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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(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, 2004

or

☐ **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 $145,385,410 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 25,750,120 shares of the Registrant's Common Stock issued and outstanding as of March 3, 2005.

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 26, 2005.

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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 Operation — 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 our 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 2004 we began offering customers new technology that leverages our CV methodology onto product wafers, providing valuable insight regarding product yield loss during mass production with minimal or no increase in test time. Also in 2004, we began extending our DFM software, pDfx, to enable it to be embedded in, or interoperable with, leading EDA tool providers. In addition, we intend to selectively acquire complementary businesses and technologies to increase the scope of our solutions. For example, during 2004 we completed the integration of our yield management system (YMS) software, *data*POWER, which we acquired from IDS Software Systems, Inc. in 2003, with our Integrated Yield Ramp solution to provide additional data analysis capabilities to *data*POWER and yield ramp customers. 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 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 continue to 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. For example, in 2004 we announced our partnership with Virage Logic to develop process-aware extensions to Virage Logic's Area, Speed and Power (ASAP) Logic™ standard cell IP libraries. 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, copper CMP and shallow trench isolation 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 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 signature analysis and product yield ramp 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 proprietary 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 proprietary software is then used to accumulate 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 proprietary 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 CMP, 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.

dataPOWER™ YMS Platform. Our dataPOWER yield management software (YMS) 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. dataPOWER software contains powerful visualization and reporting tools that are flexible to address customers' requirements. Our YMS platform 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 dataPOWER, 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 dataPOWER, WAMA and pDfx are primarily licensed separately, they are also 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 semiconductor market.

Toshiba Corporation, Sony Corporation, Matsushita Electric Industrial Co., and Texas Instruments represented 17%, 13%, 12%, and 10% respectively, of our total revenue for year ended December 31, 2004. Toshiba, Sony, Matsushita 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. No other customer accounted for 10% or more of our revenue in years 2004, 2003 and 2002.

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 J.I.T. International Co., Ltd. as a sales representative and in Korea we use Acetronix Co., Ltd. as a sales representative. 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 2004 we derived 64% of our revenue from customers based in Asia as compared to 70% of our total revenue from customers based in Asia in the year ended December 31, 2003 and 71% in the year ended December 31, 2002. Approximately 25% of our revenue was derived from customers located in the United States in the year ended December 31, 2004 as compared to 22% and 13%, respectively, in the years ended December 31, 2003 and December 31, 2002.

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 $20.3 million, $18.4 million and $15.2 million in 2004, 2003 and 2002, 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 including some of those used by the internal groups at IC companies. Specifically there are several suppliers of yield management systems, such as HPL Technologies, Inc., KLA-Tencor, and Spotfire. 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, 2004 we have been issued 6 U.S. patents and 2 German patents and have 22 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 is 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®, CV®, Optissimo®, PDF Solutions®, Yield Ramp Simulator® and YRS® are our registered trademarks, and dataPOWER™, DBYI™, Design-Based Yield Improvement™, Design-to-Silicon-Yield™, pdCV™, pdFab™, pdFasTest™, pDfx™, pdSPICE™, Proxecco™, 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, 2004, we had 263 employees, including 100 on client service teams, 106 in research and development, 25 in sales and marketing and 32 in general and administrative functions. 189 of these employees are located in San Jose/ San Diego, California, 21 are located in Texas and other parts of the United States, 18 are located in Germany, 20 are located in Japan, 14 are located in Italy, and one employee is located in the Netherlands.

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, 2004:

Name	Age	Position
John K. Kibarian, Ph.D.	40	Chief Executive Officer, President and Director
P. Steven Melman	50	Chief Financial Officer and Vice President, Finance and Administration
David A. Joseph	51	Chief Strategy Officer
Rebecca Baybrook, Ph.D.	53	Vice President, Human Resources
Cees Hartgring, Ph.D.	51	Vice President and General Manager, Manufacturing Process Solutions
Andre Hawit	43	Vice President, Software Development
James Jensen	52	Co-Vice President, Client Services
Zia Malik	53	Vice President, Sales
Kimon Michaels, Ph.D.	38	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.

Cees Hartgring Ph.D., has served as Vice President and General Manager, Manufacturing Process Solutions since January 2004. Mr. Hartgring served as Vice President, Worldwide Sales and Strategic Business Development from April 2003 through December 2003. He served as Vice President of Sales from September 2002 through March 2003. Prior to joining PDF, from May 2000 to August 2001, Mr. Hartgring 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.

Zia Malik has served as Vice President, Sales since December 2003. Prior to joining PDF, from September 2000 through November 2003, Mr. Malik served as Vice President of Operations and Customer Marketing of Ishoni Networks, a maker of broadband networking processors. From February 1997 through September 2000, he served as a Senior Director for the Foundry and Contracts Manufacturing Group of National Semiconductor Corporation, an integrated circuit manufacturer. From June 1987 through February 1997, he held various executive positions at California Micro Devices Corporation, most recently as Vice President of Business Development. Mr. Malik received a B.S. and M.S. in Chemistry from the University of Karachi in Pakistan and an MBA from the University of Phoenix.

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 square feet and the other for 1,500 square feet that expire in January 2008 and October 2005, 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 and sublease 3,000 square feet in Foster City, California under a lease that expires in September 2007. We lease 275 square feet in Amherst, New Hampshire under a lease that expires in August 2005. In addition, we lease 11,000 square feet in Munich, Germany, 2,600 square feet in Tokyo, Japan and 3,500 square feet in Desenzano, Italy under leases that expire in January 2012, April 2006, 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 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 and Issuer Purchases of Equity Securities.***

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 3, 2005 we had approximately 200 stockholders of record and the closing price of our common stock was $13.70 per share as reported by the Nasdaq National Market. The number of stockholders of record does not include individuals whose stock is in nominee or "street name" accounts through brokers.

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:

2004	High	Low
First Quarter	$ 15.55	$ 10.25
Second Quarter	$ 12.49	$ 8.38
Third Quarter	$ 12.52	$ 7.42
Fourth Quarter	$ 16.75	$ 12.12

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

The information under the heading "Equity Compensation Plan Information" in our definitive Proxy Statement (our "Proxy Statement") to be filed with the SEC in connection with our 2005 Annual Meeting of Stockholders to is incorporated into Item 5. of this report by reference.

The table below sets forth the information with respect to purchases made by or on behalf of the Company or any "affiliated purchaser" (as the term is defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934) of our common stock during the fourth quarter of the year ended December 31, 2004:

ISSUER PURCHASES OF EQUITY SECURITIES

Period	(a) Total Number of Shares (or Units) Purchased(1)	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs(1)(2)	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs(1)(2)
Month #1 (October 1, 2004 through October 31, 2004)	—	—	—	$ 5,193,677
Month #2 (November 1, through November 30, 2004)	—	—	—	$ 5,193,677
Month #3 (December 1, 2004 through December 31, 2004)	—	—	—	$ 5,193,677
Total	—	—	—	

(1) As of the quarter ended December 31, 2004, 505,579 shares had been purchased under this program at an average per share price of $9.51 and approximately $5.2 million remained available for repurchases.

(2) In February 2003, our Board of Directors approved a share repurchase program, pursuant to which up to $10.0 million of our outstanding common stock may be repurchased; the repurchase program has no set expiration or termination date. As of December 31, 2004, 505,579 shares had been repurchased under this program at an average per share price of $9.51 and approximately $5.2 million remained available for repurchases.

No cash dividends were declared or paid in 2004 or 2003. 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 or Form 10-Q for the quarter ended September 30, 2004 with respect to the use of proceeds generated by our initial public offering.

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,				
	2004	2003(1)	2002	2001	2000
	(In thousands, except per share data)				
Consolidated Statements Of Operations Data:					
Revenue:					
Design-to-silicon-yield solutions	$ 54,544	$ 35,629	$ 33,685	$ 28,115	$ 16,673
Gain share	7,802	6,897	10,039	8,733	4,597
Total revenue	62,346	42,526	43,724	36,848	21,270
Costs and expenses:					
Cost of design-to-silicon-yield solutions:					
Direct costs of design-to-silicon-yield solutions	21,855	14,412	14,986	13,219	8,050
Amortization of acquired core technology	5,209	2,168	164	164	—
Research and development	20,332	18,441	15,247	12,196	6,418
Selling, general and administrative	15,207	12,459	10,188	10,505	7,332
Offering costs	—	—	—	—	1,258
Stock-based compensation amortization*	742	1,755	2,711	7,371	7,293
Amortization of other acquired intangible assets	1,406	547	—	337	—
Write-off of in-process research and development	—	800	—	—	—
Total costs and expenses	64,751	50,582	43,296	43,792	30,351
Income (loss) from operations	(2,405)	(8,056)	428	(6,944)	(9,081)
Interest and other income, net	675	1,195	1,549	1,232	347
Income (loss) before taxes	(1,730)	(6,861)	1,977	(5,712)	(8,734)
Income tax provision (benefit)	(1,116)	(2,345)	1,453	(1,840)	363
Net income (loss)	(614)	(4,516)	524	(3,872)	(9,097)
Preferred dividend	—	—	—	(1,619)	—
Net income (loss) attributable to common stockholders	$ (614)	$ (4,516)	$ 524	$ (5,491)	$ (9,097)
Net income (loss) per share:					
Basic	$ (0.02)	$ (0.19)	$ 0.02	$ (0.38)	$ (1.24)
Diluted	$ (0.02)	$ (0.19)	$ 0.02	$ (0.38)	$ (1.24)
Weighted average common shares:					
Basic	25,330	23,278	21,962	14,425	7,356
Diluted	25,330	23,278	23,199	14,425	7,356
*Stock-based compensation amortization:					
Direct costs of design-to-silicon-yield solutions	$ 39	$ 345	$ 826	$ 1,996	$ 1,715
Research and development	667	1,099	1,341	3,227	4,016
Selling, general and administrative	36	311	544	2,148	1,562
	$ 742	$ 1,755	$ 2,711	$ 7,371	$ 7,293

	December 31,				
	2004	2003(1)	2002	2001	2000
			(In thousands)		
Consolidated Balance Sheets Data:					
Cash and cash equivalents	$ 45,660	$ 39,110	$ 71,490	$ 70,835	$ 7,626
Working capital	51,312	42,613	73,569	69,994	3,708
Total assets	125,407	123,967	89,047	83,316	15,514
Convertible preferred stock	—	—	—	—	8,457
Total shareholders' equity (deficiency)	108,798	106,552	78,742	72,884	(2,026)

(1) In May 2003, we completed our acquisition of certain assets and liabilities of WaferYield, Inc., which related to 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 were contingent upon the attainment of certain revenue performance objectives.

In September 2003, we completed our acquisition of all the outstanding stock 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 acquisition 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 2004 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, as these losses are driven by the lack of compatibility between the design and its respective 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 2004 we continued to see greater adoption of our products and services through the expansion of our customer base both domestically and internationally. Financial highlights for the year ended December 31, 2004 were as follows:

- Revenue for the year ended December 31, 2004 totaled $62.3 million, an increase of 47% from $42.5 million for the year ended December 31, 2003. The increase from the prior year was attributable to a greater number of solution implementations as well as an increase in sales of our software applications and related implementation services. For the year ended December 31, 2004, four customers each contributed over 10% of revenue and together accounted for 52% of total revenue as compared to four customers each contributing over 10% of revenue and together accounting for 64% of total revenue for the year ended December 31, 2003. Such statistics support our broadening customer base and less reliance on a few large customers.
- Net loss was $614,000 for the year ended December 31, 2004, a decrease from a net loss of $4.5 million for the year ended December 31, 2003. The net loss for the year ended December 31, 2004 included amortization of acquired core technology and intangible assets of $6.6 million and stock-based compensation amortization of $742,000 while the net loss for the fiscal year ended December 31, 2003 included amortization of acquired core technology and intangible assets of $2.7 million, the write-off of in-process research and development of $800,000 and stock based compensation amortization of $1.8 million. The increase in revenue and controlled expenses were the primary reasons for the reduction in the loss.
- Net loss per share was $0.02 for the year ended December 31, 2004 compared to a net loss per share of $0.19 for the year ended December 31, 2003, an improvement of $0.17 per share.

- Cash and equivalents increased $6.6 million, to $45.7 million, during the year ended December 31, 2004. Net cash provided by operating activities and used in investing activities for the year ended December 31, 2004 totaled $6.2 million and $1.7 million, respectively. Net cash provided by financing activities for the year ended December 31, 2004 totaled $2.0 million. During the year ended December 31, 2004, we used $4.8 million to repurchase 505,579 shares of our own common stock at an average price of $9.51 per share. The cash used in financing activities was more than offset by the collection of notes receivable from stockholders, the exercise of stock options and proceeds from the issuance of stock through our employee stock purchase plan.

Acquisitions

On May 31, 2003, we completed our acquisition 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 the acquisition added 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 were contingent upon the attainment of certain revenue performance objectives. Such revenue performance objectives could have resulted in future payments of up to $5.0 million. During the year ended December 31, 2004, we agreed to pay $1.0 million to settle such future contingent payments. As a result of this payment, the remaining $4.0 million payable under the original agreement is no longer payable. Upon final settlement of this liability, we reduced the purchase price by $500,000 reflecting the difference between the incentive amount paid and the related liability recorded in connection with the acquisition.

On September 24, 2003, we completed our acquisition of all the outstanding stock 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 provides 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 were held in escrow as security against certain financial contingencies. All of the cash held in escrow was released in October 2004. Fifty percent of the shares held in escrow, less amounts deducted to satisfy contingencies, were released upon the 12-month anniversary of the acquisition. Any remaining escrow shares will be released upon the 24-month anniversary of the acquisition. In connection with the acquisition, we recorded $39.2 million in goodwill, net of subsequent adjustments related to certain accruals and tax liabilities recognized in the acquisition. Goodwill reflects the excess of the purchase price paid over the identifiable assets assumed in the acquisition.

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 separately 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, 2004, we had $55.7 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, 2004, 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 the years indicated, the percentage of total revenue represented by the line items reflected in our consolidated statements of operations:

	Years Ended December 31,		
	2004	2003	2002
Revenue:			
Design-to-silicon-yield solutions	87%	84%	77%
Gain share	13	16	23
Total revenue	100	100	100
Costs and expenses:			
Cost of design-to-silicon-yield solutions:			
Direct costs of design-to-silicon-yield solutions	35	34	34
Amortization of acquired core technology	8	5	—
Research and development	33	44	35
Selling, general and administrative	25	29	24
Stock-based compensation amortization	1	4	6
Amortization of other acquired intangible assets	2	1	—
Write-off of in-process research and development	—	2	—
Total costs and expenses	104	119	99
Income (loss) from operations	(4)	(19)	1
Interest and other income	1	3	3
Income (loss) before taxes	(3)	(16)	4
Income tax (benefit) provision	(2)	(6)	3
Net income (loss)	(1)%	(10)%	1%

Years Ended December 31, 2004 and 2003

Revenue	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Design-to-silicon-yield solutions	$ 54,544	$ 35,629	$ 18,915	53%	87%	84%
Gain share	7,802	6,897	905	13%	13%	16%
Total	$ 62,346	$ 42,526	$ 19,820	47%	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 $18.9 million in 2004 compared to 2003 was attributable to a greater number of solution implementations as well as an increase in sales of our software applications and related implementation services primarily from new products obtained in our acquisition of IDS.

Gain Share. Gain share revenue represents profit sharing and performance incentives earned based upon our customers reaching certain defined operational levels. Gain share revenue increased approximately $905,000 in 2004 compared to 2003. The increase in gain share revenue was primarily attributable to increased production volumes by our customers at new 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 that 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	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Direct costs of design-to-silicon-yield solutions	$ 21,855	$ 14,412	$ 7,443	52%	35%	34%
Amortization of acquired core technology	5,209	2,168	3,041	140%	8%	5%
Total	$ 27,064	$ 16,580	$ 10,484	63%	43%	39%

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, facilities-related costs and the cost of utilizing sub-contractors, when such service is required. The increase in the direct costs of Design-to-Silicon-Yield solutions of $7.4 million in 2004 compared to 2003 was primarily attributable to increased personnel-related costs, travel and the use of sub-contractors necessary to support our increased Design-to-Silicon-Yield Solutions implementations. 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 $3.0 million in 2004 compared to 2003 was primarily attributable to a full year of recognition and amortization of acquired core technology associated with our acquisition of IDS on September 24, 2003. We anticipate amortization of acquired core technology to be $5.1 million in 2005, $5.1 million in 2006 and $3.2 million in 2007.

Research and Development	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Research and development	$ 20,332	$ 18,441	$ 1,891	10%	33%	44%

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 $1.9 million in 2004 compared to 2003 was primarily due to increased personnel-related expenses, a result of our acquisitions of IDS and WaferYield and our efforts to further advance our technology solutions through new research and development initiatives. 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	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Selling, general and administrative	$ 15,207	$ 12,459	$ 2,748	22%	25%	29%

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 $2.7 million in 2004 compared to 2003 was primarily due to increases in personnel-related expenses, outside sales commissions, and legal and

accounting services related to Sarbanes-Oxley compliance activities, partially offset by a reduction in our allowance for doubtful accounts.

Stock-Based Compensation Amortization	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Stock-based compensation amortization	$ 742	$ 1,755	$ (1,013)	(58)%	1%	4%

Stock-Based Compensation Amortization. The Company amortizes deferred stock-based compensation to expense under 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 $1.0 million in 2004 compared to 2003 was primarily attributable to the effects of the graded vesting method of amortization that results in higher amortization expense during the initial periods following the respective option grants, partially offset by the recognition of $45,000 associated with a grant of 10,000 fully-vested stock options to a non-employee. Additionally, during 2004 we recognized $157,000 in compensation expense associated with the acceleration of stock options to a former employee.

Amortization of Other Acquired Intangible Assets	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Amortization of other acquired intangible assets	$ 1,406	$ 547	$ 859	157%	2%	1%

Amortization of Other Acquired Intangible Assets. Amortization of other acquired intangible assets increased $859,000 as a result of the recognition and amortization of acquired other intangible assets associated with our acquisition of IDS. We anticipate amortization of other acquired intangible assets to decrease in future periods.

Write-off of In-Process Research and Development	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Write-off of in-process research and development	$ —	$ 800	$ (800)	(100)%	—	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. At December 31, 2004, the acquired technology was not being developed and does not have 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. There was no such expense in 2004.

Interest and Other Income, Net	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Interest and other income, net	$ 675	$ 1,195	$ (520)	(44)%	1%	3%

Interest and Other Income, Net. The decrease in interest and other income, net of $520,000 in 2004 compared to 2003 was primarily due to interest earned on lower average cash and cash equivalent balances

resulting from payments in connection with the acquisitions of WaferYield and IDS, partially offset by higher interest rates earned on cash and cash equivalents during 2004.

Provision (Benefit) for Income Taxes	2004	2003	$ Change	% Change	2004 % of Revenue	2003 % of Revenue
			(In thousands, except for %'s)			
Provision (benefit) for income taxes	$ (1,116)	$ (2,345)	$ 1,229	(52)%	(2)%	(6)%

Provision (Benefit) for Income Taxes. The decrease in the benefit for income taxes was due to a decrease in loss before income taxes as a result of increased revenues and improved expense management during the period. We also benefited from the favorable impact of tax deductions associated with disqualifying dispositions from stock activity during the period.

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. 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. The 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.

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. 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.

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.

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. 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.

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. 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.

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 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.

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 were no such intangible assets recognized prior to 2003 and accordingly there was no amortization expense recognized for the comparable period in 2002.

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.

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 that resulted in a reduction in our effective tax rate due to the realization of foreign and domestic tax credits.

Liquidity and Capital Resources

Net cash provided by operating activities was $6.2 million for the year ended December 31, 2004 compared to net cash used in operating activities of $6.8 million for the year ended December 31, 2003. After adjusting the net loss of $614,000 by the amortization of acquired intangible assets of $6.6 million, depreciation and amortization of $2.5 million, stock-based compensation of $742,000 and the change in deferred taxes of $2.4 million, our adjusted results provided approximately $6.8 million in cash. This generation of cash was broadened by increases in accrued compensation and benefits of $1.3 million, billings in excess of recognized revenue of $1.1 million, taxes payable of $1.1 million, accounts payable of $188,000 and a decrease in prepaid expenses and other assets of $431,000, and then partially offset by an increase in accounts receivable of $4.1 million and decreases in deferred revenues of $395,000 and other accrued liabilities of $235,000. The increase in accrued compensation and benefits was primarily the result of accruals for employee discretionary compensation. The increase in billings in excess of recognized revenue was primarily due to the timing of installment billings specified in certain customer contracts. The increase in income taxes payable was primarily the result of an increase in taxable income. The increase in accounts receivable is attributable to the increased billings, in accordance with contract terms at the end of the fiscal year.

Net cash used in investing activities was $1.7 million for the year ended December 31, 2004 compared to $29.3 million for the year ended December 31, 2003. During the year ended December 31, 2004, net cash used in investing activities consisted of the purchases of property and equipment. During the year ended December 31, 2003, 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 $2.0 million for the year ended December 31, 2004 compared to net cash provided by financing activities of $3.8 million for the year ended December 31, 2003. Net cash provided by financing activities for the year ended December 31, 2004 was primarily the result of cash proceeds from the exercise of stock options of $3.1 million, the collection of notes receivable from shareholders of $2.5 million and proceeds from purchases under the employee stock purchase plan of $1.4 million, partially offset by the repurchase of 505,579 shares of our common stock at a average purchase price of $9.51 per share for a total cost of $4.8 million. Net cash provided by financing activities for the year ended December 31, 2003, was primarily the result of the collection of notes receivable from shareholders of $2.0 million, proceeds from purchases under the employee stock purchase plan of $1.2 million and cash proceeds from the exercise of stock options of $681,000.

As of December 31, 2004, our working capital was $51.3 million, compared with $42.6 million as of December 31, 2003. Cash and cash equivalents as of December 31, 2004 were $45.7 million compared to $39.1 million as of December 31, 2003, an increase of $6.6 million. Increases in cash were primarily attributable to operating activities. We expect to experience growth in our overall expenses, in order to execute our business plan. As a result, we anticipate that our overall expenses, as well as planned capital expenditures, may constitute a material use of our cash resources. In addition, we may use cash resources to repurchase common stock, 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.

Off-Balance Sheet Arrangements

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, 2004, we had no foreign currency contracts outstanding.

Operating Lease Obligations

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
2005	$ 2,534
2006	2,404
2007	2,387
2008	739
2009	521
Thereafter	1,042
Total	$ 9,627

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 October 2003, the Emerging Issues Task Force ("EITF") reached a consensus on its tentative conclusions for EITF Issue No. 03-05, *Applicability of SOP 97-2 to Non-Software Deliverables in an Arrangement Containing More-Than Incidental Software* ("EITF No. 03-05"). EITF No. 03-05 provides that software deliverables are within the scope of SOP 97-2 as are non-software deliverables. We were required to adopt this consensus for fiscal periods beginning after August 2003. The adoption of EITF No. 03-05 did not have an effect on our financial position and results of operations.

The Financial Accounting Standards Board ("FASB") issued Financial Interpretation No. ("FIN") 46, *Consolidation of Variable Interest Entities* ("FIN 46"), in January 2003, and a revised interpretation of FIN 46 ("FIN 46-R") in December 2003. FIN 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 adoption of FIN 46-R did not have an impact on our financial position, results of operations or cash flows.

In December 2004, the FASB issued SFAS No. 123(R), *Share-Based Payment*("SFAS 123(R)"), an amendment of SFAS No. 123 and SFAS No. 95 *Statement of Cash Flows.* The statement eliminates the ability to account for share-based compensation transactions using APB No. 25 and requires that the fair value of share-based payment transactions (including those with employees and non-employees) be recognized in

the financial statements. SFAS No. 123(R) applies to all share-based payment transactions in which an entity acquires goods or services by issuing its shares, share options, or other equity instruments or by incurring liabilities based on the price of an entity's shares or that require settlement by the issuance of equity instruments. The provisions of this statement can be applied on one of two retroactive or prospective methods as defined in the statement, and will be effective for us for quarters beginning after June 15, 2005. We have not yet determined which transition method we will apply. Although we are currently assessing the application of this statement, we believe that the adoption of this statement will have a material impact on our financial position and results of operations.

Certain Risks Which May Affect Our Future Results

If semiconductor designers and manufacturers do not continue to adopt our Design-to-Silicon-Yield solutions, we may be unable to increase or maintain our revenue.

If semiconductor designers and manufacturers do not continue to 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 continue 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 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 increase 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 rely 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 year ended December 31, 2004, four customers accounted for 52% of our total net revenue, with Toshiba representing 17%, Sony representing 13%,

Matsushita representing 12%, and Texas Instruments representing 10% respectively. For the year ended December 31, 2003, Toshiba, Sony, Matsushita and Epson Corporation represented 25%, 15%, 13% and 11% 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.

While we were profitable in our most recent quarter we have experienced losses in the nine quarters prior to the most recent quarter. We may not be able to 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 $20.0 million as of December 31, 2004. 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 achieve and subsequently 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 and maintain 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 our 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.

Our operating results could be adversely affected as a result of purchase accounting treatment and the impact of amortization and impairment of intangible assets relating to business combinations.

In accordance with generally accepted accounting principles, we accounted for our acquisitions of IDS and WaferYield using the purchase method of accounting. Under the purchase method of accounting, we have allocated the cost of the individual assets acquired and liabilities assumed, including various identifiable intangible assets (such as core technology) and in-process research and development, based on their respective fair values at the date of the completion of the business combinations. Intangible assets are required to be amortized prospectively over their estimated useful lives. Any excess of the purchase price over those fair market values will be accounted for as goodwill. We are not required to amortize goodwill against income but will be subject to periodic reviews for impairment. If we are required to record impairment charges, the charge will negatively impact reported earnings in the period of the charge.

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 and some direct competition from providers of yield management software such as Spotfire or HPL Technologies. 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. 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 64% of total revenue for year ended December 31, 2004. During the year ended December 31, 2003 revenue generated from customers in Asia was 70%. 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;
- in the event a larger portion of our revenue becomes denominated in foreign currencies, we would be subject to a potentially significant exchange rate risk; 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 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.

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 that 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.

We may have difficulty maintaining the effectiveness of our internal financial controls.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we were required to furnish a report on our management's assessment of the design and effectiveness of our system of internal controls over financial reporting as part of our Annual Report on Form 10-K for the fiscal year ending December 31, 2004. Our auditors were also required to attest to, and report on, our management's assessment. In order to issue their report, our management documented both the design of our system of internal controls and our testing processes that support our management's evaluation and conclusion. During the course of future testing, we may identify deficiencies, including those arising from turnover of qualified personnel or arising as a result of acquisitions, which we may not be able to remediate in time to meet the continuing reporting deadlines imposed by Section 404 and the costs of which may have a material adverse impact of our results of operations. In addition, if we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that our management can conclude on an ongoing basis that we have effective internal controls. We also may not be able to retain independent auditors with sufficient resources to attest to and report on our internal controls in a timely manner. Moreover, our auditors may not agree with our management's future assessments and may send us a deficiency notice that we are unable to remediate on a timely basis. If we are unable to assert as of December 31, 2005 and beyond, that we maintain effective internal controls, our investors could lose confidence in the accuracy and completeness in our financial reports that in turn could cause our stock price to decline.

Changes in stock option accounting rules may materially impact our reported financial position and results of operations, our stock price and our competitiveness in the employee marketplace.

Technology companies in general and PDF in particular have a history of depending upon and using broad based employee stock option programs to hire, incentivize and retain employees in a competitive

marketplace. In December 2004, FASB released FSAS 123(R), which will require all companies to measure compensation costs for all share-based payments, including employee stock options, at fair value. The provisions of FSAS 123(R) may be applied in one of two retroactive or prospective transition methods described therein, and is effective for PDF for quarters beginning after June 15, 2005. We are currently evaluating the effect that the adoption of FSAS 123(R) will have on our financial position and results of operations. While we have not determined which transition method we will apply to measure such compensation costs, we believe that our adoption of FSAS 123(R) will have a material impact on our financial position and results of operations. In addition, we believe that the adoption of FSAS 123(R) may impact our ability to utilize broad based employee stock option plans to hire, incentivize and retain employees and could result in a competitive disadvantage to us in the employee marketplace.

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. In addition, such events have had and may continue to have negative effects on financial markets, including significant price and volume fluctuations in securities markets. If such events continue or escalate, our business and results of operations could be harmed and the market price of our common stock could decline.

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, 2004, we had cash and cash equivalents of $45.7 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, 2004 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. Potential 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 future 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.***

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed by the Company in the reports we file or furnish to the SEC under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms, and that information is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our "disclosure controls and procedures", as such term is defined under Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Changes in Internal Control

There were no significant changes in our internal controls over financial reporting or to our knowledge, in other factors that could significantly affect our internal controls over financial reporting during our most recent fiscal quarter.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control — Integrated Framework,* our management concluded that our internal control over financial reporting was effective as of December 31, 2004.

Our management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2004 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited management's assessment, included in the accompanying Management's Report on Internal Control over Financial Reporting, that PDF Solutions, Inc. and subsidiaries (the "Company") maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that the Company maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2004 of the Company and our report dated March 16, 2005 expressed an unqualified opinion on those financial statements.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 16, 2005

Item 9B. ***Other Information.***

None.

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 our Proxy Statement. The Proxy Statement is expected to be filed within 120 days of December 31, 2004.

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.

Our Board of Directors has adopted a Code of Ethics (our "Code of Ethics") which is applicable to our Chief Executive Officer, our Chief Financial Officer and employees of the Company. Our Code of Ethics is available on our website at www.pdf.com, on the investor relations page. You may also request a copy of our Code of Ethics in writing by sending your request to PDF Solutions, Inc., Attention: Investor Relations, 333 W. San Carlos Street, San Jose, California 95110. If we make any substantive amendments to the Code or grants any waiver, including any implicit waiver, from a provision of the Code of Ethics 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 Registered Public Accounting Firm

During 2004, our independent registered public accounting firm, 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.

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 40 hereof.

(2) Schedule II Valuation and Qualifying Account

See the Report of Independent Registered Public Accounting Firm and Schedule II on page 63 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

PDF SOLUTIONS, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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, 2004 and 2003 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, 2004. 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 the standards of the Public Company Accounting Oversight Board (United States). 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, 2004 and 2003 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of the Company's internal control over financial reporting as of December 31, 2004, based on the criteria established in *Internal Control–Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 16, 2005 expressed an unqualified opinion on management's assessment of the effectiveness of the Company's internal control and unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 16, 2005

PDF SOLUTIONS, INC.

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2004	2003
	(In thousands, except par amounts)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 45,660	$ 39,110
Accounts receivable, net of allowances of $254 in 2004 and $504 in 2003	15,978	11,869
Prepaid expenses and other current assets	2,685	2,614
Deferred tax assets	1,586	1,808
Total current assets	65,909	55,401
Property and equipment, net	3,321	4,110
Goodwill	39,886	40,548
Intangible assets, net	15,791	22,906
Other assets	500	1,002
Total assets	$ 125,407	$ 123,967
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,023	$ 835
Accrued compensation and related benefits	3,209	1,952
Other accrued liabilities	2,545	1,485
Other acquisition obligations	48	1,880
Taxes payable	3,286	2,871
Deferred revenues	2,905	3,300
Billings in excess of recognized revenue	1,581	465
Total current liabilities	14,597	12,788
Long-term liabilities	311	287
Deferred tax liabilities	1,701	4,340
Total liabilities	16,609	17,415
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 2004 and 2003	—	—
Common stock, $0.00015 par value, 75,000 shares authorized: shares issued and outstanding 25,645 in 2004 and 25,432 in 2003	4	4
Additional paid-in capital	134,191	129,568
Treasury stock at cost, 506 shares in 2004 and none in 2003	(4,806)	—
Deferred stock-based compensation	(148)	(688)
Notes receivable from stockholders	(550)	(3,025)
Accumulated deficit	(19,975)	(19,361)
Accumulated other comprehensive income	82	54
Total stockholders' equity	108,798	106,552
Total liabilities and stockholders' equity	$ 125,407	$ 123,967

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2004	2003	2002
	(In thousands, except per share amounts)		
Revenue:			
Design-to-silicon-yield solutions	$ 54,544	$ 35,629	$ 33,685
Gain share	7,802	6,897	10,039
Total revenue	62,346	42,526	43,724
Costs and expenses:			
Cost of design-to-silicon-yield solutions:			
Direct costs of design-to-silicon-yield solutions	21,855	14,412	14,986
Amortization of acquired core technology	5,209	2,168	164
Research and development	20,332	18,441	15,247
Selling, general and administrative	15,207	12,459	10,188
Stock-based compensation amortization*	742	1,755	2,711
Amortization of other acquired intangible assets	1,406	547	—
Write-off of in-process research and development	—	800	—
Total costs and expenses	64,751	50,582	43,296
Income (loss) from operations	(2,405)	(8,056)	428
Interest and other income, net	675	1,195	1,549
Income (loss) before taxes	(1,730)	(6,861)	1,977
Income tax provision (benefit)	(1,116)	(2,345)	1,453
Net income (loss)	$ (614)	$ (4,516)	$ 524
Net income (loss) per share:			
Basic	$ (0.02)	$ (0.19)	$ 0.02
Diluted	$ (0.02)	$ (0.19)	$ 0.02
Weighted average common shares:			
Basic	25,330	23,278	21,962
Diluted	25,330	23,278	23,199
*Stock-based compensation amortization:			
Direct cost of design-to-silicon-yield solutions	$ 39	$ 345	$ 826
Research and development	667	1,099	1,341
Selling, general and administrative	36	311	544
	$ 742	$ 1,755	$ 2,711

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.

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

	Common Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Treasury Stock		Notes Receivable from Stockholders	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount			Shares	Amount				
					(In thousands)					
Balances, January 1, 2002	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
Collection and repurchase of common stock in connection with notes receivable from stockholders	(4)		(25)				2,475			2,450
Exercise of options	504		3,091							3,091
Issuance of common stock in connection with employee stock purchase plan	219		1,354							1,354
Amortization of employee stock-based compensation			158	540						698
Non-employee stock-based compensation			45							45
Acquisition of treasury stock	(506)				506	(4,806)				(4,806)
Net loss								(614)		
Cumulative translation adjustment									28	
Comprehensive loss										(586)
Balances, December 31, 2004	25,645	$ 4	$ 134,191	$ (148)	506	$ (4,806)	$ (550)	$ (19,975)	$ 82	$ 108,798

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2004	2003	2002
		(In thousands)	
Operating activities:			
Net income (loss)	$ (614)	$ (4,516)	$ 524
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	2,503	2,138	1,575
Stock-based compensation expense	742	1,755	2,711
Amortization of acquired intangible assets	6,615	2,715	164
Write-off of in-process research and development	—	800	—
Deferred taxes	(2,417)	(3,461)	(727)
Changes in assets and liabilities, net of effect of acquisition:			
Accounts receivable	(4,109)	(3,405)	(2,378)
Prepaid expenses and other assets	431	(1,019)	(1,287)
Accounts payable	188	37	(239)
Accrued compensation and related benefits	1,257	809	(2,918)
Other accrued liabilities	(235)	(701)	(204)
Taxes payable	1,119	328	1,608
Deferred revenues	(395)	(2,172)	1,723
Billings in excess of recognized revenue	1,116	(141)	432
Net cash provided by (used in) operating activities	6,201	(6,833)	984
Investing activities:			
Purchases of property and equipment	(1,713)	(2,402)	(2,929)
Businesses acquired in purchase transactions, net of cash acquired	—	(26,938)	—
Net cash used in investing activities	(1,713)	(29,340)	(2,929)
Financing activities:			
Exercise of stock options	3,091	681	179
Proceeds from employee stock purchase plan	1,354	1,150	1,402
Collection of notes receivable from stockholders	2,450	1,963	981
Purchases of treasury stock	(4,806)	—	—
Repayments of long-term liabilities	(55)	(17)	(23)
Net cash provided by financing activities	2,034	3,777	2,539
Effect of exchange rate changes on cash	28	16	61
Net increase (decrease) in cash and cash equivalents	6,550	(32,380)	655
Cash and cash equivalents, beginning of period	39,110	71,490	70,835
Cash and cash equivalents, end of period	$ 45,660	$ 39,110	$ 71,490
Non-cash investing and financing activities:			
Repurchase of common stock through cancellation of notes receivable	$ 25	$ 11	$ 73
Purchase price adjustments	$ 662	$ 172	$ —
Supplemental disclosure of cash flow information:			
Cash paid during the year for:			
Taxes	$ 488	$ 720	$ 560
Interest	$ 4	$ 4	$ 3

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2004, 2003 and 2002

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 requires 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, 2004, three customers accounted for 37% of the Company's gross accounts receivable and four customers accounted for 52% of the Company's total revenue. 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. For year ended December 31, 2002, four customers accounted for 72% 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 $2.8 million and $2.0 million at December 31, 2004 and 2003, respectively.

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 — 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.

The following table provides information relating to the intangible assets and goodwill contained within the Company's consolidated balance sheets as of December 31, 2004 and December 31, 2003 (in thousands):

	December 31, 2004			
	Cost	Purchase Price Adjustments	Accumulated Amortization	Net Carrying Amount
Goodwill	$ 41,282	$ (834)	$ (562)	$ 39,886
Acquired identifiable intangibles:				
Acquired core technology	$ 21,602	$ (500)	$ (7,817)	$ 13,285
Brand name	2,000	—	(667)	1,333
Other acquired intangibles	2,460	—	(1,287)	1,173
Total	$ 26,062	$ (500)	$ (9,771)	$ 15,791

	December 31, 2003			
	Cost	Purchase Price Adjustments	Accumulated Amortization	Net Carrying Amount
Goodwill	$ 41,282	$ (172)	$ (562)	$ 40,548
Acquired identifiable intangibles:				
Acquired core technology	$ 21,602	$ —	$ (2,609)	$ 18,993
Brand name	2,000	—	(167)	1,833
Other acquired intangibles	2,460	—	(380)	2,080
Total	$ 26,062	$ —	$ (3,156)	$ 22,906

As required by SFAS No. 142, the Company performed its transitional impairment test of goodwill as of January 1, 2002, at which time the Company determined that the carrying value of goodwill had not been impaired. SFAS No. 142 also requires that goodwill be tested for impairment on an annual basis and more frequently in certain circumstances. Accordingly, the Company has selected December 31, as the date to perform the annual testing requirements. As of December 31, 2004, the Company completed its annual testing requirements and determined that the carrying value of goodwill had not been impaired.

During the year ended December 31, 2003, the Company recorded a non-cash adjustment of $172,000, relating to the reversal of excess accruals for acquisition-related expenses. Such adjustment resulted in a reduction of goodwill. During the year ended December 31, 2004, the Company recorded a non-cash adjustment of $704,000 relating to the reversal of estimated tax liabilities recorded by IDS prior to the

acquisition, which were resolved in 2004. Such adjustment resulted in a reduction of goodwill. Additionally, during the twelve months ended December 31, 2004, the Company recorded a non-cash adjustment of $42,000 relating to a change in estimate on abandoned leased facilities assumed during the acquisition. This adjustment resulted in an increase in goodwill.

During the year ended December 31, 2004, the Company recorded a non-cash adjustment of $500,000 associated with a reversal of contingent incentive performance amounts originally recorded to acquired core technology in connection with the acquisition of Wafer Yield.

The Company expects that annual amortization of acquired identifiable intangible assets to be as follows (in thousands):

Year Ending December 31,	Amount
2005	$ 6,004
2006	6,004
2007	3,783
Total	$ 15,791

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 2004 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, 2004 and 2003, 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. The outstanding balance at December 31, 2004 of $550,000 will mature and be collected 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") 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 as soon as losses become known. 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 ("VSOE") 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 separately 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 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

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

issued to non-employees in accordance with the provisions of SFAS No. 123 and its related pronouncements 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,		
	2004	2003	2002
Net income (loss) as reported:	$ (614)	$ (4,516)	$ 524
Add: stock-based employee compensation expense included in reported net income (loss) under APB No. 25, net of related tax effects	540	1,528	2,711
Deduct: total stock based employee compensation determined under fair value based method for all awards, net of related tax effects	(7,755)	(12,694)	(11,136)
Pro forma net loss	$ (7,829)	$ (15,682)	$ (7,901)
Basic and diluted net income (loss) per share:			
As reported	$ (0.02)	$ (0.19)	$ 0.02
Pro forma	$ (0.31)	$ (0.67)	$ (0.36)

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		
	2004	2003	2002	2004	2003	2002
Estimated life (in years)	5.5	5.5	5.5	1.5	0.75	0.5
Volatility	66.2%	73.0%	79.7%	51.2%	73.0%	80.0%
Risk-free interest rate	3.71%	3.01%	4.14%	1.64%	1.32%	2.6%
Expected dividend	—	—	—	—	—	—

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123(Revised 2004), *Share-Based Payment* ("SFAS 123(R)"), which revised SFAS No. 123. Under the provision of SFAS No. 123(R), all companies will be required to expense the estimated fair value of equity instruments including stock options and similar awards. The accounting provisions of SFAS 123(R) will be effective for quarters beginning after June 15, 2005.

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 (loss).

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, 2004 and 2003 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 October 2003, the EITF reached a consensus on its tentative conclusions for EITF Issue No. 03-05, *Applicability of SOP 97-2 to Non-Software Deliverables in an Arrangement Containing More-Than Incidental Software* ("EITF No. 03-05"). EITF No. 03-05 discusses that software deliverables are within the scope of SOP 97-2 as are non-software deliverables. The Company was required to adopt this consensus for fiscal periods beginning after August 2003. The adoption of EITF No. 03-05 did not have an effect on the Company's financial position or results of operations.

The FASB issued Financial Interpretation Number ("FIN") 46, *Consolidation of Variable Interest Entities* ("FIN 46"), in January 2003, and a revised interpretation of FIN 46 ("FIN 46-R") in December 2003. FIN 46-R 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 adoption of FIN 46-R did not have an impact on the Company's financial position, results of operations or cash flows.

In December 2004, the FASB issued SFAS No. 123(Revised 2004), *Share-Based Payment*("SFAS 123(R)"), an amendment of SFAS No. 123 and SFAS No. 95 *Statement of Cash Flows.* The statement eliminates the ability to account for share based compensation transactions using APB No. 25 and requires that the cost of share-based payment transactions (including those with employees and non-employees) be recognized in the financial statements at fair value. SFAS No. 123(R) applies to all share-based payment transactions in which an entity acquires goods or services by issuing its shares, share options, or other equity instruments or by incurring liabilities based on the price of the company's shares or that require settlement by the issuance of equity instruments. The provisions of this statement can be applied on one of two retroactive or prospective methods as defined in the statement, and will be effective for quarters beginning after June 15, 2005. The Company has not yet determined which transition method it will apply. Although the Company is currently assessing the application of this statement, management believes that the adoption of this statement will have a material impact on its financial position and results of operations.

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, that 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 provides 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 payments 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 400,000 shares of common stock were held in escrow as security against certain financial contingencies. All cash held in escrow was released in October 2004. Fifty percent of the shares held

in escrow, less amounts deducted to satisfy contingencies, were 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 was 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* ("SFAS No. 141"), 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 identifiable 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, with the assistance of an independent third party appraiser through established valuation techniques. At December 31, 2004 the acquired technology was not being developed and does not have alternative future use.

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.

During the year ended December 31, 2003, the Company recorded a non-cash adjustment of $172,000, relating to the reversal of excess accruals for acquisition-related expenses. Such adjustment resulted in a reduction of goodwill. During the year ended December 31, 2004, the Company recorded a non-cash adjustment of $704,000 relating to the reversal of estimated tax liabilities which were recorded by IDS prior to the acquisition, which were resolved in 2004. Such adjustment resulted in a reduction of goodwill. Additionally, during the twelve months ended December 31, 2004, the Company recorded a non-cash adjustment of $42,000 relating to a change in estimate on abandoned leased facilities assumed during the acquisition. This adjustment resulted in an increase in 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 periods. 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, except per share data):

	Years Ended December 31, 2003
Revenue	$ 47,726
Net income (loss)	$ (6,645)
Pro forma net income (loss) per share — basic	$ (0.27)
Pro forma net income (loss) per share — diluted	$ (0.27)

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 WaferYield, Inc., ("WaferYield") a privately held company, which primarily included WaferYield's proprietary shot map WAMA^{tm} 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. The acquisition added to the Company's product offering and its capabilities in enabling semiconductor companies to improve yield and performance of integrated circuits or 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 were contingent upon the attainment of certain revenue performance objectives. Such revenue performance objectives could have resulted in future payments of up to $5.0 million. There were no other assets or liabilities assumed in connection with the acquisition. During 2004, the Company agreed to pay $1.0 million to settle the future incentive agreement. As a result of this settlement, the remaining $4.0 million payable under the original agreement is no longer payable. Upon final determination of this liability, the Company reduced its core technology intangible asset by $500,000 reflecting the difference between the incentive amount paid and the related liability recorded in connection with the acquisition. 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, 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 $860,000 in years 2005 and 2006 and approximately $360,000 in year 2007.

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

3. Property and Equipment

Property and equipment consist of (in thousands):

	December 31,	
	2004	2003
Computer equipment	$ 7,562	$ 6,427
Software	2,667	2,516
Furniture, fixtures, and equipment	914	853
Leasehold improvements	212	120
	11,355	9,916
Accumulated depreciation	(8,034)	(5,806)
	$ 3,321	$ 4,110

4. Other Accrued Liabilities

Other accrued liabilities consist of (in thousands):

	2004	2003
Accrued commissions	$ 615	$ 369
Other accrued expenses	1,930	1,116
Total other accrued expenses	$ 2,545	$ 1,485

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 $2.5 million, $2.2 million and $2.6 million in 2004, 2003 and 2002, respectively.

Future minimum lease payments under noncancelable operating leases at December 31, 2004 are as follows (in thousands):

Year Ended December 31,	
2005	$ 2,534
2006	2,404
2007	2,387
2008	739
2009	521
Thereafter	1,042
Total future minimum lease payments	$ 9,627

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.

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

In addition, the Bylaws of the Company provide that the Company is required to indemnify its officers and directors even when indemnification would otherwise be discretionary, and the Company is required to advance expenses to its officers and directors as incurred in connection with proceedings against them for which they may be indemnified. The Company has entered into indemnification agreements with its officers and directors containing provisions that are in some respects broader than the specific indemnification provisions contained in the Delaware general corporation law. The indemnification agreements require the Company to indemnify its officers and directors against liabilities that may arise by reason of their status or service as officers and directors other than for liabilities arising from willful misconduct of a culpable nature, to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified, and to obtain directors' and officers' insurance if available on reasonable terms. The Company has obtained directors' and officers' liability insurance in amounts comparable to other companies of the Company's size and in the Company's industry. Since a maximum obligation of the Company is not explicitly stated in the Company's Bylaws or in its indemnification agreements and will depend on the facts and circumstances that arise out of any future claims, the overall maximum amount of the obligations cannot be reasonably estimated. Historically, the Company has not made payments related to these obligations, and the estimated fair value for these obligations is zero on the consolidated balance sheet as of December 31, 2004.

6. Stockholders Equity

Common Stock — Common stock issued to the founders and certain other employees are subject to repurchase agreements whereby the Company has the option to repurchase the unvested shares upon termination of employment at the original issue price. The Company's repurchase right generally lapses over four years. At December 31, 2004, 14,758 shares of common stock were subject to repurchase by the Company.

As of December 31, 2004 the Company has reserved 6,572,766 shares of common stock for issuance and exercise of options, of which 2,332,319 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 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, 2004 there were no outstanding options that had been granted outside of the Plans.

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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, 2002 (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
Granted (weighted average fair value of $5.82 per share)	1,047,400	9.63
Exercised	(503,814)	6.14
Canceled	(841,008)	10.98
Expired	(354,187)	12.00
Outstanding, December 31, 2004 (2,368,598 shares vested and exercisable at a weighted average exercise price of $10.00 per share)	4,952,282	$ 9.72

Additional information regarding options outstanding as of December 31, 2004 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
$ 0.15 – $ 0.15	3,332	3.5	$ 0.15	3,332	$ 0.15
$ 0.53 – $ 0.53	333	5.0	$ 0.53	333	$ 0.53
$ 1.13 – $ 1.50	90,815	7.0	$ 1.16	74,948	$ 1.17
$ 1.88 – $ 1.88	16,666	5.4	$ 1.88	16,666	$ 1.88
$ 3.00 – $ 3.78	80,186	7.6	$ 3.62	36,859	$ 3.44
$ 4.95 – $ 7.00	1,080,587	7.9	$ 6.11	526,067	$ 6.01
$ 7.50 – $11.20	2,340,944	8.2	$ 9.86	948,199	$ 10.35
$11.45 – $16.62	1,319,419	7.5	$ 13.37	747,195	$ 13.63
$19.00 – $19.00	20,000	7.0	$ 19.00	14,999	$ 19.00
$ 0.15 – $19.00	4,952,282	7.9	$ 9.72	2,368,598	$ 10.00

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, 2004, 1,729,103 shares of the Company's common stock have been reserved for issuance under the Purchase Plan. During years 2004, 2003 and 2002, 219,087, 192,894 and 230,212 were issued at a weighted average price of $6.18, $5.89 and $6.09 per share, respectively and at December 31, 2004, 1,030,736 shares were available for future issuance under the Purchase Plan. The weighted average estimated fair value of shares granted under the Purchase Plan during 2004, 2003 and 2002 was $2.78, $2.62 and $3.95, 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 was 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, 2004, 2003 and 2002, the cancellation of none, 7,223 and 111,478 of these common stock options resulted in the reversal of none, $43,000 and $275,000 of employee stock-based compensation expense.

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.

During 2004, the Company recorded $45,000 in compensation expense associated with a grant of 10,000 stock options to a non-employee granted under the 2001 Stock Plan. Such options were granted at an exercise price of $9.04 per share, the fair market value on the grant date, and were fully vested at the date of grant. Such options were valued, using the Black-Scholes option pricing model with the following weighted average assumptions: contractual life of 2.5 years; risk free interest rate of 4.14%; volatility of 80%; and no dividends during the expected term.

Amortization of employee and non-employee stock-based compensation totaled $742,000, $1.8 million and $2.7 million in 2004, 2003 and 2002, respectively. Amortization of stock-based compensation is expected to be approximately $116,000 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,		
	2004	2003	2002
Net income (loss)	$ (614)	$ (4,516)	$ 524
Shares (denominator), basic and diluted:			
Weighted average common shares outstanding	25,397	23,734	22,985
Weighted average common shares outstanding subject to repurchase	(67)	(456)	(1,023)
Shares used in computation — basic	25,330	23,278	21,962
Dilutive common equivalent shares:			
Weighted average common shares outstanding subject to repurchase	—	—	1,023
Stock options	—	—	214
Shares used in computation — diluted	25,330	23,278	23,199
Net income (loss) per share — basic and diluted	$ (0.02)	$ (0.19)	$ 0.02

During 2004 and 2003, 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,		
	2004	2003	2002
Shares of common stock subject to repurchase	67	456	—
Outstanding options	1,052	772	—

8. Tax Provision

	Year Ended December 31,		
	2004	2003	2002
	(In thousands)		
U.S.			
Current	$ 835	$ 341	$ 1,980
Deferred	(2,412)	(2,969)	(528)
Foreign			
Current	155	34	44
Withholding	311	313	100
Deferred	(5)	(64)	(143)
Total provision (benefit)	$ (1,116)	$ (2,345)	$ 1,453

During 2004, 2003 and 2002, respectively, income (loss) before taxes was $(2.6) million, $(6.9) million, and $1.9 million from U.S. operations and income from foreign operations was $241,000, $106,000 and $109,000, respectively.

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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,	
	2004	2003
Net operating loss carryforward	$ 348	$ 1,589
Research and development credit carryforward	2,392	1,507
Foreign tax credit carryforward	656	313
Accruals deductible in different periods	1,293	1,505
Stock-based compensation	328	328
Deferred tax assets	5,017	5,242
Deferred tax liabilities — intangible assets	(5,132)	(7,774)
	$ (115)	$ (2,532)

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,		
	2004	2003	2002
Federal statutory tax provision (benefit)	$ (606)	$ (2,401)	$ 692
State tax expense	(1)	(460)	1
Stock compensation expense	(591)	346	961
Write-off of in-process research and development	—	280	—
Offering costs	—	—	170
Meals and entertainment	6	4	7
Tax credits	(152)	(207)	(275)
Foreign tax, net	226	91	21
Other	2	2	(124)
Total	$ (1,116)	$ (2,345)	$ 1,453

As of December 31, 2004, the Company had federal net operating loss carryforwards for income tax purposes of approximately $1.7 million. If not utilized, the federal net operating loss carryforwards will begin to expire in 2024. In addition, as of December 31, 2004, the Company had federal and state research and experimental tax credit carryforwards of $910,000 and $1,482,000, respectively. The federal credits expire in 2024, while the state credits have no expiration. The extent to which the federal and state 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 $985,000 are considered to be indefinitely reinvested and accordingly, no provision for federal and state income taxes has been provided thereon.

As of December 31, 2004 the Company had no recorded tax contingencies.

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

9. Customer and Geographic Information

The Company has adopted the disclosure requirements of SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information,* which establishes standards for reporting information about operating segments. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or group, in deciding how to allocate resources and in assessing performance.

The Company's chief operating decision maker, the chief executive officer, reviews discrete financial information presented on a consolidated basis for purposes of making operating decisions and assessing financial performance. Accordingly the Company considers itself to be in one operating segment, specifically the licensing and implementation of yield improvement solutions for integrated circuit manufacturers.

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

	Years Ended December 31,		
Customer	2004	2003	2002
A	17%	25%	25%
C	13%	15%	17%
G	12%	13%	22%
I	5%	11%	1%
J	10%	9%	—

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

	December 31,	
Customer	2004	2003
A	13%	25%
C	14%	20%
J	2%	18%
N	10%	—

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

	Years Ended December 31,		
	2004	2003	2002
Asia	$ 39,969	$ 29,872	$ 30,968
United States	15,751	9,203	5,784
Europe	6,626	3,451	6,972

As of December 31, 2004 and 2003 long-lived assets related to AISS, located in Germany, totaled $795,000 and $863,000, respectively, of which $659,000 and $718,000 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.

PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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. Stock Repurchase Program

In February 2003, the Board of Directors approved a program to repurchase up to $10.0 million of the Company's common stock in the open market. The Company did not repurchase any shares of its common stock under the program during the year ended December 31, 2003. During the year ended December 31, 2004, the Company has repurchased 505,579 shares at an average price of $9.51 per share for a total cost of $4.8 million. Under this authorization, the Company may continue to make additional stock repurchases from time to time, depending on market conditions, stock price and other factors. At December 31, 2004, $5.2 million remained available under the program to repurchase additional shares.

13. Selected Quarterly Financial Data (Unaudited)

	Year Ended December 31, 2004			
	Q1	Q2	Q3	Q4
	(In thousands except for per share amounts)			
Total revenue	$ 12,676	$ 15,169	$ 16,450	$ 18,051
Total costs and expenses	$ 15,384	$ 15,842	$ 16,379	$ 17,146
Net income (loss)	$ (1,842)	$ (460)	$ 135	$ 1,553
Net income (loss) per share:				
Basic	$ (0.07)	$ (0.02)	$ 0.01	$ 0.06
Diluted	$ (0.07)	$ (0.02)	$ 0.01	$ 0.06

	Year Ended December 31, 2003			
	Q1	Q2	Q3	Q4
	(In thousands except for per share amounts)			
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)

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 16, 2005

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	Chairman of the Board of Directors

SIGNATURE	TITLE
/s/ Donald L. Lucas Donald L. Lucas	Director
/s/ Kimon Michaels Kimon Michaels	Director

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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, 2004 and 2003, and for each of the three years in the period ended December 31, 2004, management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2004, and the effectiveness of the Company's internal control over financial reporting as of December 31, 2004 and have issued our reports thereon dated March 16, 2005 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 16, 2005

SCHEDULE II

PDF SOLUTIONS, INC.

VALUATION AND QUALIFYING ACCOUNT
Years ended December 31, 2004, 2003 and 2002

	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions/ Write-offs of Accounts	Balance at End of Period
		(In thousands)		
Allowance for doubtful accounts				
December 31, 2004	$ 504	$ —	$ 250	$ 254
December 31, 2003	$ 504	$ —	$ —	$ 504
December 31, 2002	$ 292	$ 212	$ —	$ 504

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.(8)
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)
21.01	Subsidiaries of Registrant
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).

(8) Incorporated by reference to PDF's Definitive Proxy Statement filed April 15, 2004 (File No. 000-31311).

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

Exhibit 21.01

Subsidiaries of Registrant

Name of Entity	Jurisdiction of Incorporation or Organization
PDF Solutions GmbH	Germany
PDF Solutions KK	Japan
PDF Solutions International Services, Inc.	Delaware

EXHIBIT 23.01

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-102509 and 333-109809 of our reports relating to the financial statements of PDF Solutions, Inc. and management's report on the effectiveness of internal control over financial reporting, dated March 16, 2005 appearing in this Annual Report on Form 10-K of PDF Solutions, Inc. for the year ended December 31, 2004.

/s/ Deloitte & Touche LLP
San Jose, California
March 16, 2005

EXHIBIT 31.01

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 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 report;

3. Based on my knowledge, the financial statements, and other financial information included in this 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 report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, 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 report is being prepared;

(b) Designed such internal controls over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principals;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

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

Date: March 16, 2005

EXHIBIT 31.02

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 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 report;

3. Based on my knowledge, the financial statements, and other financial information included in this 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 report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, 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 report is being prepared;

(b) Designed such internal controls over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principals;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ P. Steven Melman

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

Date: March 16, 2005

EXHIBIT 32.01

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, 2004 as filed with the Securities and Exchange Commission on March 16, 2005 (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 16, 2005

EXHIBIT 32.02

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, 2004 as filed with the Securities and Exchange Commission on March 16, 2005 (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
(Principal Financial Officer)

Date: March 16, 2005