability or a significant decrease in yield 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. Further, decreased demand for semiconductor products decreases the volume of products our customers are able to sell, which may adversely affect our gain share revenue.

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, including the mix between fixed and variable revenue and the mix of elements, can adversely affect the size and timing of our total revenue.

Our long-term 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. Due to acquisitions and expanded business strategies, the mix of elements in some of our contracts has changed recently and the relative importance of the software component in some of our contracts has increased. We have experienced, and may in the future experience, delays in the expected recognition of revenue associated with generally accepted accounting principles regarding the timing of revenue recognition in multi-element software arrangements, including the effect of acceptance criteria. If we fail to meet contractual acceptance criteria on time or at all, the total revenue we receive under a contract could be delayed or decline. In addition, by increasing the gain share or the software component, we may increase the variability or timing of recognition 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 a large percentage 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 for our core Design-to-Silicon-Yield solutions and we expect this to continue in the near term. In the twelve months ended December 31, 2003, four customers accounted for 64% of our total net revenue, with Toshiba representing 25%, Sony 15%, Matsushita 13% and Epson representing 11%, respectively. For the year ended December 31, 2002, Toshiba, Sony, Matsushita and Epson represented 25%, 17%, 22% and 1%, respectively. The loss of any of these customers or a decrease in the sales volumes of their products could significantly reduce our total revenue below expectations. In particular, such a loss could cause significant fluctuations in results of operations because our expenses are fixed in the short term and it takes us a long time to replace customers.

It typically takes us a long time to sell our unique solutions to new customers, which can result in uncertainty and delays in generating additional revenue.

Because our gain share business model is unique 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. 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 nine 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 may incur losses in the future and we may be unable to achieve or subsequently maintain profitability.

We have experienced losses in the five most recent quarters. 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 $19.4 million as of December 31, 2003. We expect to continue to incur significant expenses in connection with:

- 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 maintain profitability on a quarterly or annual basis. Any of these factors could cause our stock price to decline.

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 commenced during the third quarter of calendar 2000, with no significant upturn to date. 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.

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

If our products, technologies, services and integrated 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 products, technologies, services and integrated 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 products, technologies, services and integrated 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, which could adversely affect our operating results.

We intend to pursue additional strategic relationships, which are necessary to maximize our growth, but 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 technology 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.

Recent acquisitions may adversely affect our business by diverting management's attention, increasing our expenses or by being more difficult to integrate than expected.

During 2003, we completed the acquisitions of WaferYield and IDS. Our success in realizing the strategic benefits and growth opportunities to be gained from incorporating the operations of WaferYield and IDS into PDF and the timing of this realization depend upon our successful integration of WaferYield and IDS. The integration of WaferYield and IDS is a complex, costly and time-consuming process. The difficulties of combining our operations associated with these acquisitions include:

- consolidating research and development operations;
- retaining key employees;
- incorporating acquired products and business technology into our existing product lines;
- coordinating effective sales and marketing functions;
- preserving research and development, marketing, customer and other important relationships; and
- minimizing the diversion of management's attention from ongoing business concerns.

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 any acquisitions we might make. These difficulties could disrupt our ongoing business, distract our management and employees and increase our expenses.

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. Also, competitors could establish non-domestic operations with a lower cost structure than our engineering organization, which would give any such competitor's products a competitive advantage over our solutions. There may be other providers of commercial solutions for systematic IC yield and performance enhancement of which we are not aware. We currently face indirect competition from the internal groups at IC companies. Some providers of yield management software or inspection equipment may seek to broaden their product offerings and compete with us. For example, KLA-Tencor has announced adding the use of test structures to one of their inspection product lines. Other companies, such as HPL Technologies which, through its acquisition of Test Chip Technologies, has indicated its intent to further utilize test chips in its product offering, may in the future seek to directly enter our market. 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 solutions as a result of the increase in competition.

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 Asia. Revenue generated from customers in Asia accounted for 70% of total revenue in 2003. During 2002 revenue generated from customers in Asia was 71%. We expect that a significant portion of our total future revenue will continue to be derived from companies based in Asia. 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;
- 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, including the Euro, 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 an 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; and
- if any of these risks materialize, we may be unable to continue to market our solutions successfully in international markets.

We must effectively manage and support our operations and 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 have in the past, and may in the future, experience interruptions in our information systems. Further, physical damage to, failure of, or digital damage (such as significant viruses or worms) to, our information systems could delay time-sensitive services or computing operations that we perform for our customers, which could negatively impact our business results and reputation. In the future, we may need to switch to a new accounting system in the near future, which could 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 client service and 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.

Key executives, including our chief executive officer and our chief strategy officer, 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 our key executives, including John Kibarian, our President and Chief Executive Officer, and David Joseph, our Chief Strategy Officer. If we lose the services of any of our key executives, it could slow execution of our business plan, hinder our product development processes and impair our sales efforts. Searching for replacements could divert 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 our 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 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. 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, hardware and software tools and the cost of support to remedy any such defects could decrease our revenue and our competitive market share.

If the software, hardware 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 solutions. Further, the cost of support resources required to remedy any defects in our technologies, hardware or software tools could exceed our expectations. Any actual or perceived defects with our software, hardware 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, hardware or proprietary technologies or enhancements to existing software, hardware or proprietary technologies. Our software, hardware 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, hardware or proprietary technologies contain errors or defects, it could require us to expend significant resources to alleviate these problems, which could reduce margins, and result in the diversion of technical and other resources from our other development efforts.

Worldwide events may reduce our revenues and harm our business.

Future political or related events similar or comparable to the September 11, 2001 terrorist attacks, or significant military conflicts or long term reactions of governments and society to such events, may cause significant delays or reductions in technology purchases or limit our ability to travel to certain parts of the world.

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 will be sufficient to meet our presently anticipated working capital and capital expenditure requirements for at least the next 12 months. However, unanticipated efforts to support more rapid expansion, develop or enhance Design-to-Silicon-Yield solutions, respond to competitive pressures or acquire complementary businesses or technologies could impact our future capital requirements and the adequacy of our available funds. In such event, we may need to raise additional funds through public or private financings, strategic relationships or other arrangements. We may not be able to raise any necessary funds on terms favorable to us, or at all.

Item 7A. Quantitative and Qualitative Disclosures About 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 December 31, 2003, we had cash and cash equivalents of $39.1 million, consisting of cash and highly liquid money market instruments with original maturities of 90 days or less. 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. A hypothetical increase in market interest rates of 10% from the market rates in effect at December 31, 2003 would cause the fair value of these investments to decrease 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.

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. Some foreign sales to date, generated by our German subsidiary since the date of the AISS 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. There can be no assurance that exchange rate fluctuations will not have a materially negative impact on our business.

Item 8. Financial Statements and Supplementary Data.

The consolidated financial statements and supplementary data required by this Item 8 are listed in Item 15(a)(1) and begin at page 37 of this Annual Report on Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures

(a) *Evaluation of disclosure controls and procedures*. Our Chief Executive Officer and our Chief Financial Officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in the Securities Exchange Act of 1934 Rules 13a-14(c) and 15-d-14(c)) as of a date (the "Evaluation Date") within 90 days before the filing date of this Annual Report on Form 10-K, have concluded that as of the Evaluation Date, our disclosure controls and procedures were adequate and designed to ensure that material information relating to us and our consolidated subsidiaries would be made known to them by others within those entities so that we are able to record, process, summarize and disclose such information in the reports we file with the SEC within the time periods specified in the SEC's rules and forms.

(b) *Changes in internal controls*. There were no significant changes in our internal controls or to our knowledge, in other factors that could significantly affect our disclosure controls and procedures subsequent to the Evaluation Date.

PART III

Pursuant to Paragraph (3) of the General Instructions to Form 10-K, the information required by Part III of this Form 10-K is incorporated by reference from the Registrant's Proxy Statement. The Proxy Statement is expected to be filed within 120 days of December 31, 2003.

Item 10. Directors and Executive Officers of the Registrant.

Information with respect to our directors appears in our Proxy Statement under "Proposal No. 1 — Election of Directors — Nominees for the Board of Directors" and is incorporated herein by reference. Information with respect to our executive officers appears in Part I, Item 1 — "Executive Officers" of this Form 10-K.

Information with respect to compliance with Section 16(a) of the Exchange Act of 1934, as amended, appears in our Proxy Statement under "Section 16 Beneficial Ownership Reporting Compliance" and is incorporated herein by reference.

Information regarding our Code of Ethics (the "Code") appears as Appendix A in our Proxy Statement. If we make any substantive amendments to the Code or grants any waiver, including any implicit waiver, from a provision of the Code to our Chief Executive Officer or Chief Financial Officer, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

Item 11. Executive Compensation.

The information required by this item is incorporated herein by reference to the section entitled "Compensation of Executive Officers and Other Matters — Executive Compensation" in our Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this item is incorporated herein by reference to the section entitled "Security Ownership of Certain Beneficial Owners and Management" in our Proxy Statement.

Item 13. Certain Relationships and Related Transactions.

The information required by this item is incorporated herein by reference to the section entitled "Certain Relationships and Related Transactions" in our Proxy Statement.

Item 14. Principal Accounting Fees and Services.

Information with respect to Principal Accounting Fees and Services is incorporated by reference from our Proxy Statement.

Non-Audit Services Provided by Independent Auditors

During 2003, our independent auditors, Deloitte & Touche LLP, performed certain services that were approved by the Audit Committee of our Board of Directors as follows:

1. International tax planning and tax compliance services
2. Due diligence services provided in connection with our acquisition of IDS
3. Professional services provided in connection with Sarbanes-Oxley Section 404

PART IV

Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K.

(a) The following documents are filed as part of this report:

(1) Consolidated Financial Statements and Report of Deloitte & Touche LLP

See Index to Consolidated Financial Statements on page 35 hereof.

(2) Schedule II Valuation and Qualifying Account

See the Independent Auditors' Report of Deloitte & Touche LLP and Schedule II on pages 57 and 58 hereof.

(3) Exhibits

The exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this Annual Report on Form 10-K

(b) Reports on Form 8-K

On October 23, 2003 we furnished under Items 7 and 12 of the Company's current report on Form 8-K the press release announcing the Company's financial results for the third quarter of 2003, the Company's unaudited consolidated balance sheets as of September 30, 2003 and December 31, 2002, the Company's consolidated statements of operations (unaudited) for the three months and the nine months ended September 30, 2003 and September 30, 2002, the Company's reconciliation of reported GAAP net income (loss) to pro forma net income (unaudited) for the three months and the nine months ended September 30, 2003 and the Company's financial outlook for the fourth quarter of 2003 and the first quarter of 2004.

On November 12, 2003 we amended the Company's previous current report on Form 8-K dated September 25, 2003 to include Item 7(a) Financial Statements and Item 7(b) Pro Forma Financial Information, and furnished the audited financial statements of IDS for the two years ended September 30, 2002 and September 30, 2001 and unaudited financial statements for the nine months ended June 30, 2003 and 2002, the unaudited pro forma condensed combined balance sheet of the Company and IDS as of June 30, 2003 and the unaudited pro forma condensed combined statements of operations of the Company and IDS for the year ended December 31, 2002 and the six months ended June 30, 2003.

On November 20, 2003 we furnished under Items 5 and 9 of the Company's current report on Form 8-K the press release announcing the filing of the Company's Form 10-Q/A for the period ending September 30, 2003 to correct an error in a footnote disclosure regarding pro forma consolidated financial data as if the results of the acquisition of IDS had been included for the entire reporting period.

PDF SOLUTIONS, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Stockholders 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, 2003 and 2002 and the related consolidated statements of operations, stockholders' equity and comprehensive income (loss), and cash flows for each of the three years in the period ended December 31, 2003. 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 consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated 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, 2003 and 2002 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 1 to the consolidated financial statements, in 2002 the Company changed its method of accounting for goodwill and intangibles to conform to Statement of Financial Accounting Standards No. 142 "Goodwill and Other Intangible Assets."

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 15, 2004

PDF SOLUTIONS, INC.

CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)

	December 31,	
	2003	**2002**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 39,110	$ 71,490
Accounts receivable, net of allowances of $504 in 2003 and 2002	11,869	7,924
Prepaid expenses and other current assets	2,614	1,993
Deferred tax assets	1,808	2,413
Total current assets	55,401	83,820
Property and equipment, net	4,110	3,533
Goodwill	40,548	662
Intangible assets, net	22,906	220
Deferred tax assets	—	301
Other assets	1,002	511
Total assets	$123,967	$ 89,047
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 835	$ 499
Accrued compensation and related benefits	1,952	1,143
Other accrued liabilities	1,485	1,669
Other acquisition obligations	1,880	—
Taxes payable	2,871	1,838
Deferred revenues	3,300	4,496
Billings in excess of recognized revenue	465	606
Total current liabilities	12,788	10,251
Long-term liabilities	287	54
Deferred tax liabilities	4,340	—
Total liabilities	17,415	10,305
Commitments and contingencies (Notes 2, 5 and 10)		
Stockholders' equity:		
Preferred stock, $0.00015 par value, 5,000 shares authorized, no shares issued and outstanding in 2003 and 2002	—	—
Common stock, $0.00015 par value, 75,000 shares authorized: shares issued and outstanding 25,432 in 2003 and 23,130 in 2002	4	3
Additional paid-in capital	129,568	99,884
Deferred stock-based compensation	(688)	(1,340)
Notes receivable from stockholders	(3,025)	(4,998)
Accumulated deficit	(19,361)	(14,845)
Accumulated other comprehensive income	54	38
Total stockholders' equity	106,552	78,742
Total liabilities and stockholders' equity	$123,967	$ 89,047

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)

	Years Ended December 31,		
	2003	2002	2001
Revenue:			
Design-to-silicon-yield solutions	$35,629	$33,685	$28,115
Gain share	6,897	10,039	8,733
Total revenue	42,526	43,724	36,848
Costs and expenses:			
Cost of design-to-silicon-yield solutions:			
Direct costs of design-to-silicon-yield solutions	14,412	14,986	13,219
Amortization of acquired core technology	2,168	164	164
Research and development	18,441	15,247	12,196
Selling, general and administrative	12,459	10,188	10,505
Stock-based compensation amortization*	1,755	2,711	7,371
Amortization of other acquired intangible assets	547	—	337
Write-off of in-process research and development	800	—	—
Total costs and expenses	50,582	43,296	43,792
Income (loss) from operations	(8,056)	428	(6,944)
Interest and other income, net	1,195	1,549	1,232
Income (loss) before taxes	(6,861)	1,977	(5,712)
Income tax provision (benefit)	(2,345)	1,453	(1,840)
Net income (loss)	(4,516)	524	(3,872)
Preferred dividends	—	—	(1,619)
Net income (loss) attributable to common stockholders	$ (4,516)	$ 524	$ (5,491)
Net income (loss) per share:			
Basic	$ (0.19)	$ 0.02	$ (0.38)
Diluted	$ (0.19)	$ 0.02	$ (0.38)
Weighted average common shares:			
Basic	23,278	21,962	14,425
Diluted	23,278	23,199	14,425
*Stock-based compensation amortization:			
Cost of design-to-silicon-yield solutions	$ 345	$ 826	$ 1,996
Research and development	1,099	1,341	3,227
Selling, general and administrative	311	544	2,148
	$ 1,755	$ 2,711	$ 7,371

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE INCOME (LOSS)
(In thousands)

	Common Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Notes Receivable From Stockholders	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount						
Balances, January 1, 2001	10,903	$ 2	$ 25,386	$ (11,882)	$ (5,646)	$ (9,878)	$ (8)	$ (2,026)
Collection of notes receivable from stockholders					46			46
Repurchase of common stock through cancellation of notes receivable	(68)		(535)	437	98			—
Issuance of common stock in connection with IPO, net of issuance costs of $5.6 million	5,175	1	56,465					56,466
Sale of common stock to Applied Materials net of issuance costs of $120	500		5,880					5,880
Conversion of preferred stock to common	6,333		8,456					8,456
Exercise of options	81		560		(550)			10
Stock-based compensation expense			252					252
Issuance of common stock in connection with employee stock purchase plan	56		568					568
Amortization of employee stock-based compensation				7,113				7,113
Amortization of non-employee stock-based compensation				6				6
Net loss						(3,872)		
Cumulative translation adjustment							(15)	
Comprehensive loss								(3,887)
Preferred dividends			1,619			(1,619)		
Balances, December 31, 2001	22,980	3	98,651	(4,326)	(6,052)	(15,369)	(23)	72,884
Collection of notes receivable from stockholders					981			981
Repurchase of common stock through cancellation of notes receivable	(111)		(348)	275	73			—
Exercise of options	31		179					179
Issuance of common stock in connection with employee stock purchase plan	230		1,402					1,402
Amortization of employee stock-based compensation				2,711				2,711
Net income						524		
Cumulative translation adjustment							61	
Comprehensive income								585
Balances, December 31, 2002	23,130	3	99,884	(1,340)	(4,998)	(14,845)	38	78,742
Collection and repurchase of common stock in connection with notes receivable from stockholders	(8)		(10)		1,973			1,963
Exercise of options	117		681					681
Issuance of common stock in connection with employee stock purchase plan	193		1,150					1,150
Amortization of employee stock-based compensation				1,528				1,528
Amortization of non-employee stock-based compensation			227					227
Reversal of employee stock-based compensation for terminated employees			(43)	43				—
Issuance of common stock in connection with acquisition	2,000	1	24,999					25,000

Assumption of stock options in connection with acquisition			2,680	(919)				1,761
Net loss						(4,516)		
Cumulative translation adjustment							16	
Comprehensive loss								(4,500)
Balances, December 31, 2003	25,432	$ 4	$129,568	$ (688)	$ (3,025)	$ (19,361)	$ 54	$106,552

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Years Ended December 31,		
	2003	2002	2001
Operating activities:			
Net income (loss)	$ (4,516)	$ 524	$ (3,872)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	2,138	1,575	921
Stock-based compensation expense	1,755	2,711	7,371
Amortization of acquired intangible assets	2,715	164	501
Write-off of in-process research and development	800	—	—
Deferred taxes	(3,461)	(727)	(2,397)
Changes in assets and liabilities, net of effect of acquisition:			
Accounts receivable	(3,405)	(2,378)	(1,596)
Prepaid expenses and other assets	(1,019)	(1,287)	(483)
Accounts payable	37	(239)	224
Accrued compensation and related benefits	809	(2,918)	1,858
Other accrued liabilities	(701)	(204)	46
Taxes payable	328	1,608	215
Deferred revenues	(2,172)	1,723	903
Billings in excess of recognized revenue	(141)	432	(879)
Net cash provided by (used in) operating activities	(6,833)	984	2,812
Investing activities:			
Purchases of property and equipment	(2,402)	(2,929)	(1,540)
Businesses acquired in purchase transactions, net of cash acquired	(26,938)	—	—
Net cash used in investing activities	(29,340)	(2,929)	(1,540)
Financing activities:			
Net cash proceeds from initial public offering	—	—	56,466
Net cash proceeds from sale of common stock to Applied Materials	—	—	5,880
Exercise of stock options and warrants	681	179	10
Proceeds from employee stock purchase plan	1,150	1,402	568
Repayment of notes payable	—	—	(995)
Collection of notes receivable from stockholders	1,963	981	46
Repayments of long-term liabilities	(17)	(23)	(23)
Net cash provided by financing activities	3,777	2,539	61,952
Effect of exchange rate changes on cash	16	61	(15)
Net increase (decrease) in cash and cash equivalents	(32,380)	655	63,209
Cash and cash equivalents, beginning of period	71,490	70,835	7,626
Cash and cash equivalents, end of period	$ 39,110	$71,490	$70,835
Non-cash investing and financing activities:			
Preferred stock dividend	$ —	$ —	$ 1,619
Conversion of preferred stock into common stock	$ —	$ —	$ 8,456
Common stock issued for notes receivable	$ —	$ —	$ 550
Repurchase of common stock through cancellation of notes receivable	$ 11	$ 73	$ 98
Supplemental disclosure of cash flow information:			
Cash paid during the year for:			
Taxes	$ 720	$ 560	$ 555
Interest	$ 4	$ 3	$ 7

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2003, 2002 and 2001

1. Business and Significant Accounting Policies

PDF Solutions, Inc. (the "Company" or "PDF"), provides 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 industries, 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: 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; integration of newly acquired companies; and new product introductions by competitors.

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 what it considers high credit quality financial institutions.

The Company primarily sells its technologies and services to companies in Japan, Europe and North America. If the financial condition or operations of the Company's customers deteriorate the risks of collection could increase substantially. As of December 31, 2003, three customers accounted for 62% of the Company's gross accounts receivable and four customers accounted for 64% of the Company's total revenue. As of December 31, 2002, four customers accounted for 72% of the Company's gross accounts receivable and three customers accounted for 64% of the Company's total revenue. For year ended December 31, 2001, two customers accounted for 63% of the Company's total revenue. 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 investments with an original maturity of 90 days 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 $2.0 million and $1.0 million at December 31, 2003 and 2002, 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:

Computer and equipment	3 years
Software	3 years
Furniture, fixtures, and equipment	5-7 years
Leasehold improvements	Shorter of estimated useful life or term of lease

Goodwill and Intangible Assets — On January 1, 2002, the Company adopted Statement of Financial Accounting Standards ("SFAS") No. 142, *Goodwill and Other Intangible Assets.* SFAS No. 142 requires goodwill to be tested for impairment under certain circumstances, written down when impaired, and requires purchased intangible assets other than goodwill to be amortized over their useful lives unless these lives are determined to be indefinite.

On January 1, 2002, the Company ceased amortization of goodwill with a net book value totaling $662,000, which includes $192,000 of acquired workforce intangibles, net of related deferred tax liabilities which were reclassified to goodwill pursuant to the requirements of SFAS No. 142.

The following table provides information relating to the intangible assets contained within the Company's consolidated balance sheets as of December 31, 2003 and December 31, 2002 (in thousands):

	Weighted Average Life (years)	December 31, 2003			December 31, 2002		
		Cost	Accumulated Amortization	Net Carrying Amount	Cost	Accumulated Amortization	Net Carrying Amount
Goodwill	N/A	$41,110	$ (562)	$40,548	$1,224	$ (562)	$ 662
Acquired identifiable intangible assets							
Acquired core technology	4	$21,602	$ (2,609)	$18,993	$ 662	$ (442)	$ 220
Brand name	4	2,000	(167)	1,833	—	—	—
Other acquired intangibles	4	2,460	(380)	2,080	—	—	—
Total		$26,062	$ (3,156)	$22,906	$ 662	$ (442)	$ 220

Amortization of acquired identifiable intangible assets is recorded on a straight-line basis over their estimated useful lives with a weighted average life of approximately four years. The Company expects annual amortization of acquired identifiable intangible assets to be as follows (in thousands):

Year ended December 31:	
2004	$ 6,701
2005	6,175
2006	6,175
2007	3,855
Total amortization expense	$22,906

The Company performed its transition impairment test of goodwill as of January 1, 2002 which did not indicate any impairment. SFAS No. 142 also requires that goodwill be tested for impairment on an annual basis and more frequently in certain circumstances. The required annual goodwill impairment test was performed as of December 31, 2003 and the Company concluded that there was no impairment related to goodwill.

The following table presents the impact of SFAS No. 142 on net income (loss) and net income (loss) per share and adjusted net income (loss) and adjusted net income (loss) per share as if the standard had been in effect for the year ended December 31, 2001 (in thousands, except per-share amounts):

	December 31, 2003	December 31, 2002	December 31, 2001
Reported net income (loss)	$ (4,516)	$ 524	$ (5,491)
Add back goodwill amortization, net of taxes	—	—	88
Add back acquired workforce amortization, net of taxes	—	—	131
Adjusted net income (loss)	$ (4,516)	$ 524	$ (5,272)
Basic and diluted net income (loss) per share:			
Reported basic and diluted net income (loss) per share	$ (0.19)	$ 0.02	$ (0.38)
Add back goodwill amortization per share	—	—	0.01
Add back acquired workforce amortization per share	—	—	0.01
Adjusted basic and diluted net income (loss) per share	$ (0.19)	$ 0.02	$ (0.36)

Long-lived Assets — The Company's long-lived assets, excluding goodwill, consist of property, plant and equipment and other acquired intangibles. The Company periodically reviews its long-lived assets for impairment in accordance with SFAS No. 144 *Accounting for the Impairment or Disposal of Long-Lived Assets.* For assets to be held and used, the Company initiates its review whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset group may not be recoverable. Recoverability of an asset group is measured by comparison of its carrying amount to the expected future undiscounted cash flows (without interest charges) that the asset group is expected to generate. If it is determined that an asset group is not recoverable, an impairment loss is recorded in the amount by which the carrying amount of the asset group exceeds its fair value.

The Company concluded in 2003 that there were no events or changes in circumstances that would indicate that the carrying amounts of long-lived assets were impaired.

Notes Receivable from Stockholders — The notes receivable from stockholders are full recourse notes issued in exchange for common stock. Notes outstanding at December 31, 2003 and 2002, bear interest at rates ranging from 4.46% to 7.75% per annum. The notes are generally payable over periods of two to four years. Of the $3.0 million in notes receivable from stockholders at December 31, 2003, $2.4 million matures in 2004 and $572,000 matures in 2005.

Revenue Recognition — The Company derives revenue from two sources: Design-to-Silicon-Yield solutions and gain share. The Company recognizes revenue in accordance with the provisions of American Institute of Certified Public Accountants Statement of Position ("SOP") SOP No. 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts* and SOP No. 97-2, *Software Revenue Recognition*, as amended.

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 — The Company's solution implementations generate a significant portion of revenue from fixed-price contracts delivered over a specific period of time. These contracts require the accurate estimation of the cost to perform obligations and the overall scope of each engagement. 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 revisions become known and can be estimated.

On occasion, the Company has licensed its software products as a component of its fixed price solutions implementations. In such instances, the software products are licensed to the customer over the specified term of the agreement with support and maintenance to be provided over the license term. Under these arrangements, where vendor-specific objective evidence of fair value does not exist to allocate a portion of the total fee to the undelivered elements, revenue is recognized ratably over the term of the agreement. Costs incurred under these arrangements are deferred and recognized in proportion to revenue recognized under these arrangements.

Software Licenses — The Company has licensed software products separate from its solutions implementation services. In such cases revenue is recognized under the residual method when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) the fee is fixed or determinable, (iv) collectibility is probable and the arrangement does not require services that are essential to the functionality of the software. When arrangements include multiple elements such as support and maintenance, consulting (other than our fixed price solution implementations), installation and training services, revenue is allocated to each element of a transaction based upon its fair value as determined by the Company's vendor specific objective evidence (VSOE). VSOE is generally established for maintenance based upon negotiated renewal rates while VSOE for consulting, installation and training services is established based upon the Company's customary pricing for such services when sold separately. Revenue from support and maintenance services is recognized

ratably over the term of the support and maintenance contract, generally one year, while revenue from consulting, installation and training services is recognized as the services are performed. When VSOE does not exist to allocate a portion of the total fee to the undelivered elements, revenue is recognized ratably over the term of the underlying element for which VSOE does not exist. No revenue has been recognized under arrangements with extended payment terms in excess of amounts due.

Gain Share — Gain share revenue represents profit sharing and performance incentives earned based upon the Company's customer reaching certain defined operational levels. Upon achieving such operational levels, the Company receives either a fixed fee and/or variable fee based on the units manufactured by the 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 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 its interpretations, and complies with the disclosure provisions of SFAS No. 123 *Accounting for Stock-Based Compensation* as amended by SFAS No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosures*. 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 ("EITF") Issue No. 96-18 under the fair value based method.

The Company adopted the disclosure-only provisions of SFAS No. 123, and accordingly, no expense has been recognized for options granted to employees under the various Plans. The Company amortizes deferred stock-based compensation on the graded vesting method over the vesting periods of the applicable stock purchase rights and stock options, generally four years. The graded vesting method provides for vesting of portions of the overall awards at interim dates and results in greater vesting in earlier years than the straight-line method. Had compensation expense been determined based on the fair value at the grant date for awards, consistent with the provisions of SFAS No.123, the Company's pro forma net loss and proforma net loss per share would be as follows (in thousands, except per share data):

	Years Ended December 31,		
	2003	2002	2001
Net income (loss) as reported:	$ (4,516)	$ 524	$(3,872)
Add: stock-based employee compensation expense included in reported net income (loss) under APB No. 25, net of related tax effects	1,528	2,711	7,113
Deduct: total stock based employee compensation determined under fair value based method for all awards, net of related tax effects	(12,694)	(11,136)	(9,730)
Pro forma net loss	(15,682)	(7,901)	(6,489)
Preferred dividends	—	—	(1,619)
Pro forma net loss attributable to common stockholders	$(15,682)	$ (7,901)	$(8,108)
Basic and diluted net income (loss) per share:			
As reported	$ (0.19)	$ 0.02	$ (0.38)
Pro forma	$ (0.67)	$ (0.36)	$ (0.56)

The weighted average fair value of the Company's stock-based awards to employees under the above plans was estimated using the minimum value method through July 26, 2001 and from then forward using the Black-Scholes option pricing model with the following weighted average assumptions as of December 31:

	Stock Plans			Employee Stock Purchase Plan		
	2003	2002	2001	2003	2002	2001
Estimated life (in years)	5.5	5.5	5.5	0.5	0.5	0.5
Volatility	73.0%	79.7%	66.6%	73.0%	80.0%	66.6%
Risk-free interest rate	3.01%	4.14%	4.7%	1.32%	2.6%	3.5%
Expected dividend	—	—	—	—	—	—

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 (Loss) — 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 (loss) is presented within the statement of stockholders' equity. Accumulated other comprehensive income (loss) at December 31, 2003 and 2002 is comprised entirely of cumulative translation adjustments.

Fair Value of Financial Instruments — The carrying amounts of the Company's financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, approximate fair value because of their short maturities.

Recently Issued Accounting Standards — In July 2002, the Financial Accounting Standards Board ("FASB") issued SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*. SFAS No. 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and replaces EITF Issue No. 94-3, Liability *Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring)* and must be applied beginning January 1, 2003. SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than when the exit or disposal plan is approved. The Company adopted SFAS No. 146 on January 1, 2003. The adoption of this statement did not have an effect on the financial position and operating results of the Company.

In November 2002, the FASB issued FASB Interpretation No. 45*, Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others* ("FIN No. 45"). FIN No. 45 requires companies to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. Guarantees in existence at December 31, 2003 are grandfathered for the purposes of recognition and would only need to be disclosed. The Company adopted FIN No. 45 on January 1, 2003. The adoption of this statement did not have an effect on the Company's financial position and operating results.

In May 2003, the EITF reached a consensus on EITF Issue No. 00-21*, Revenue Arrangements with Multiple Deliverables*. This issue addresses certain aspects of the accounting by a vendor for arrangements under which it will perform multiple revenue-generating activities. In some arrangements, the different revenue-generating activities (deliverables) are sufficiently separable and there exists sufficient evidence of their fair values to separately account for some or all of the deliverables (that is, there are separate units of accounting). In other arrangements, some or all of the deliverables are not independently functional, or there is not sufficient evidence of their fair values to account for them separately. This issue addresses when and, if so, how an arrangement involving multiple deliverables should be divided into separate units of accounting. This issue does not change otherwise applicable revenue recognition criteria. The guidance in this issue is effective for revenue arrangements entered into in periods beginning after June 15, 2003. The adoption of EITF No. 00-21 did not have an effect on the Company's financial position and results of operations.

The FASB issued FIN No. 46, *Consolidation of Variable Interest Entities*, in January 2003, and a revised interpretation of FIN No. 46 ("FIN No. 46-R") in December 2003. FIN No. 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. The Company does not expect the adoption of FIN No. 46-R to have an impact on the financial position, results of operations or cash flows of the Company.

Reclassifications — Certain reclassifications have been made to the prior year financial statements to conform to the current year presentation.

2. ACQUISITIONS

IDS Software Systems

On September 24, 2003, the Company completed its acquisition of IDS Software Systems, Inc ("IDS"). IDS, a privately held company, developed and licensed yield management software applications and services dedicated to the semiconductor industry to enable customers to monitor manufacturing data and identify areas for yield improvement. The acquisition of IDS will provide the Company's customers with greater capabilities for managing product yield improvement through the use of the acquired technology and services. The aggregate purchase price was $51.0 million which included the issuance of cash of $23.0 million, the issuance of 2.0 million shares of PDF common stock valued at $25.0 million, the assumption of vested stock options valued at $1.7 million and acquisition costs of $1.3 million. In connection with the acquisition, $1.0 million in cash and 400,0000 shares of common stock have been held in escrow as security against certain financial contingencies. Cash payments held in escrow, less any amounts deducted to satisfy contingencies, will be released no later than the 24-month anniversary following the completion of the acquisition. Fifty percent of the shares held in escrow, less any amounts deducted to satisfy contingencies, shall be released upon the 12-month anniversary of the acquisition and the remaining shares shall be released upon the 24-month anniversary of the acquisition. The fair value of the Company's common stock was determined based on the average closing price per share of the Company's common stock over a 5-day period beginning two trading days before and ending two trading days after the amended terms of the acquisition were agreed to and announced (September 3, 2003). The fair value of the options assumed were calculated as of September 24, 2003, based on the Black-Scholes options pricing model. The acquisition was accounted for using the purchase method of accounting in accordance with SFAS No. 141, *Business Combinations*, and accordingly the Company's consolidated financial statements from September 24, 2003 include the impact of the acquisition.

The allocation of the purchase price for this acquisition, as of the date of the acquisition, is as follows (in thousands, except amortization period):

Allocation of Purchase Price	Amortization Period (Years)	Amount
Fair value of tangible assets		$ 950
Fair value of intangible assets:		
Brand name	4	2,000
Contract backlog	1	700
Backlog renewals	4	900
Customer relationships	4	800
Non-compete covenant	4	60
Core technology	4	16,800
In-process research and development	N/A	800
Goodwill	N/A	40,059
Total assets acquired		63,069
Deferred tax liability		(8,708)
Accrued liabilities		(1,744)
Deferred revenue under maintenance obligations		(976)
Accounts payable		(629)
Total liabilities assumed		(12,057)
Total consideration, net		$(51,012)

The acquisition was accounted for as a purchase transaction, and accordingly, the assets and liabilities of IDS were recorded at their estimated fair values at the date of the acquisition. With the exception of the goodwill and acquired in-process research and development ("IPR&D"), the identified intangible assets will be amortized on a straight-line basis over their estimated useful lives, with a weighted average life of approximately four years. The acquired IPR&D technology was immediately expensed because technological feasibility had not been established and no future alternative use exists. In assessing IDS's IPR&D projects, the key characteristics of the products under development were considered as well as future prospects, the rate at which technology changes, product life cycles, and the projects' stages of development. The IPR&D technology write-off is included as a component of operating expenses in the consolidated statement of operations. The fair value of IPR&D, as well as the fair value of the identifiable intangible assets, was determined, in part, by an independent third party appraiser through established valuation techniques.

The acquisition of IDS was structured as a tax-free acquisition. Therefore, the difference between the recognized fair values of the acquired net assets and their historical tax base are not deductible for tax purposes. A

deferred tax liability has been recognized for the difference between the assigned fair values of intangible assets for book purposes and the tax basis of such assets.

Subsequent to the acquisition date, the Company recorded a non-cash adjustment of $173,000, relating to the reversal of excess accruals for acquisition related expenses. This adjustment resulted in a reduction of goodwill.

The following unaudited pro forma consolidated financial data represents the combined results of operations as if IDS had been combined with the Company at the beginning of the respective period. This pro forma financial data includes the straight line amortization of intangibles over their respective estimated useful lives and excludes the write-off of IPR&D (in thousands):

	Years Ended December 31,	
	2003	2002
Revenue	$ 47,726	$ 53,717
Net income (loss)	$ (6,645)	$ 126
Pro forma net income (loss) per share - basic	$ (0.27)	$ 0.01
Pro forma net income (loss) per share - diluted	$ (0.27)	$ 0.00

These results do not purport to be indicative of what would have occurred had the acquisition been made as of the beginning of the respective periods or the results of operations which may occur in future periods.

WaferYield

On May 31, 2003 the Company acquired certain assets and liabilities of WaferYield, Inc., ("WaferYield") a privately held company, which primarily included WaferYield's proprietary shot map WAMA™ technology and related business. The WAMA product offering is designed to optimize semiconductor wafer shot maps to help semiconductor companies achieve greater yield and net die per wafer, higher stepper throughput and reduced probe test costs. This acquisition adds to the Company's product offering and its capabilities in enabling semiconductor companies to improve yield and performance of ICs. The aggregate purchase price was $4.1 million, which included cash payments of $2.6 million and the recognition of $1.5 million in other liabilities associated with future payments that are contingent upon the attainment of certain revenue performance objectives. There were no other assets or liabilities assumed in connection with the acquisition. The agreement also contains additional payments in the event the Company achieves further performance objectives as specified in the agreement, up to an additional payment of $3.5 million. Any additional payments made as a result of achieving such operating levels, which exceed amounts currently accrued, will be accounted for as goodwill. The entire purchase price has been allocated to core technology which is being amortized over an estimated useful life of 4 years. The acquisition has been accounted for using the purchase method of accounting in accordance with SFAS No. 141, *Business Combinations,* and accordingly, the Company's consolidated financial statements from May 31, 2003 include the impact of the acquisition. Pro forma results of operations have not been presented because the effect of the acquisition was not material to the Company. Amortization expense associated with acquired core technology recognized in connection with the acquisition is anticipated to be approximately $1.0 million annually.

3. Property and Equipment

Property and equipment consist of (in thousands):

	December 31,	
	2003	2002
Computer equipment	$ 6,427	$ 4,844
Software	2,516	1,670
Furniture, fixtures, and equipment	853	662
Leasehold improvements	120	25
	9,916	7,201
Accumulated depreciation	(5,806)	(3,668)
	$ 4,110	$ 3,533

4. Other Accrued Liabilities

Other accrued liabilities consist of (in thousands):

	2003	2002
Accrued commissions	$ 369	$ 739
Other accrued expenses	1,116	930
Total other accrued expenses	$1,485	$1,669

5. Commitments and Contingencies

Leases — 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 at various times through 2012. Rent expense was $2.2 million, $2.6 million and $1.8 million in 2003, 2002 and 2001, respectively.

Future minimum lease payments under noncancelable operating leases at December 31, 2003 are as follows (in thousands):

Year Ended December 31,	
2004	$ 2,723
2005	2,380
2006	2,391
2007	2,423
2008	775
Thereafter	1,680
Total future minimum lease payments	$12,372

Indemnifications — The Company generally provides a warranty to its customers that its software will perform substantially in accordance with documented specifications typically for a period of 90 days following delivery of its products. The Company also indemnifies certain customers from third-party claims of intellectual property infringement relating to the use of its products. Historically, costs related to these guarantees have not been significant. The Company is unable to estimate the maximum potential impact of these guarantees on its future results of operations.

6. Stockholders Equity

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

Initial Public Offering and Concurrent Private Placement — On July 6, 2001 the Company 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 was less than $14.25 per share, the Series B preferred stock would be converted into an aggregate of 499,987 shares of common stock.

On July 26, 2001 the Company completed its initial public offering in which it sold 5,175,000 shares of its common stock. The net proceeds from the offering totaled $56.5 million. Concurrent with this offering, the

Company completed the private placement of 500,000 shares of its common stock to Applied Materials, Inc. Net proceeds of this concurrent private placement totaled $5.9 million. Based on the initial public offering price of $12.00 per share the Company's then outstanding Series A and Series B Convertible Preferred Stock were automatically converted into an aggregate of 6,333,318 shares of common stock and the Company recorded a one-time dividend charge of $1.6 million in the third quarter of 2001, representing the fair value of additional shares 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.

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, 2003, 233,624 shares of common stock were subject to repurchase by the Company.

As of December 31, 2003 the Company has reserved 5,301,159 shares of common stock for issuance and exercise of options, of which 1,071,097 shares are available for grant.

Stock Plans — During 2001, the Company terminated the 1996 and 1997 Stock Plans as to future option grants, and adopted the 2001 Stock Plan. Under the 2001 Stock Plan, on January 1 of each year, starting with year 2002, the number of shares in the reserve will automatically increase by the lesser of (i) 3,000,000 shares, (ii) 5% of the outstanding common stock on the last day of the immediately preceding year, or (iii) the number of shares determined by the board of directors. Under the 2001 Stock Plan, the Company may grant options to purchase shares of common stock 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 under the 1996 and 1997 Stock Plans 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, 2003 there were no outstanding options which had been granted outside of the Plans.

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

	Outstanding Options	
	Number of Options	Weighted Average Exercise Price Per Share
Balance, January 1, 2001	371,076	$ 4.43
Granted (weighted average fair value of $4.35 per share)	1,277,568	11.89
Exercised	(81,348)	6.88
Canceled	(56,293)	2.44
Outstanding, December 31, 2001 (157,234 shares vested and exercisable at a weighted average exercise price of $6.45 per share)	1,511,003	10.68
Granted (weighted average fair value of $6.43 per share)	2,118,925	9.84
Exercised	(30,716)	5.82
Canceled	(130,477)	10.70
Outstanding, December 31, 2002 (598,394 shares vested and exercisable at a weighted average exercise price of $9.97 per share)	3,468,735	10.21
Granted (weighted average fair value of $6.15 per share)	2,361,176	8.56
Exercised	(117,546)	5.80
Canceled	(86,011)	11.81
Expired	(22,463)	13.20
Outstanding, December 31, 2003 (1,771,296 shares vested and exercisable at a weighted average exercise price of $9.79 per share)	5,603,891	$ 9.57

Additional information regarding options outstanding as of December 31, 2003 is as follows:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price Per Share	Number Vested and Exercisable	Weighted Average Exercise Price Per Share
$0.06 - $0.06	3,126	3.6	$ 0.06	3,126	$ 0.06
$0.15 - $0.15	3,832	4.6	$ 0.15	3,832	$ 0.15
$0.53 - $0.53	333	6.0	$ 0.53	333	$ 0.53
$1.13 - $1.50	167,816	7.9	$ 1.18	120,633	$ 1.19
$1.88 - $1.88	27,499	6.4	$ 1.88	22,983	$ 1.88
$3.00 - $3.78	100,363	8.7	$ 3.66	24,763	$ 3.34
$4.95 - $7.00	1,688,559	8.9	$ 6.01	277,673	$ 5.47
$7.50 - $11.20	1,821,230	8.3	$ 10.32	813,747	$ 10.53
$11.50 - $16.62	1,761,133	8.7	$ 13.35	489,208	$ 13.69
$19.00-$19.00	30,000	8.0	$ 19.00	14,998	$ 19.00
$0.06 – $19.00	5,603,891	8.6	$ 9.57	1,771,296	$ 9.79

Employee Stock Purchase Plan — In July 2001, the Company adopted an Employee Stock Purchase Plan, ("Purchase Plan") under which eligible employees can contribute up to 10% of their compensation, as defined in the Purchase Plan, towards the purchase of shares of PDF common stock at a price of 85% of the lower of the fair market value at the beginning of the offering period or the end of each six-month offering period. Under the Purchase Plan, on January 1 of each year, starting with 2002, the number of shares reserved for issuance will automatically increase by the lesser of (i) 675,000 shares, (ii) 2% of the Company's outstanding common stock on the last day of the immediately preceding year, or (iii) the number of shares determined by the board of directors. As of January 1, 2003, 1,220,463 shares of the Company's common stock have been reserved for issuance under the employee stock purchase plan. During year 2003, 2002 and 2001, 192,894, 230,212 and 55,702 shares were issued at a weighted average price of $5.89, $6.09 and $10.20 per share, respectively and at December 31, 2003, 741,655 shares are available for future issuance under this plan. The weighted average estimated fair value of shares granted under the employee stock purchase plan during 2003, 2002 and 2001 was $2.62, $3.95 and $3.66, respectively.

Common Stock Options — 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 $18.7 million 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 years ended December 31, 2003, 2002 and 2001 the cancellation of 7,223, 111,478 and 68,073 of these common stock options resulted in the reversal of $43,000, $275,000 and $437,000 of employee stock-based compensation expense.

During 2001, the Company accelerated the vesting on options to purchase 15,226 shares of common stock under a separation agreement with an original strike price of $0.15 per share. This action resulted in a modification to the award resulting in a stock compensation charge of $252,000.

During 2003, the Company recorded $227,000 in compensation expense for the fair value of options granted to two non-employees associated with 45,000 common shares granted under the 2001 Stock Plan. Such options were granted at an exercise price of $7.59 per share, the fair market value on the grant date, and were fully vested at the date of grant and contained restrictions on when such shares could be sold. Such options were valued, using the Black- Scholes option pricing model with the following weighted average assumptions: contractual life of 5 years; risk free interest rate of 4.14%; volatility of 80%; and no dividends during the expected term.

During 2003, in connection with stock options granted and assumed through the Company's acquisition of IDS, it recorded deferred stock-based compensation of $920,000, which reflects the intrinsic value of the unvested stock options assumed as of the acquisition date. Deferred compensation associated with such options is being amortized over the remaining vesting periods of the applicable options.

Amortization of employee and non-employee stock-based compensation totaled $1.8 million, $2.7 million and $7.4 million in 2003, 2002, and 2001, respectively. Amortization of stock-based compensation is expected to be approximately $539,000 in 2004, $117,000 in 2005, $31,000 in 2006 and $1,000 in 2007.

7. Net Income (Loss) Per Share

Basic net income (loss) per share excludes dilution and is computed by dividing net income (loss) attributable to common stockholders by the weighted average common shares outstanding for the period (excluding shares subject to repurchase). Diluted net income (loss) per share reflects the weighted average common shares outstanding plus the potential effect of dilutive securities which are convertible into common shares (using the treasury stock method), except in cases in which the effect would be anti-dilutive. The following is a reconciliation of the numerators and denominators used in computing basic and diluted net income (loss) per share (in thousands except per share data):

	Years Ended December 31,		
	2003	2002	2000
Net income (loss)	$ (4,516)	$ 524	$ (3,872)
Preferred dividends	—	—	(1,619)
Net income (loss) attributable to common shareholders (numerator)	$ (4,516)	$ 524	$ (5,491)
Shares (denominator), basic and diluted:			
Weighted average common shares outstanding	23,734	22,985	16,624
Weighted average common shares outstanding subject to repurchase	(456)	(1,023)	(2,199)
Shares used in computation — basic	23,278	21,962	$14,425
Dilutive common equivalent shares:			
Weighted average common shares outstanding subject to repurchase	—	1,023	—
Stock Options	—	214	—
Shares used in computation — diluted	23,278	23,199	14,425
Net income (loss) per share — basic and diluted	$ (0.19)	$ 0.02	$ (0.38)

During 2003 and 2001, 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 these periods, as their effect would have been anti-dilutive. Such outstanding securities consist of the following (in thousands):

	Years Ended December 31,		
	2003	2002	2001
Shares of common stock subject to repurchase	456	—	2,199
Outstanding options	772	—	800

8. Tax Provision

	Year Ended December 31,		
	2003	2002	2001
	(In thousands)		
U.S.			
Current	$ 341	$1,980	$ 280
Deferred	(2,969)	(528)	(2,280)
Foreign			
Current	34	44	177
Withholding	313	100	100
Deferred	(64)	(143)	(117)
Total provision (benefit)	$(2,345)	$1,453	$(1,840)

During 2003, 2002 and 2001, respectively, income (loss) before taxes was $(6.9) million, $1.9 million, and $(6.2) million from U.S. operations and income from foreign operations was $106,000, $109,000 and $451,000, respectively.

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 assets (liability) is comprised of (in thousands):

	December 31,	
	2003	2002
Net operating loss carryforward	$ 1,589	$ —
Research and development credit carryforward	1,507	725
Foreign tax credit carryforward	313	—
Accruals deductible in different periods	1,505	1,755
Stock-based compensation	328	328
Deferred tax assets	5,242	2,808
Deferred tax liabilities - intangible assets	(7,774)	(94)
	$(2,532)	$2,714

On a quarterly basis, management evaluates the recoverability of the deferred tax assets and thus the need for and level of the valuation allowance. During the fourth quarter of 2001, it was determined that the previously recorded deferred tax asset valuation allowance was no longer necessary based on the evaluation of current evidence and its effect on the Company's estimate of future earnings. Accordingly, the Company reversed a deferred tax valuation allowance of $2.1 million in the fourth quarter of 2001.

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

	December 31,		
	2003	2002	2001
Federal statutory tax provision (benefit)	$(2,401)	$ 692	$(1,989)
State tax expense	(460)	1	1
Stock compensation expense	346	961	2,578
Write-off of in-process research and development	280	—	—
Offering costs	—	170	
Meals and entertainment	4	7	6
Tax credits	(207)	(275)	(531)
Foreign tax, net	91	21	177
Valuation allowances	—	—	(2,050)
Other	2	(124)	(32)
Total	$(2,345)	$1,453	$(1,840)

As of December 31, 2003, the Company had federal and state net operating loss carryforwards for income tax purposes of approximately $3.9 million and $3.6 million, respectively. If not utilized, the federal net operating loss carryforwards will begin to expire in 2023, and the California net operating loss carryforwards will begin to expire in 2013. In addition, as of December 31, 2003, the Company had federal and state research and experimental tax credit carryforwards of $413,000 and $1,358,000, respectively. The federal credits expire in 2023, while the state credits have no expiration. The extent to which the credit carryforwards can be used to offset future 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.

Undistributed earnings of the Company's foreign subsidiaries of $744,000 are considered to be indefinitely reinvested and accordingly, no provision for federal and state income taxes has been provided thereon.

9. Customer and Geographic Information

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

	Years Ended December 31,		
Customer	2003	2002	2001
A	25%	25%	34%
C	15%	17%	9%
G	13%	22%	29%
I	11%	1%	2%

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

	December 31,	
Customer	2003	2002
A	25%	31%
C	20%	11%
G	7%	19%
J	18%	—
K	7%	11%

Revenue from customers by geographic area is as follows (in thousands):

	Years Ended December 31,		
	2003	2002	2001
Japan	$29,872	$30,968	$28,206
United States	9,203	5,784	5,123
Europe	3,451	6,972	3,519

As of December 31, 2003 and 2002 long-lived assets related to AISS, located in Germany, totaled $863,000 and $1.1 million, respectively, of which $718,000 and $882,000 respectively, relates to acquired intangibles and goodwill. The majority of the Company's remaining long-lived assets are in the United States.

10. Litigation

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. This litigation was settled by all parties in the second quarter of 2002. All expenses related to the lawsuit have been reflected in the consolidated financial statements in 2002.

In addition to the matter mentioned above, the Company is subject to various legal proceedings and claims which have arisen in the normal course of business. The Company does not believe that any current litigation or claims will have a material effect on its financial condition.

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 to this plan are discretionary; no such Company contributions have been made since the inception of this plan.

12. Selected Quarterly Financial Data (Unaudited)

	Year Ended December 31, 2003			
	Q1	Q2	Q3	Q4
Total revenue	$ 9,067	$10,090	$11,300	$12,069
Total costs and expenses	$11,128	$11,290	$13,250	$14,914
Net income (loss)	$ (1,334)	$ (676)	$ (1,231)	$ (1,275)
Net income (loss) per share:				
Basic	$ (0.06)	$ (0.03)	$ (0.05)	$ (0.05)
Diluted	$ (0.06)	$ (0.03)	$ (0.05)	$ (0.05)

	Year Ended December 31, 2002			
	Q1	Q2	Q3	Q4
Total revenue	$11,457	$12,236	$11,037	$ 8,994
Total costs and expenses	$10,396	$11,458	$10,950	$10,492
Net income (loss)	$ 580	$ 565	$ 185	$ (806)
Net income (loss) per share:				
Basic	$ 0.03	$ 0.03	$ 0.01	$ (0.02)
Diluted	$ 0.02	$ 0.02	$ 0.01	$ (0.02)

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PDF SOLUTIONS, INC.

By: /s/ JOHN K. KIBARIAN
John K. Kibarian
President and Chief Executive Officer

By: /s/ P. STEVEN MELMAN
P. Steven Melman
Chief Financial Officer and Vice President, Finance and Administration

Date: March 15, 2004

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John K. Kibarian and P. Steven Melman, jointly and severally, his or her attorneys-in-fact, each with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

SIGNATURE	TITLE
/s/ JOHN K. KIBARIAN John K. Kibarian	Director, President and Chief Executive Officer (Principal Executive Officer)
/s/ P. STEVEN MELMAN P. Steven Melman	Chief Financial Officer and Vice President, Finance and Administration (Principal Financial and Accounting Officer)
/s/ SUSAN BILLAT Susan Billat	Director
/s/ B.J. CASSIN B.J. Cassin	Director
/s/ LUCIO L. LANZA Lucio L. Lanza	Director
/s/ DONALD L. LUCAS Donald L. Lucas	Director
/s/ KIMON MICHAELS Kimon Michaels	Director

INDEPENDENT AUDITORS' REPORT

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

We have audited the consolidated financial statements of PDF Solutions, Inc. and subsidiaries (collectively, the "Company") as of December 31, 2003 and 2002, and for each of the three years in the period ended December 31, 2003, and have issued our report thereon dated March 15, 2004 (which includes an explanatory paragraph regarding a change in method of accounting for goodwill and intangibles) included elsewhere in this Annual Report on Form 10-K. Our audits also included the consolidated financial statement schedule of the Company listed in Item 15(a)(2) of this Annual Report on Form 10-K. This consolidated financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion based on our audits. In our opinion, such consolidated financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 15, 2004

Schedule II

PDF SOLUTIONS, INC.

VALUATION AND QUALIFYING ACCOUNT
Years ended December 31, 2003, 2002 and 2001
(IN THOUSANDS)

	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions/ Write-offs of Accounts	Balance at End of Period
Allowance for doubtful accounts				
December 31, 2003	$ 504	$ —	$ —	$ 504
December 31, 2002	$ 292	$ 212	$ —	$ 504
December 31, 2001	$ 192	$ 100	$ —	$ 292

INDEX TO EXHIBITS

Exhibit Number	Description
2.01	Amended and Restated Agreement and Plan of Reorganization, dated September 2, 2003, by and among PDF Solutions, Inc., IDS Software Acquisition Corp., PDF Solutions, LLC and IDS Software Systems Inc.(5)
3.01	Third Amended and Restated Certificate of Incorporation of PDF Solutions, Inc.(2)
3.02	Amended and Restated Bylaws of PDF Solutions, Inc.(2)
4.01	Specimen Stock Certificate.(2)
4.02	Second Amended and Restated Rights Agreement dated July 6, 2001.(1)
10.01	Form of Indemnification Agreement between PDF Solutions, Inc. and each of its Officers and Directors.(1)(H)
10.02	1996 Stock Option Plan and related agreements.(1)
10.03	1997 Stock Plan and related agreements.(1)
10.04	2001 Stock Plan and related agreements.(1)
10.05	2001 Employee Stock Purchase Plan.(1)
10.06	2001 Stock Option/Stock Issuance Plan. (7)
10.07	Lease Agreement between PDF Solutions, Inc. and Metropolitan Life Insurance Company dated April 1, 1996.(1)
10.08	Offer letter to P. Steven Melman dated July 9, 1998.(1)
10.09	Offer letter to Cornelius D. Hartgring dated August 29, 2002.(3)
10.10	Amendment to Lease Agreement between PDF Solutions, Inc. and Metropolitan Life Insurance Company dated as of March 19, 2003.(4)
10.11	Office Lease between PDF Solutions, Inc. and 15015 Avenue of Science Associates LLC dated as of April 1, 2003.(4)
10.12	Andre Hawit Employment Offer letter agreement dated September 24, 2003 by and between PDF Solutions Inc. and Andre Hawit.(6)
23.01	Independent Auditors' Consent.
31.01	Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.02	Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.01	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.02	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

(1) Incorporated by reference to PDF's Registration Statement on Form S-1, as amended (File No. 333-43192).

(2) Incorporated by reference to PDF's Report on Form 10-Q filed September 6, 2001 (File No. 000-31311).

(3) Incorporated by reference to PDF's Report on Form 10-K filed March 26, 2003 (File No. 000-31311).

(4) Incorporated by reference to PDF's Report Form 10-Q filed May 14, 2003 (File No. 000-31311).

(5) Incorporated by reference to Exhibit 2.1 to PDF's Current Report on Form 8-K filed on September 25, 2003.

(6) Incorporated by reference to PDF's report on Form 10-Q filed November 14, 2003 (File No. 000-31311).

(7) Incorporated by reference to PDF's Registration Statement on Form S-8 (File No. 333-109809).

(H) Portions of this Exhibit have been omitted pursuant to a request for confidential treatment.

EXHIBIT 23.1

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statement Nos. 333-102509 and 333-109809 and on Form S-8 of PDF Solutions, Inc. of our reports dated March 15, 2004 (which include an explanatory paragraph regarding a change in method of accounting for goodwill and intangibles) appearing in this Annual Report on Form 10-K of PDF Solutions, Inc. for the year ended December 31, 2003.

/s/ DELOITTE & TOUCHE LLP
San Jose, California
March 15, 2004

CERTIFICATIONS

I, John K. Kibarian, certify that:

1. I have reviewed this annual report on Form 10-K of PDF Solutions, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ JOHN K. KIBARIAN

John K. Kibarian
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 15, 2004

I, P. Steven Melman, certify that:

1. I have reviewed this annual report on Form 10-K of PDF Solutions, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ P. STEVEN MELMAN

P. Steven Melman
Chief Financial Officer and Vice President of Finance and Administration
(Principal Financial Officer)

Date: March 15, 2004

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of PDF Solutions, Inc. (the "Company") on Form 10-K for the year ended December 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John K. Kibarian, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ JOHN K. KIBARIAN
John K. Kibarian
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 15, 2004

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of PDF Solutions, Inc. (the "Company") on Form 10-K for the year ended December 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, P. Steven Melman, Chief Financial Officer and Vice President of Finance and Administration of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ P. STEVEN MELMAN
P. Steven Melman
Chief Financial Officer and Vice President of Finance and Administration

Date: March 15, 2004