PDF SOLUTIONS INC
Form 10-K
March 16, 2007

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

(Mark One)

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2006

or

o **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
Common Stock, $0.00015 par value	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer (as defined in Rule 405 of the Securities Act). Yes o No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ

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 þ No o

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. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Act (Check one):
Large accelerated filer o Accelerated filer þ Non-accelerated filer o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No þ

The aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately $146,619,211 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 27,991,391 shares of the Registrant s Common Stock issued and outstanding as of March 10, 2007.

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 30, 2007.

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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 assum of these terms 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, Item 1A, Risk Factors. 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 and better controlling equipment during mass production. By providing our customers the ability to quickly characterize and model their manufacturing processes, our customers can improve the capabilities of their manufacturing processes faster and design products that are more manufacturable. Our solutions are designed to improve a semiconductor company s time-to-market, yield, and ultimately product profitability. Our solutions combine test chips to characterize a manufacturing process, a proprietary electrical wafer test system, proprietary yield modeling and simulation software and methodologies, design-for-manufacturability (DFM) software, yield management system (YMS) software, process control system (PCS) software, and professional services. As an integral part of IC design process development, and fabrication, our solutions enable our customers to analyze yield loss mechanisms to identify, quantify, and correct the issues that cause yield loss. This drives IC design and manufacturing improvements that result in an optimized yield ramp to achieve and exceed targeted IC yield throughout process life cycles. Our solution is designed to increase the initial yield when a design first enters mass production, increase the rate at which that yield improves, or ramps, and achieve higher final yield during volume production. In addition, a yield ramp completed with our technologies allows subsequent product designs to be added to the manufacturing line 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 solutions 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, shortening 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

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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, yield ramp, and process control are designed to allow our customers to achieve a higher final yield, higher yield at mass production, and therefore a lower cost of goods sold. In addition, our solutions, which now also include fault detection and classification (FDC) software, are designed to provide our customers with the ability to proactively monitor process health to avoid potential yield problems.

Our objective is to maximize IC yield by providing the industry standard in technologies and services during the entire IC lifecycle, from design to yield ramp and into mass production. 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, we continue to expand and develop new technology that leverages our Characterization Vehicle® (CV®) methodology onto product wafers, providing valuable insight regarding product yield loss during mass production with minimal or no increase in test time. In addition, we intend to selectively acquire complementary businesses and technologies to increase the scope of our solutions. For example, in late 2006, we completed the acquisition of Si Automation, S.A., a leading provider of FDC software. This acquisition allows us to expand our mass production offerings by leveraging our proprietary characterization of our customers processes to provide them with Yield-Aware PCS. 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 and PCS 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, memory, CMOS image sensor 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 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 and test equipment vendors, electronic design automation vendors, silicon intellectual property providers, semiconductor foundries, and contract test and assembly houses. We believe that our integrated solution provides significant value because it is a comprehensive solution and thus, we will continue to pursue strategic relationships that expand the benefits of our CV® infrastructure (CV*i*), Integrated Yield Ramp (IYR), DFM, and PCS 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

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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. 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, for example from particles falling on the wafer during the manufacturing process. As the semiconductor industry has 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 and Intellectual Property Protection

We have developed proprietary technologies for yield simulation, analysis, loss detection, 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 (CMP), 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 detecting anomalies in a signal and monitoring a manufacturing system;

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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;

algorithms for the optimization of die placement on the wafer to improve the throughput of the test cell; and

algorithms for the optimization of probe head stepping pattern on the wafer to improve the throughput of the test cell.

Characterization Vehicle® test chip designs of experiments, layout designs, and layouts, all of which are used to characterize the manufacturing 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.

Our future success and competitive position rely to some extent upon our ability to protect these proprietary technologies and to prevent competitors from using our systems, methods, and technologies in their products. To accomplish this, we rely primarily on a combination of contractual provisions, confidentiality procedures, trade secrets, and patent, copyright, and trademark laws. 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. As of December 31, 2006 we hold 33 patents worldwide, which includes 19 U.S. patents, and we have 71 patent applications currently pending worldwide, which includes 27 pending in the United States. We intend to prepare additional patent applications for submission to the United States Patent and Trademark Office and various foreign patent offices. In the future, we may seek additional patent protection when we feel it is necessary. Characterization Vehicle®, Circuit Surfer®, CV®, *dataPOWER*®, Optissimo®, pdFasTest®, PDF Solutions®, Proxecco®, the PDF Solutions logo, Yield Ramp Simulator®, and YRS® are our registered trademarks, and Design-to-Silicon-Yield™, Maestria™, pdCV™ and pDfx™ are our unregistered trademarks.

Products And Services

Our solutions consist of integration engineering services, proprietary software, and other technologies designed to address our customers specific manufacturing or design issues. These solutions can be grouped as follows:

Manufacturing Process Solutions. IC manufacturing process development typically involves four 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; a yield ramp

of lead products through the entire manufacturing line; and volume manufacturing of all products through the life of the process. We offer solutions targeted to each of these phases that are designed to

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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.

Volume Manufacturing: Our volume manufacturing solutions are designed to enable our customers to extend our yield ramp services through the life of the process by continuing to collect test data and equipment signals during production and improving yield while reducing the overhead of manufacturing separate test wafers. Optional software modules allow customers to perform 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. Our PCS offering enables our customers to monitor and control process signals to detect and diagnose yield loss related to equipment performance.

Design-for-Manufacturability 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.

Our solutions incorporate the use of various elements of our software and other technologies depending on the customers needs. Our software and other technologies include the following:

Characterization Vehicle (CV) infrastructure. Our test chip design engineers develop a design of experiments (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*i* includes:

CV Test Chips. Our family of proprietary test chip products are run through the manufacturing process with intentional process modifications to explore the effects of potential process improvements given natural manufacturing variations. Our custom-designed CV test chips are optimized for our test hardware and analysis software and include DOEs tuned to each customer s process. Our full-reticle short-flow CV test chips provide a fast learning cycle for specific process modules and are fully integrated with third-party failure analysis and

inspection tools for complete diagnosis to root cause. Our Scribe CV® products are inserted directly on customers product wafers and collect data from product wafers about critical layers.

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.

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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 incorporates our pDfx yield models and software into commercial Electronic Design Automation (EDA) tools available to the IC Design community. These tools are either developed by PDF or frequently in partnership with commercial EDA vendors. Incorporating our pDfx modeling capability into the design flow allows designers 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 *data*POWER 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. *data*POWER 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. Optional modules extend the base platform to enable defect analysis (dP-Defect), memory analysis (dP-bitMAP) , spatial signature analysis (dP-SSA), and optimization of die on the wafer (dP-shotMAP).

Maestria™ FDC Software. Our Maestria product provides fault detection and classification capabilities to rapidly identify sources of process variations and manufacturing excursions by monitoring equipment parameters through proprietary data collection and analysis features.

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

Customers

Our current customers are primarily integrated device manufacturers (IDMs), but also include fabless semiconductor design companies and foundries. Our customers targeted product segments vary significantly, including microprocessors, memory, graphics, 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.

International Business Machines Corporation and Toshiba Corporation represented 25% and 12% respectively, of our total revenue for the year ended December 31, 2006. Texas Instruments, International Business Machines Corporation, Matsushita Electric Industrial Co., and Toshiba Corporation represented 15%, 13%, 11%, and 10%, respectively, of our total revenue for the year ended December 31, 2005. Toshiba, Sony Corporation, Matsushita, and Texas Instruments represented 17%, 13%, 12%, and 10% respectively, of our total revenue for the year ended December 31, 2004. No other customer accounted for 10% or more of our revenue in years 2006, 2005 and 2004.

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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 and, for FDC offerings, a local distributor, Yamatake Corporation. In Taiwan we use J.I.T. International Co., Ltd. as a sales representative and in Korea we use a combination of direct sales and local sales representatives and distributors. 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 2006 we derived 50% of total revenue from customers based in Asia compared to 55% in the year ended December 2005 and 64% in the year ended December 31, 2004. Approximately 39% of our total revenue was derived from customers located in the United States in the year ended December 31, 2006 as compared to 35% and 25%, respectively, in the years ended December 31, 2005 and December 31, 2004. Additional discussion regarding the risks associated with international operations can be found under Item 1A, Risk Factors .

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.

See our Notes to Consolidated Financial Statements , included under Part II, Item 8. Financial Statements and Supplementary Data for additional geographic information.

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 $27.6 million, $22.2 million and $21.0 million in 2006, 2005 and 2004, 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, process control software, and yield management software. Currently, we are the only provider of comprehensive 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.

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We 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 and/or prediction systems, such as KLA-Tencor, Ponte Solutions, Predictions Software, Syntricity Inc., Spotfire Inc., Synopsys Inc., and Yield Dynamics Inc., and process control software, such as Triant Holdings Inc., Straatum Processware Ltd. and MKS Instruments Inc. In addition, Synopsys Inc. now appears to offer directly competing DFM capability, while other EDA suppliers provide alternative DFM solutions that may compete for the same budgetary funds.

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

demonstrated results and reputation;

strength and breadth 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.

Employees

As of December 31, 2006, we had 369 employees, including 123 on client service teams, 161 in research and development, 40 in sales and marketing and 45 in general and administrative functions. 191 of these employees are located in San Jose/San Diego, California, 57 are located in France, 29 are located in Texas and other parts of the United States, 26 are located in Japan, 25 are located in China and other parts of Asia, 20 are located in Germany, 19 are located in Italy, and 2 employees are 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.

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Executive Officers

The following table and notes set forth information about our current executive officers.

Name	Age	Position
John K. Kibarian, Ph.D.	42	Chief Executive Officer, President and Director
Keith A. Jones	36	Chief Financial Officer and Vice President, Finance
David A. Joseph	53	Chief Strategy Officer
Rebecca Baybrook, Ph.D.	55	Vice President, Human Resources
Cees Hartgring, Ph.D.	53	Vice President and General Manager, Manufacturing Process Solutions
Andre Hawit	45	Vice President and General Manager, Yield Manufacturing Solutions
James Jensen	54	Vice President, Engineering Services for Manufacturing Process Solutions
Zia Malik	55	Vice President, Sales
P. Steven Melman	52	Vice President, Investor Relations and Strategic Initiatives
Kimon Michaels, Ph.D.	40	Vice President, Field Operations for Manufacturing Process Solutions 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.

Keith A. Jones, has served as Chief Financial Officer and Vice President, Finance since January 2006. Mr. Jones served as Director of Finance and SEC Compliance from July 2003 to December 2005. Prior to joining PDF, from September 2001 to July 2003, he served as Assistant Controller for Interwoven, Inc., a provider of enterprise content management solutions. From May 2000 to July 2001, he served as Controller for eTime Capital, Inc., a financial software applications company. From July 1994 to April 2000, he served in various positions at Deloitte & Touche LLP, most recently as an Audit Manager. Mr. Jones received a B.S. in Business Administration from California State University, Fresno and 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, Vice President Customer Satisfaction and General Manager of 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., a publishing company. 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 Chief Executive Officer 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

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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 the University of California at Berkeley.

Andre Hawit has served as Vice President and General Manager, Yield Manufacturing Solutions since January 2006. Mr. Hawit served as Vice President, Software Development from September 2003 through December 2005. 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 Chief Technology Officer. Mr. Hawit received a B.S. in Electronics and Computer Engineering from San Francisco State University and an M.B.A. from National University School of Business.

James Jensen has served as Vice President, Engineering Services for Manufacturing Process Solutions since January 2006. Mr. Jensen served as Co-Vice President, Client Services from November 2003 through December 2005 and 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, a maker of semiconductors, 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.

P. Steven Melman has served as Vice President, Investor Relations and Strategic Initiatives since January 1, 2006. Mr. Melman served as Chief Financial Officer and Vice President, Finance and Administration from July 1998 to December 2005. Prior to joining PDF, from April 1997 to June 1998, he served as Vice President Finance and Administration with Animation Science Corporation, an animation company. From April 1995 to April 1997, he served as Vice President, Finance and Chief Financial Officer with Business Resource Group, a facilities management and commercial furnishings company. Mr. Melman received a B.S. in Business Administration from Boston University. Mr. Melman is a Certified Public Accountant.

Kimon Michaels, Ph.D., one of our founders, has served as Vice President, Field Operations for Manufacturing Process Solutions since January 2006, and has been a Director since November 1995. From March 1993 through December 2005, 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.

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Item 1A. ***Risk Factors***

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, both as currently comprised and as we may offer them in the future, our revenue could decline. 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. We need to target as new customers additional integrated device manufacturers (IDM), 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;

our inability to develop, market, or sell effective solutions that are outside of our traditional MPS logic focus;

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.

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, 2006, two customers accounted for 37% of our total net revenue, with International Business Machines Corporation representing 25% and Toshiba Corporation representing 12%. In the year ended December 31, 2005, four customers accounted for 49% of our total net revenue, with Texas Instruments representing 15%, International Business Machines representing 13%, Matsushita representing 11% and Toshiba representing 10%. We could lose a customer due to such customer s decision not to engage us on future process nodes, its decision not to develop its own future process node, or as a result of industry consolidation. 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.

If integrated device manufacturers of logic integrated circuits reduce investment in new process technology as a result of a shift to a fabless manufacturing business model, the pool of potential logic customers for our yield ramp solutions will shrink and our results of operations may suffer.

Historically, the majority of our revenue from integrated yield ramps has been derived from integrated device manufacturers (IDMs) of logic integrated circuits (ICs). If IDMs decide to discontinue or significantly cut back their investment in the development of new process technology as a result of a shift to a model of outsourcing a larger proportion, or all, of the mass production of their ICs, there may be fewer IDMs that are potential customers for our solutions that integrate product designs with in-house manufacturing processes. As a result, the revenue we are able to generate from integrated yield ramps for logic ICs could fall below levels that are currently expected. Also, because our expenses are fixed in the short term and it takes a long time for us to replace customers, such a reduction in revenue could cause significant fluctuations in results of operations.

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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 on which our global operations depend. Further, physical damage to, failure of, or digital damage (such as significant viruses or worms) to, our information systems could disrupt and delay time-sensitive services or computing operations that we perform for our customers, which could negatively impact our business results and reputation. We may need to switch to a new accounting system in the near future, which could disrupt our business operations and distract management. In addition, we will need to expand our intranet to support new data centers to enhance our research and development efforts. Our intranet is expensive to expand and must be highly secure due to the sensitive nature of our customers information that we transmit. Building and managing the support necessary for our growth places significant demands on our management and resources. These demands may divert these resources from the continued growth of our business and implementation of our business strategy. Further, we must adequately train our new personnel, especially our client service and technical support personnel, to effectively 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.

If we fail to protect our intellectual property rights, customers or potential competitors may be able to use our technologies to develop their own solutions which could weaken our competitive position, reduce our revenue, or increase our costs.

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

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 and increase pricing pressure. 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, unless we also establish lower cost non-domestic operations, 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 or prediction software such as Ponte Solutions, Predictions Software, Syntricity Inc., Spotfire Inc., Synopsys Inc. (through their acquisition of HPL Technologies), and Yield Dynamics, Inc., and process control software, such as Triant Holdings Inc., Straatum Processware Ltd., and MKS Instruments Inc. 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

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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. In addition, Synopsys, Inc. now appears to offer directly competing DFM capability, while other EDA suppliers provide alternative DFM solutions that may compete for the same budgetary funds. If these potential competitors change the pricing environment or 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 50% of total revenue in the year ended December 31, 2006. During the year ended December 31, 2005 revenue generated from customers in Asia was 55% of total revenue. We expect that a significant portion of our total future revenue will continue to be derived from companies based in Asia. In addition, we have expanded our non-U.S. operations recently and plan to continue such expansion by establishing overseas subsidiaries, offices, or contractor relationships in locations, and when, deemed appropriate by our management. The success of our business is subject to risks inherent in doing business internationally, including third-party vendors that provide certain software quality assurance and other services having operations in the Middle East. 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 and it may be difficult for us to recruit and retain qualified technical and managerial employees in foreign offices;

- 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, increasing the difficulty of managing multiple, remote locations performing various development, quality assurance, and yield ramp analysis projects;

- compliance with, and unexpected changes in, a wide variety of foreign laws and regulatory environments with which we are not familiar, including, among other issues, with respect to protection of our intellectual property, and a wide variety of trade and export controls under domestic, foreign, and international law;

- 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;

- quarantine, private travel limitation, or business disruption in regions affecting our operations, stemming from actual, imminent or perceived outbreak of human pandemic or contagious disease;

- 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, including but not limited to armed conflict, terrorism, and the resulting disruption to economic activity and business operations.

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; and

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.

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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 that 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 currently have only a few large customers and we are relying on gain share as a significant component of our total revenue, any delay could significantly harm our quarterly results.

Changes in the structure of our customer contracts, including the mix between fixed and variable revenue and the mix of elements, can adversely affect the size and timing of our total revenue.

Our long-term success is largely dependent upon our ability to structure our future customer contracts to include a larger gain share component relative to the fixed fee component. If we are successful in increasing the gain share component of our customer contracts, we will experience an adverse impact on our operating results in the short term as we reduce the fixed fee component, which we typically recognize earlier than gain share fees. Due to acquisitions and expanded business strategies, the mix of elements in some of our contracts has changed recently

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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 as a result of the change in our contracts. 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.

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 maintain profitability.

While we have been profitable in some prior quarters and certain fiscal years, we have experienced losses in the past and in the current fiscal year ended December 31, 2006. We may not achieve and thereafter 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 $13.9 million as of December 31, 2006. 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 stock-based compensation.

As a result, we will need to significantly increase revenue to maintain profitability on a quarterly or annual basis. Any of these factors could cause our stock price to decline.

We may experience significant fluctuations in operating results due to the cyclical nature of the semiconductor industry.

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. The semiconductor industry also periodically experiences increased demand and production capacity constraints. As a result, we may experience

significant fluctuations in operating results due to general semiconductor industry conditions and overall economic conditions.

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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.

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

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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.

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, and 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.

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We may have difficulty maintaining the effectiveness of our internal control over financial reporting.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to furnish a report on our management s assessment of the design and effectiveness of our system of internal control over financial reporting as part of our Annual Report on Form 10-K. Our auditors are also required to attest to, and report on, our management s assessment. In order to issue their report, our management is required to document both the design of our system of internal controls and our testing processes that support our management s evaluation and conclusion. While our management has been able to conclude that our internal control over financial reporting has been effective in each of the last three years, 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 harm 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 deem our controls as ineffective if we are unable to remediate on a timely basis. If we are unable to assert as of December 31, 2006 and beyond, that we maintain effective internal controls, our investors could lose confidence in the accuracy and completeness of our financial reports that in turn could cause our stock price to decline.

We may not be able to expand our business and 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.

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.

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

On October 31, 2006, we completed our acquisition of Si Automation S.A. Our success in realizing the strategic benefits and growth opportunities to be gained from incorporating the operations of Si Automation into PDF and the timing of this realization depend upon our successful integration of Si Automation. The integration of Si Automation is a complex, costly and time-consuming process. The difficulties of combining our operations associated with this acquisition 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;

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preserving research and development, marketing, customer and other important relationships; and

minimizing the diversion of management s attention from ongoing business concerns.

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

Our principal executive offices are located in San Jose, California where we lease approximately 48,050 square feet under two leases, one for 39,100 square feet and the other for 8,950 square feet, each expiring in January 2008. 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 2008. 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 2007. In addition, we lease 7,100 square feet in Munich, Germany, 2,600 square feet in Tokyo, Japan, 5,800 square feet in Shanghai, China, 6,500 square feet in Montpellier, France, 900 square feet in Neuilly, France and 3,500 square feet in Desenzano, Italy under leases that expire in December 2011, April 2008, June 2008, October 2009, May 2007 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.

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

None.

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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 February 28, 2007 we had approximately 211 stockholders of record and the closing price of our common stock was $11.39 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:

2006	**High**	**Low**
First Quarter	$ 19.85	$ 16.50
Second Quarter	$ 19.36	$ 11.00
Third Quarter	$ 13.35	$ 9.50
Fourth Quarter	$ 15.70	$ 10.79

2005	**High**	**Low**
First Quarter	$ 16.15	$ 13.25
Second Quarter	$ 13.90	$ 11.41
Third Quarter	$ 17.76	$ 13.15
Fourth Quarter	$ 17.33	$ 14.48

The following graph compares the cumulative total stockholder return data for our stock since July 26, 2001 (the date on which the Company s stock was first registered under Section 12 of the Securities Exchange Act of 1934, as amended) to the cumulative return over such period of (i) The Nasdaq Stock Market (U.S.) Index and (ii) the RDG Technology Composite Index. The graph assumes that $100 was invested on July 27, 2001. The graph further assumes that such amount was initially invested in the Common Stock of the Company at a per share price of $12.00 (price at which such stock was first offered to the public by the Company on the date of its initial public offering) and reinvestment of any dividends. This performance graph is not soliciting material, is not deemed filed with the SEC and is not to be incorporated by reference in any filing by us under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

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COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among PDF Solutions, Inc., The NASDAQ Composite Index
And The RDG Technology Composite Index

* $100 invested on 12/31/01 in stock or index-including reinvestment of dividends.

Fiscal year ending December 31.

The information under the heading Equity Compensation Plan Information in our definitive Proxy Statement (our Proxy Statement) to be filed with the Security and Exchange Commission (SEC) in connection with our 2007 Annual Meeting of Stockholders 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, 2006:

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ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs(1)
Month #1 (October 1, 2006 through October 31, 2006)				$ 4,451,236
Month #2 (November 1, 2006 through November 30, 2006)				$ 4,451,236
Month #3 (December 1, 2006 through December 31, 2006)				$ 4,451,236
Total				

(1) On March 26, 2003, we announced that 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, 2006, 550,521 shares had been repurchased under this program at a weighted average per share price of $10.08 and approximately $4.5 million remained available for repurchases.

Dividend Policy

No cash dividends were declared or paid in 2006 or 2005. 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.

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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 therein and in Part II of this Form 10-K.

	Year Ended December 31,				
	2006(2)	2005	2004	2003(1)	2002
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenue:					
Design-to-silicon-yield solutions:					
Integrated solutions	$ 45,382	$ 52,719	$ 49,573	$ 28,060	$ 30,104
Software licenses	10,774	9,319	4,971	7,569	3,581
Gain share	20,028	11,890	7,802	6,897	10,039
Total revenue	76,184	73,928	62,346	42,526	43,724
Cost of design-to-silicon-yield solutions:					
Direct costs of design-to-silicon-yield solutions:					
Integrated solutions	27,418	24,319	21,811	14,734	15,812
Software licenses	209	293	83	23	
Amortization of acquired core technology	5,270	5,064	5,209	2,168	164
Total direct costs of design-to silicon-yield solutions	32,897	29,676	27,103	16,925	15,976
Gross margin	43,287	44,252	35,243	25,601	27,748
Operating expenses:					
Research and development	27,613	22,204	20,999	19,540	16,588
Selling, general and administrative	19,814	16,146	15,243	12,770	10,732
Amortization of other acquired intangible assets	1,459	940	1,406	547	
Write-off of in-process research and development	800			800	
Total operating expenses	49,686	39,290	37,648	33,657	27,320
Income (loss) from operations	(6,399)	4,962	(2,405)	(8,056)	428
Interest and other income, net	2,827	1,658	675	1,195	1,549
Income (loss) before taxes	(3,572)	6,620	(1,730)	(6,861)	1,977
Income tax provision (benefit)	(3,133)	96	(1,116)	(2,345)	1,453
Net income (loss)	$ (439)	$ 6,524	$ (614)	$ (4,516)	$ 524

Net income (loss) per share:					
Basic	$ (0.02)	$ 0.25	$ (0.02)	$ (0.19)	$ 0.02
Diluted	$ (0.02)	$ 0.24	$ (0.02)	$ (0.19)	$ 0.02
Weighted average common shares:					
Basic	26,885	25,983	25,330	23,278	21,962
Diluted	26,885	27,473	25,330	23,278	23,199

Stock based compensation expense included in these consolidated statements of operations was recorded under Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees* (APB

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No. 25) for the years 2002 through 2005 and under Statement of Financial Accounting Standards (SFAS) No. 123 (revised 2004), *Share-Based Payment* (SFAS No. 123(R)) for 2006.

For the year ended December 31, 2006 the provision for income tax includes income tax benefit from stock-based compensation.

	2006(2)	2005	December 31, 2004	2003(1)	2002
			(In thousands)		
Consolidated Balance Sheets Data:					
Cash and cash equivalents	$ 36,451	$ 60,506	$ 45,660	$ 39,110	$ 71,490
Short-term investments	16,402				
Working capital	66,586	68,534	51,312	42,613	73,569
Total assets	168,857	139,892	125,407	123,967	89,047
Total stockholders equity	148,219	122,681	108,798	106,552	78,742

(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.

(2) In October 2006, we completed our acquisition of all the outstanding stock of Si Automation which developed and licensed fault detection and classification software applications and services. The aggregate purchase price of $36.6 million included the payment in cash of $25.5 million, the issuance of 699,298 shares of PDF common stock valued at $9.4 million and acquisition costs of $1.7 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 Risk Factors included in Item 1A. 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 Item 1A. Risk Factors 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 and better controlling equipment during mass production. Our solutions are designed to 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, process control system software, 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, to increase the rate at which that yield improves, and to allow subsequent product designs to be added to manufacturing lines more quickly and easily.

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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 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 enhanced our product and service offerings through the acquisitions of IDS and WaferYield. In 2006, we further complemented our technology offering by acquiring Si Automation S.A. and adding its FDC software capabilities to our integrated solution.

Industry Trend

Demand for consumer electronics and communications devices 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 and through 2007 more and more companies have expanded or advanced their design and manufacturing processes to develop and produce deep submicron ICs containing component sizes measured at 90 nanometers and below. As this trend continues, companies will continually be challenged to improve process capabilities to optimally produce ICs with minimal random and systematic and yield loss, which is 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 products and services that address the performance yield loss issues the semiconductor industry is facing today and will face in the future.

Financial Highlights

Financial highlights for the year ended December 31, 2006 were as follows:

Total revenue for the year ended December 31, 2006 was $76.2 million, an increase of 3% compared to the year ended December 31, 2005. Revenue from Design-to-Silicon-Yield integrated solutions for the year ended December 31, 2006 decreased to $45.4 million compared to $52.7 million for the year ended December 31, 2005. The decrease was primarily the result of a slower booking rate for new integrated solution engagements in the second half of 2005, which would have contributed to revenue in 2006, and the first half of 2006, coupled with late timing of new contracts signed in the second half of 2006. The decline in fixed fee integrated solutions revenue was partially offset by an increase in software maintenance revenue. Revenue from Design-to-Silicon-Yield software licenses for the year ended December 31, 2006 increased to $10.8 million compared to $9.3 million for the year ended December 31, 2005. This increase was due to greater adoption of our software applications by new and existing customers and to the addition of new software offerings as a result of the acquisition of Si Automation in October 2006. Gain share revenue for the year ended

December 31, 2006 increased to $20.0 million compared to $11.9 million for the year ended December 31, 2005 as a result of increased wafer starts at our customers and a greater number of contracts reaching gain share thresholds. Our gain share revenue may continue to fluctuate from quarter to quarter as a result of each customer s contractual performance measures for achieving gain share as well as each customer s production volumes in any given period.

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Net loss of $439,000 was reported for the year ended December 31, 2006, compared to net income of $6.5 million for the year ended December 31, 2005. The decrease in net income was primarily attributable to an overall $7.2 million increase in stock-based compensation expense recognized and allocated to all functional expense categories as a result of our adoption of SFAS No. 123(R) and increased operating expenses, partially offset by increased other income and tax benefits. The increase in operating expenses was mainly due to growth in headcount, an increase in amortization of other acquired intangible assets and the write-off of acquired in-process research and development as a result of the acquisition of Si Automation on October 31, 2006. The tax benefit was the result of the realization of state and federal tax credits associated with the current and prior years. We will continue to monitor and control costs, relative to our revenue growth, however, we expect that the integration of Si Automation will materially increase our overall costs.

Net loss per basic and diluted share was $0.02 for the year ended December 31, 2006 compared to a net income per diluted share of $0.24 for the year ended December 31, 2005, a decrease of $0.26 per share. The net loss in fiscal 2006 included $7.4 million in stock-based compensation expense related to the adoption of SFAS No. 123(R).

Cash, cash equivalents and short-term investments decreased $7.7 million to $52.9 million during the year ended December 31, 2006, primarily a result of the acquisition of Si Automation. Net cash provided by operating activities and financing activities for the year ended December 31, 2006 totaled $2.6 million and $8.2 million, respectively. Net cash used in investing activities for capital equipment and businesses acquired (net of cash acquired) for the year ended December 31, 2006 totaled $2.4 million and $18.7 million, respectively.

Acquisitions

On October 31, 2006, we completed our acquisition of all the outstanding capital stock of Si Automation S.A., a privately held company based in Montpellier, France (SIA). SIA developed and licensed fault detection and classification software applications and provided services dedicated to the semiconductor industry that enable customers to rapidly identify sources of process variations and manufacturing excursions by monitoring equipment parameters through its proprietary data collection and analysis applications. We believe that the acquisition of SIA will allow us to provide our customers greater capabilities for managing product yield improvement as a result of these process control solutions and services. At the closing of the acquisition, SIA became our wholly owned subsidiary and its name was changed to PDF Solutions S.A. The aggregate purchase price was $36.6 million which included the payment in cash of $25.5 million, the issuance of 699,298 shares of our common stock valued at $9.4 million, and acquisition costs of $1.7 million. In connection with the acquisition, $2.7 million in cash and approximately 119,000 shares of common stock were held in escrow as security against certain financial contingencies. The cash and shares held in escrow, less amounts deducted to satisfy contingencies, will be released upon the 18-month anniversary of the acquisition. Any remaining cash and shares held in escrow after satisfying contingencies will be released no later than the 36-month anniversary of the acquisition. In connection with the acquisition, we recorded $21.1 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

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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 integrated solutions and software licenses. Revenue recognition for each element of Design-to-Silicon-Yield solutions is as follows:

Integrated Solutions We generate a significant portion of 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 (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 agreement. Costs incurred under these arrangements are deferred and recognized in proportion to revenue recognized under these arrangements.

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 bundled with software licenses in multiple element arrangements, support and maintenance, consulting (other than for our fixed price solution implementations), installation, and training revenue is allocated to each element of a transaction based upon its fair value as determined by our VSOE. VSOE is generally established for maintenance based upon negotiated renewal rates while VSOE for consulting, installation, and training is established based upon our customary pricing for such services when sold separately. 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.

Software Licenses We also license our software products separate from our integrated solutions. 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

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solution implementations), installation, and training, revenue is allocated to each element of a transaction based upon its fair value as determined by our VSOE and such services are recorded as integrated solutions. 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. No revenue has been recognized for software licenses 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. 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, 2006, we had $60.0 million of goodwill and $13.6 million of intangible assets. In the valuation of our goodwill and intangible assets, we must make assumptions regarding estimated future cash flows to be derived from the acquired assets. If these estimates or their related assumptions change in the future, we may be required to record impairment charges for these assets, which would have a material adverse effect on our operating results. We evaluate goodwill for impairment pursuant to the provisions of SFAS No. 142, *Goodwill and Other Intangible Assets*. We have selected December 31 as the date upon which to perform our annual testing for impairment. As of December 31, 2006, 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 1 to 6 years, which are based on the estimated period of benefit to be delivered from such assets. However, a decrease in the estimated useful lives of such assets would 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.

Stock-Based Compensation

Effective January 1, 2006, we adopted the provisions of Statement of Financial Accounting Standards (SFAS) No. 123 (revised 2004), *Share-Based Payment* (SFAS No. 123(R)). The statement eliminates the ability to account for share-based compensation transactions using Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees* (APB No. 25) and requires that the cost of share-based payment

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transactions (including those with employees and non-employees) be recognized in the financial statements based on estimated fair values. SFAS No. 123(R) applies to all share-based payment transactions in which we acquire goods or services by issuing our shares, share options, or other equity instruments or by incurring liabilities based on the price of our shares or that require settlement by the issuance of equity instruments. We elected to use the modified prospective transition method upon adopting this statement and accordingly prior periods have not been restated to reflect the impact of SFAS No. 123(R). Under this transition method, stock-based compensation expense for the year ended December 31, 2006 includes compensation expense for all stock-based compensation awards granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provision of SFAS No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123). Stock-based compensation expense for all stock-based compensation awards granted after January 1, 2006 is based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123(R). We recognize the compensation costs of options granted after January 1, 2006 on a straight-line basis over the vesting periods of the applicable stock purchase rights and stock options, generally four years. Prior to adoption of SFAS No. 123(R), we presented all tax benefits resulting from stock options as operating cash flow in our statement of cash flows. In accordance with SFAS No. l23(R), the cash flows resulting from excess tax benefits are classified as financing cash flows.

Prior to the adoption of SFAS No. 123(R), we accounted for stock-based compensation in accordance with APB No. 25, and complied with the disclosure provisions of SFAS No. 123 as amended by SFAS No. 148, *Accounting for Stock-Based Compensation Transition and Disclosures*. Deferred compensation recognized under APB No. 25 was amortized to expense using the graded vesting method. In March 2005, the Securities and Exchange Commission (the SEC) issued Staff Accounting Bulletin No. 107 (SAB 107) regarding the SEC s interpretation of SFAS No. 123(R) and the valuation of share-based payments for public companies. We have applied the provisions of SAB 107 in its adoption of SFAS No. 123(R). See Note 7 to the Consolidated Financial Statements for a further discussion on stock-based compensation.

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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,		
	2006	**2005**	**2004**
Revenues:			
Design-to-silicon-yield solutions:			
Integrated solutions	60%	71%	79%
Software licenses	14	13	8
Gain share	26	16	13
Total revenues	100%	100%	100%
Cost of design-to-silicon-yield solutions:			
Direct costs of design-to-silicon-yield solutions:			
Integrated solutions	36	33	35
Software licenses			
Amortization of acquired core technology	7	7	8
Total cost of design-to silicon-yield solutions	43	40	43
Gross margin	57	60	57
Operating expenses:			
Research and development	37	30	34
Selling, general and administrative	26	22	25
Amortization of other acquired intangible assets	2	1	2
Write-off of in-process research and development	1		
Total operating expenses	66	53	61
Income (loss) from operations	(9)	7	(4)
Interest and other income, net	4	2	1
Income (loss) before taxes	(5)	9	(3)
Income tax provision (benefit)	(4)		(2)
Net income (loss)	(1)%	9%	(1)%

Years Ended December 31, 2006 and 2005

	2006	**2005**

Revenue	2006	2005	$ Change	% Change	% of Revenue	% of Revenue
	(In thousands, except for % s)					
Design-to-silicon-yield solutions:						
Integrated solutions	$ 45,382	$ 52,719	$ (7,337)	(14)%	60%	71%
Software licenses	10,774	9,319	1,455	16	14	13
Gain share	20,028	11,890	8,138	68	26	16
Total	$ 76,184	$ 73,928	$ 2,256	3%	100%	100%

Design-to-Silicon-Yield Solutions. Design-to-Silicon-Yield solutions revenue is derived from integrated solutions (including solution implementations, software support and maintenance and training) and software licenses, provided during our customer yield improvement engagements and solution product sales.

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Integrated solutions. The decrease in integrated solutions revenue of $7.3 million for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily attributable to a slower booking rate for new integrated solution engagements in late 2005, which would have contributed to revenue in 2006, and in the first half of 2006, and to the late timing of new contracts signed in the second half of 2006. The decline in fixed fee integrated solutions revenue was partially offset by an increase in software maintenance revenue. Our integrated solutions revenue may fluctuate in the future and is dependent on a number of factors including our ability to obtain new customers at emerging technology nodes.

Software licenses. The increase in software licenses revenue of $1.5 million for the year ended December 31, 2006 compared to the year ended December 31, 2005 was due to greater adoption of our software applications by new and existing customers and the addition of new software offerings as a result of the acquisition of Si Automation in October 2006. Software license revenue may fluctuate in the future and is dependent upon a number of factors including the semiconductor industry s acceptance of our products, our ability to attract new customers and further penetration of our current customer base.

Gain Share. Gain share revenue represents profit sharing and performance incentives earned based upon our customer reaching certain defined operational levels. Gain share revenue increased approximately $8.1 million for the year ended December 31, 2006 compared to the year ended December 31, 2005. The increase in gain share revenue was primarily due to a greater number of wafer starts at our customers sites, as well as a greater number of engagements contributing to gain share at newer technology nodes. Our gain share revenue may continue to fluctuate from period to period. 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	2006	2005	$ Change	% Change	2006 % of Revenue	2005 % of Revenue
	(In thousands, except for % s)					
Direct costs of design-to-silicon-yield solutions:						
Integrated solutions	$ 27,418	$ 24,319	$ 3,099	13%	36%	33%
Software licenses	209	293	(84)	(29)		
Amortization of acquired core technology	5,270	5,064	206	4	7	7
Total	$ 32,897	$ 29,676	$ 3,221	11%	43%	40%

Direct Costs of Design-to-Silicon-Yield Solutions. Direct costs of Design-to-Silicon-Yield solutions consists of costs incurred to provide and support our integrated solutions and costs recognized in connection with licensing our software.

Integrated solutions. Integrated solutions costs consist of material, labor, overhead costs, and stock-based compensation charges associated with our solution implementations. Costs include purchased materials, employee compensation and benefits, travel and facilities-related costs. The increase in direct costs of Design-to-Silicon-Yield integrated solutions of $3.1 million for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily attributable to the increase of $2.1 million in stock-based compensation expense under

SFAS No. 123(R), and the distribution of expanded pdFastest products. Our labor costs remained relatively unchanged for the year ended December 31, 2006 as compared to the year ended December 31, 2005, despite the decrease in revenues, primarily a result of a decrease in the utilization rate of our labor resources. 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.

Software Licenses. Software license costs consist of costs associated with licensing third-party software sold in conjunction with our software products and expenses incurred to produce and distribute our product documentation. The decrease in direct costs of Design-to-Silicon-Yield solutions software licenses of $84,000

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for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily attributable to a decrease in license fees and royalties incurred associated with third party software licenses sold in conjunction with our software. We expect the cost of software licenses to fluctuate in the future as a result of royalties and license fees paid for third party applications incorporated in our software products.

Amortization of Acquired Core Technology. Amortization of acquired core technology consists of the amortization of intangibles acquired as a result of certain business combinations. The increase in the amortization of acquired core technology expense of $206,000 for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily attributable to the amortization of core technology acquired from our acquisition of Si Automation in October 2006. We anticipate amortization of acquired core technology to be $4.4 million in 2007, $1.2 million in 2008, $1.2 million in 2009 and $1.0 million in 2010.

Research and Development	2006	2005	$ Change	% Change	2006 % of Revenue	2005 % of Revenue
	(In thousands, except for %s)					
Research and development	$ 27,613	$ 22,204	$ 5,409	24%	37%	30%

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, facilities cost allocations, and stock-based compensation charges. The increase in research and development expenses of $5.4 million for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily due to the increase of $2.1 million in stock-based compensation expense recognized since the adoption of SFAS No. 123(R), increased personnel-related expenses, third-party developer expenses, additional operating costs associated with the opening of a new office in Shanghai, China, and additional operating costs associated with the acquisition of Si Automation in October 2006. 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	2006	2005	$ Change	% Change	2006 % of Revenue	2005 % of Revenue
	(In thousands, except for %s)					
Selling, general and administrative	$ 19,814	$ 16,146	$ 3,668	23%	26%	22%

Selling, General and Administrative. Selling, general and administrative expenses consist primarily of compensation, 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, and stock-based compensation charges. The increase in selling, general and administrative expenses of $3.7 million for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily due to the increase of $3.0 million in stock-based compensation expense recognized since the adoption of SFAS No. 123(R), increased personnel-related expenses, primarily a result of the acquisition of Si Automation in October 2006 and increased legal fees, partially offset by a decrease in outside sales commissions.

Amortization of Other Acquired Intangible Assets	2006	2005	$ Change	% Change	2006 % of Revenue	2005 % of Revenue
	(In thousands, except for % s)					
Amortization of other acquired intangible assets	$ 1,459	$ 940	$ 519	55%	2%	1%

Amortization of Other Acquired Intangible Assets. Amortization of other acquired intangible assets consists of the amortization of intangibles acquired as a result of certain business combinations. Amortization of other acquired intangible assets increased $519,000 for the year ended December 31, 2006 compared to the year ended December 31, 2005, as a result of the acquisition of Si Automation in October 2006 and related amortization expense of such acquired intangibles. We anticipate amortization of these other acquired intangible assets to continue to increase in future periods.

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Write-off of In-Process Research and Development	2006	2005	$ Change	% Change	2006 % of Revenue	2005 % of Revenue
	(In thousands, except for % s)					
Write-off of in-process research and development	$ 800	$	$ 800	N/A	1%	

Write-off of In-process Research and Development. Write-off of in-process research and development of $800,000 in the year ended December 31, 2006 was related to the acquisition of Si Automation and was associated with acquired technology that had not reached technological feasibility and for which there was no alternative future use. At December 31, 2006, the acquired technology was not being developed and did not have alternative future use. With the assistance of an independent valuation, 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 2005.

Interest and Other Income, Net	2006	2005	$ Change	% Change	2006 % of Revenue	2005 % of Revenue
	(In thousands, except for % s)					
Interest and other income, net	$ 2,827	$ 1,658	$ 1,169	71%	4%	2%

Interest and Other Income, Net. The increase in interest and other income, net of $1.2 million for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily due to higher average cash and cash equivalent balances and short-term investments during the year ended December 31, 2006 coupled with higher interest rates earned during the period. We anticipate interest and other income will fluctuate in future periods as a result of our projected use of cash.

Income Tax Provision (Benefit)	2006	2005	$ Change	% Change	2006 % of Revenue	2005 % of Revenue
	(In thousands, except for % s)					
Income tax provision (benefit)	$ (3,133)	$ 96	$ (3,229)	(3,364)%	(4)%	

Income Tax Provision (Benefit). The decrease in the income tax provision of $3.2 million for the year ended December 31, 2006 compared to the year ended December 31, 2005 was primarily due to the benefit of increased research and development tax credits claimed for the current and certain prior years as a result of a study performed during the period and to the decrease in operating income for the year ended December 31, 2006.

Years Ended December 31, 2005 and 2004

Revenue	2005	2004	$ Change	% Change	2005 % of Revenues	2004 % of Revenue
	(In thousands, except for %)					
Design-to-silicon-yield solutions:						
Integrated solutions	$ 52,719	$ 49,573	$ 3,146	6%	71%	79%
Software licenses	9,319	4,971	4,348	87	13	8
Gain share	11,890	7,802	4,088	52	16	13
Total	$ 73,928	$ 62,346	$ 11,582	19%	100%	100%

Design-to-Silicon-Yield Solutions. Design-to-Silicon-Yield solutions revenue is derived from integrated solutions (including solution implementations, software support and maintenance and training) and software licenses, provided during our customer yield improvement engagements and solution product sales.

Integrated solutions. The increase in integrated solutions revenue of $3.1 million for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily attributable to an overall

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increase in the total contract value of our solution implementations and to an increase in software maintenance revenues as a result of our increased customer base for our applications.

Software licenses. The increase in software licenses revenue of $4.3 million for the year ended December 31, 2005 compared to the year ended December 31, 2004 was due to greater adoption of our software applications, principally from our existing customers, who continue to expand their usage of our software products.

Gain Share. Gain share revenue represents profit sharing and performance incentives earned based upon our customer reaching certain defined operational levels. Gain share revenue increased approximately $4.1 million for the year ended December 31, 2005 compared to the year ended December 31, 2004. The increase in gain share revenue was primarily due to a greater number of engagements contributing to gain share at newer technology nodes, as well as a greater number of wafer starts at our customers sites.

Cost of Design-to-Silicon-Yield Solutions	2005	2004	$ Change	% Change	2005 % of Revenues	2004 % of Revenue
	(In thousands, except for %)					
Direct costs of design-to-silicon-yield solutions:						
Integrated solutions	$ 24,319	$ 21,811	$ 2,508	11%	33%	35%
Software licenses	293	83	210	253		
Amortization of acquired core technology	5,064	5,209	(145)	(3)	7	8
Total	$ 29,676	$ 27,103	$ 2,573	9%	40%	43%

Direct Costs of Design-to-Silicon-Yield Solutions. Direct costs of Design-to-Silicon-Yield solutions consists of costs incurred to provide and support our integrated solutions and costs recognized in connection with licensing our software.

Integrated solutions. The increase in direct costs of Design-to-Silicon-Yield integrated solutions of $2.5 million for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily attributable to increased personnel-related costs needed to support our increased integrated solutions revenues, partially offset by a decrease in sub-contractor costs.

Software Licenses. The increase in direct costs of Design-to-Silicon-Yield solutions software licenses of $210,000 for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily attributable to an increase in license fees and royalties incurred associated with third party software licenses sold in conjunction with our software.

Amortization of Acquired Core Technology. The decrease in the amortization of acquired core technology expense of $145,000 for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily attributable to certain acquired core technology being fully amortized in prior periods.

	2005	2004

Research and Development	2005	2004	$ Change	% Change	% of Revenue	% of Revenue
	(In thousands, except for % s)					
Research and development	$ 22,204	$ 20,999	$ 1,205	6%	30%	34%

Research and Development. The increase in research and development expenses of $1.2 million for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily due to increased personnel-related expenses, a result of our growth in headcount, and to increased outside development expenses, a result of engaging additional consultants, partially offset by the decrease in stock-based compensation as a result of the graded vesting method of amortization which results in higher amortization expense during the initial periods following the respective option grants.

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Selling, General and Administrative	2005	2004	$ Change	% Change	2005 % of Revenue	2004 % of Revenue
	(In thousands, except for % s)					
Selling, general and administrative	$ 16,146	$ 15,243	$ 903	6%	22%	25%

Selling, General and Administrative. The increase in selling, general and administrative expenses of $903,000 for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily due to increases in personnel-related expenses, legal and accounting services, a reduction in our allowance for doubtful accounts in the prior year, partially offset by a reduction in outside sales commissions.

Amortization of Other Acquired Intangible Assets	2005	2004	$ Change	% Change	2005 % of Revenue	2004 % of Revenue
	(In thousands, except for % s)					
Amortization of other acquired intangible assets	$ 940	$ 1,406	$ (466)	(33)%	1%	2%

Amortization of Other Acquired Intangible Assets. Amortization of other acquired intangible assets decreased $466,000 for the year ended December 31, 2005 compared to the year ended December 31, 2004, as a result of certain intangible assets being fully amortized in prior periods.

Interest and Other Income, Net	2005	2004	$ Change	% Change	2005 % of Revenue	2004 % of Revenue
	(In thousands, except for % s)					
Interest and other income, net	$ 1,658	$ 675	$ 983	146%	2%	1%

Interest and Other Income, Net. The increase in interest and other income, net of $983,000 for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily due to increased interest earned on higher average cash and cash equivalent balances during the period coupled with higher interest rates earned during the period.

Income Tax Provision (Benefit)	2005	2004	$ Change	% Change	2005 % of Revenue	2004 % of Revenue
	(In thousands, except for % s)					
Income tax provision (benefit)	$ 96	$ (1,116)	$ 1,212	(109)%		(2)%

Income Tax Provision (Benefit). The increase in the income tax provision of $1.2 million for the year ended December 31, 2005 compared to the year ended December 31, 2004 was primarily due to taxes on operating income earned during the year ended December 31, 2005, partially offset by certain tax credits recognized during the period. This compares to an operating loss recognized during the year ended December 31, 2004.

Liquidity and Capital Resources

Net cash provided by operating activities was $2.6 million for the year ended December 31, 2006 compared to $9.8 million for the year ended December 31, 2005. After adjusting net loss of $439,000 by the amortization of acquired intangible assets of $6.7 million, depreciation and amortization of $2.1 million, stock-based compensation of $7.4 million, loss on disposal of property plant, and equipment of $61,000 the increase in deferred tax assets of $6.9 million, the tax benefit related to stock-based compensation plans of $1.1 million, the excess tax benefit from stock-based compensation of $463,000 and the write-off of in-process research and development of $800,000 our adjusted results provided approximately $10.4 million in cash. Net cash was also used by increases in accounts receivable of $3.6 million, prepaid expenses and other assets of $67,000 and decreases in accrued compensation and related benefits of $2.4 million, other accrued liabilities of $1.6 million, taxes payable of $184,000, and billings in excess of recognized revenue of $1.5 million, partially offset by increases in accounts payable of $391,000 and in deferred revenues of $1.2 million. The increase in accounts receivable and decrease in billings in excess of revenue recognized was due to increased revenues during the period as well as the timing of billing milestones specified in the contract agreements. The moderate increase in prepaid expenses and other assets was primarily the result of the

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increase in operating expenses and associated prepayments. The increase in accounts payable was due to the timing of vendor payments coupled with moderate increases in our operating activities. The net decrease in accrued compensation and related benefits was primarily the result of payments made associated with employee variable compensation. The net decrease in other accrued liabilities was primarily due to payments made associated with costs related to the acquisition of Si Automation. The decrease in income taxes payable was primarily the result of payments made during the year. The increase in deferred revenue was primarily due to the billing in late 2006 of certain software contracts with undelivered obligations.

Net cash used in investing activities was $35.2 million for the year ended December 31, 2006 compared to $2.3 million for the year ended December 31, 2005. In both periods, investing activities included purchases of property and equipment, principally computer hardware and software. Cash used to purchase property and equipment was $2.4 million and $2.3 million during the year ended December 31, 2006 and December 31, 2005, respectively. During the year ended December 31, 2006, our investing activities included net purchases of short-term investments of $14.1 million, and the purchase of Si Automation of $18.7 million net of cash acquired. As of December 31, 2006, we had not invested in derivative securities.

Net cash provided by financing activities was $8.2 million for the year ended December 31, 2006 compared to $7.5 million for the year ended December 31, 2005. Net cash provided by financing activities for the year ended December 31, 2006 was primarily the result of cash proceeds from the exercise of stock options of $6.0 million, proceeds from purchases under the employee stock purchase plan of $1.8 million, and $463,000 in excess tax benefit derived from stock-based compensation. Net cash provided by financing activities for the year ended December 31, 2005 was primarily the result of cash proceeds from the exercise of stock options of $6.0 million and proceeds from purchases under the employee stock purchase plan of $1.6 million.

As of December 31, 2006, our working capital was $66.6 million, compared with $68.5 million as of December 31, 2005. Cash and cash equivalents, and short-term investments as of December 31, 2006 were $52.9 million compared to $60.5 million as of December 31, 2005, a decrease of $7.7 million. Decreases in cash and short-term investments were primarily attributable to the acquisition of Si Automation, partially offset by cash provided by operating activities and by proceeds from the exercise of stock options and issuance of common stock under our equity plan. 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, 2006, we had no foreign currency contracts outstanding, other than euro denominated receivables.

We indemnify certain customers from third-party claims of intellectual property infringement relating to the use of our products. Historically, costs related to these guarantees have not been significant. We are unable to estimate the maximum potential impact of these guarantees on our future results of operations.

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Contractual Obligations

The following table summarizes our known contractual obligations (in thousands):

	Payments Due by Period				
Contractual Obligations	**2007**	**2008-2009**	**2010-2011**	**Thereafter**	**Total**
Debt principal(1)	$ 185	$ 594	$ 475	$	$ 1,254
Debt interest	26	35	13		74
Capital lease obligations (including interest)	134	128	10		272
Operating lease obligations	2,736	907	306		3,949
Total	$ 3,081	$ 1,664	$ 804	$	$ 5,549

(1) Amount represents the repayment of an interest free loan of 550,000 and a 400,000 euros loan with a variable interest rate based on the EURIBOR plus 160 basis points.

Operating lease amounts include minimum rental payments under our operating leases for our office facilities, as well as limited computer, office equipment, and vehicles that we utilize under lease agreements. These agreements expire at various dates through 2011. Capital lease amounts include $26,000 of imputed interest. Capital leases were contracted to purchase computer, software, office equipment, and vehicles in our French subsidiary.

Recent Accounting Pronouncements

In June, 2006, the Financial Accounting Standard Board (FASB) issued Financial Interpretation No. 48 (FIN No. 48), *Accounting for Uncertainty in Income Taxes* which clarifies the accounting for uncertainty in income taxes recognized in an enterprise s financial statements in accordance with SFAS No. 109. Additionally, the Interpretation provides guidance on measurement, de-recognition, classification, interest and penalties, accounting for interim periods, disclosure and transition. The Interpretation is effective for fiscal years beginning after December 15, 2006. We are currently evaluating the provisions of FIN No. 48 and have not yet completed our determination of the impact of adoption on our financial statements.

In June 2006, the FASB ratified the EITF consensus on EITF Issue No. 06-2 (EITF 06-2), *Accounting for Sabbatical Leave and Other Similar Benefits Pursuant to FASB Statement No. 43.* EITF 06-2 requires companies to accrue the cost of such compensated absences over the requisite service period. We currently accrue the cost of compensated absences for sabbatical programs when the eligible employee completes the requisite service period, which is three years of service. EITF 06-2 is effective for all financial statements issued after December 31, 2006. EITF 06-2 permits adoption through retrospective application to all prior periods or through a cumulative-effect adjustment to retained earnings. We are currently evaluating the impact of the adoption of EITF 06-2 on our financial statements.

In September, 2006, the FASB issued SFAS No. 157 (SFAS No. 157), *Fair Value Measurement* that establishes a framework for measuring fair value in generally accepted accounting principles (GAAP), and expands disclosures about fair value measurements. Additionally, the pronouncement provides guidance on definition, measurement, methodology and use of assumptions and inputs in determining fair value. The pronouncement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal

years. We are currently evaluating the impact of the adoption of SFAS No. 157 on our financial statements.

In September 2006, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 108 (SAB 108), Considering the Effects of Prior Year Misstatements When Quantifying Misstatements in Current Year Financial Statements, which provides interpretive guidance on how the effects of the carryover or reversal of prior year misstatements should be considered in quantifying a current year misstatement. We adopted the provisions of SAB 108 in connection with the preparation of our annual financial statements for fiscal year 2006. The adoption of SAB 108 did not materially impact our consolidated financial statements.

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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, 2006, we had cash and cash equivalents and short term investments of $52.9 million. Cash and cash equivalents consisted of cash, highly liquid money market instruments and commercial paper with maturities of 90 days or less. Short-term investments consisted of debt securities with maturities of more than three months but less than twelve months. Because of the short maturities of those 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 100 basis points from the market rates in effect at December 31, 2006 would cause the fair value of these investments to decrease by an immaterial amount which would not have significantly impacted our financial position or results of operations. Declines in interest rates over time will result in lower interest income and increased interest expense

Foreign Currency and Exchange Risk. Virtually all of our revenue is denominated in U.S. dollars, although such revenue is derived substantially from foreign customers. Some foreign sales to date, generated by our German subsidiary since the date of the AISS acquisition and by our French subsidiary since the date of the Si Automation 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).

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.

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. We have excluded from our evaluation the internal control over financial reporting of Si Automation, S.A., which we acquired on October 31, 2006. As of and for the period from October 31, 2006

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through December 31, 2006, total assets and total revenues subject to Si Automation s internal control over financial reporting represented 7%, 4%, and 1% of the Company s consolidated total assets, net assets, and total revenues respectively, as of and for the fiscal year ended December 31, 2006. 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, 2006.

Our management s assessment of the effectiveness of our internal control over financial reporting as of December 31, 2006 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control

There were no changes in the our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Rule 13a-15 or Rule 15d-15 under the Exchange Act that occurred during the our fourth fiscal quarter of 2006 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

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 (collectively, the Company) maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. As described in Management s Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at S.I. Automation S.A., which was acquired on October 31, 2006 and whose financial statements constitute four percent and seven percent of net and total assets, respectively, one percent of revenues, and two hundred and forty five percent of net loss of the consolidated financial statement amounts as of and for the year ended December 31, 2006. Accordingly, our audit did not include the internal control over financial reporting at S.I. Automation S.A. 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, 2006, 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, 2006, 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 and financial statement schedule as of and for the year ended December 31, 2006 of the Company and our report dated March 16, 2007 expressed an unqualified opinion on those financial statements and financial statement schedule and includes an explanatory paragraph relating to the adoption of Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment.*

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 16, 2007

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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, 2006.

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 (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 of Ethics or grant 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 Accountant Fees and Services is incorporated by reference from our Proxy Statement.

Non-Audit Services Provided by Independent Registered Public Accounting Firm

During 2006, 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.

2. Consulting and other advisory services associated with the Si Automation acquisition.

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PART IV

Item 15. ***Exhibits and Financial Statement Schedules.***

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

(1) Consolidated Financial Statements and Report of Independent Registered Public Accounting Firm

See Index to Consolidated Financial Statements.

(2) Schedule II Valuation and Qualifying Account

See the Report of Independent Registered Public Accounting Firm and Schedule II.

(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.

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PDF SOLUTIONS, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying consolidated balance sheets of PDF Solutions, Inc. and its subsidiaries (collectively, the Company) as of December 31, 2006 and 2005, 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, 2006. Our audits also included the financial statement schedule listed in Item 15(a)(2) of this annual report. These financial statements and the financial statement schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on the financial statements and the financial statement schedule 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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2006 and 2005, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2006, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as whole, presents fairly, in all material respects, the information set forth therein.

As discussed in Note 1 to the consolidated financial statements, effective January 1, 2006, the Company changed its method of accounting for stock-based compensation in accordance with guidance provided in Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment.*

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, 2006, 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, 2007 expressed an unqualified opinion on management s assessment of the effectiveness of the Company s internal control over financial reporting and an unqualified opinion on the effectiveness of the Company s internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 16, 2007

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PDF SOLUTIONS, INC.

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2006	2005
	(In thousands, except par values)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 36,451	$ 60,506
Short-term investments	16,402	
Accounts receivable, net of allowances of $294 in 2006 and $254 in 2005	27,575	22,082
Prepaid expenses and other current assets	2,796	1,992
Deferred tax assets	2,581	908
Total current assets	85,805	85,488
Property and equipment, net	3,916	3,328
Goodwill	60,034	39,886
Intangible assets, net	13,605	9,787
Deferred tax assets	4,994	877
Other assets	503	526
Total assets	$ 168,857	$ 139,892
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 302	$
Accounts payable	3,182	1,728
Accrued compensation and related benefits	3,325	4,922
Other accrued liabilities	3,843	1,469
Taxes payable	4,767	4,950
Deferred revenues	3,705	2,281
Billings in excess of recognized revenue	95	1,604
Total current liabilities	19,219	16,954
Long-term debt	1,198	
Other liabilities	221	257
Total liabilities	20,638	17,211
Commitments and contingencies (Notes 5 and 10)		
Stockholders equity:		
Preferred stock, $0.00015 par value, 5,000 shares authorized, no shares issued and outstanding		
	4	4

Common stock, $0.00015 par value, 70,000 shares authorized: shares issued and outstanding 27,948 in 2006 and 26,433 in 2005		
Additional paid-in capital	167,323	141,720
Treasury stock at cost, 551 shares repurchased	(5,549)	(5,549)
Deferred stock-based compensation		(27)
Accumulated deficit	(13,890)	(13,451)
Accumulated other comprehensive income (loss)	331	(16)
Total stockholders equity	148,219	122,681
Total liabilities and stockholders equity	$ 168,857	$ 139,892

See notes to consolidated financial statements.

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PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2006	2005	2004
	(In thousands, except per share amounts)		
Revenues:			
Design-to-silicon-yield solutions:			
Integrated solutions	$ 45,382	$ 52,719	$ 49,573
Software licenses	10,774	9,319	4,971
Gain share	20,028	11,890	7,802
Total revenues	76,184	73,928	62,346
Cost of design-to-silicon-yield solutions:			
Direct costs of design-to-silicon-yield solutions:			
Integrated solutions	27,418(1)	24,319	21,811
Software licenses	209	293	83
Amortization of acquired core technology	5,270	5,064	5,209
Total cost of design-to-silicon-yield solutions	32,897	29,676	27,103
Gross margin	43,287	44,252	35,243
Operating expenses:			
Research and development	27,613(1)	22,204	20,999
Selling, general and administrative	19,814(1)	16,146	15,243
Amortization of other acquired intangible assets	1,459	940	1,406
Write-off of in-process research and development	800		
Total operating expenses	49,686	39,290	37,648
Income (loss) from operations	(6,399)	4,962	(2,405)
Interest and other income, net	2,827	1,658	675
Income (loss) before taxes	(3,572)	6,620	(1,730)
Income tax provision (benefit)	(3,133)(2)	96	(1,116)
Net income (loss)	$ (439)	$ 6,524	$ (614)
Net income (loss) per share:			
Basic	$ (0.02)	$ 0.25	$ (0.02)
Diluted	$ (0.02)	$ 0.24	$ (0.02)
Weighted average common shares:			

Basic	26,885	25,983	25,330
Diluted	26,885	27,473	25,330

See notes to consolidated financial statements.

(1) Costs and expenses for the year ended December 31, 2006, include SFAS No. 123(R) stock-based compensation expense. See Notes 1 and 7 to the consolidated financial statements for additional information.

(2) Tax benefit includes income tax benefit from stock-based compensation.

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PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS)

	Common Stock		Additional Paid-In	Deferred Stock-Based	Treasury Stock		Notes Receivable from	Accumulated	Accumulated Other Comprehensive Income	
	Shares	Amount	Capital	Compensation	Shares	Amount	Stockholders	Deficit	(Loss)	Total
					(In thousands)					
lances, January 1, 04	25,432	$ 4	$ 129,568	$ (688)			$ (3,025)	$ (19,361)	$ 54	$ 106,55
llection and urchase of common ck in connection with es receivable from ckholders	(4)		(25)				2,475			2,45
ercise of options	504		3,091							3,09
uance of common ck in connection with ployee stock rchase plan	219		1,354							1,35
ployee stock-based mpensation expense			158	540						69
n-employee ck-based mpensation			45							4
quisition of treasury ck	(506)				506	(4,806)				(4,80
t loss								(614)		
mulative translation ustment									28	
mprehensive loss										(58
lances, December 31, 04	25,645	4	134,191	(148)	506	(4,806)	(550)	(19,975)	82	108,79
ercise of options	669		5,952							5,95
uance of common ck in connection with ployee stock rchase plan	164		1,592							1,59
ployee stock-based mpensation expense				114						11
versal of employee ck-based			(23)	7						(1

mpensation for minated employees										
celeration of ployee stock options			8							
quisition of treasury ck in exchange for ckholder note eivable	(45)				45	(743)	550			(19
t income								6,524		
mulative translation ustment									(98)	
mprehensive income										6,42
lances, December 31, 05	26,433	4	141,720	(27)	551	(5,549)		(13,451)	(16)	122,68
ercise of options	639		6,021							6,02
uance of common ck in connection with ployee stock rchase plan	177		1,752							1,75
uance of common ck in connection with SIA acquisition	699		9,362							9,36
versal of deferred ck-based mpensation expense			(27)	27						
nployee stock-based mpensation expense			7,351							7,35
x benefit related to ployee stock-based mpensation expense			1,144							1,14
t loss								(439)		
mulative translation ustment									347	
mprehensive loss										(9
lances, December 31, 06	27,948	$ 4	$ 167,323	$	551	$ (5,549)	$	$ (13,890)	$ 331	$ 148,21

See notes to consolidated financial statements.

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PDF SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2006	2005	2004
	(In thousands)		
Operating activities:			
Net income (loss)	$ (439)	$ 6,524	$ (614)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	2,103	2,235	2,503
Stock-based compensation expense	7,351	106	742
Loss on disposal of property, plant and equipment	61		
Amortization of acquired intangible assets	6,729	6,004	6,615
Tax benefit related to stock-based compensation expense	1,144		
Excess tax benefit from stock-based compensation expense	(463)		
Write-off of in-process research and development	800		
Deferred taxes	(6,864)	(1,900)	(2,417)
Changes in operating assets and liabilities, net of effect of acquisition:			
Accounts receivable, net of allowances	(3,648)	(6,104)	(4,109)
Prepaid expenses and other assets	(67)	475	431
Accounts payable	391	783	145
Accrued compensation and related benefits	(2,402)	1,713	1,257
Other accrued liabilities	(1,582)	(1,124)	(235)
Taxes payable	(184)	1,664	1,119
Deferred revenues	1,206	(624)	(395)
Billings in excess of recognized revenue	(1,509)	23	1,116
Net cash provided by operating activities	2,627	9,775	6,158
Investing activities:			
Purchases of available-for-sale securities	(45,823)		
Maturities and sales of available-for-sale securities	31,700		
Purchases of property and equipment	(2,433)	(2,320)	(1,670)
Business acquired in purchase transactions, net of cash acquired	(18,658)		
Net cash used in investing activities	(35,214)	(2,320)	(1,670)
Financing activities:			
Exercise of stock options	6,021	5,952	3,091
Proceeds from employee stock purchase plan	1,752	1,592	1,354
Collection of notes receivable from stockholders			2,450
Purchases of treasury stock			(4,806)
Principal payments on long-term obligations	(23)	(55)	(55)
Excess tax benefit from stock-based compensation expense	463		

Net cash provided by financing activities	8,213	7,489	2,034
Effect of exchange rate changes on cash	319	(98)	28
Net increase (decrease) in cash and cash equivalents	(24,055)	14,846	6,550
Cash and cash equivalents, beginning of period	60,506	45,660	39,110
Cash and cash equivalents, end of period	$ 36,451	$ 60,506	$ 45,660
Non-cash investing and financing activities:			
Repurchase of common stock through cancellation of notes receivable		$ 743	$ 25
Purchase price adjustments	$ 923		$ 662
Reversal of deferred stock compensation	$ 27		
Purchase of property and equipment on account	$ 28	$ 22	$ 100
Supplemental disclosure of cash flow information:			
Cash paid during the year for:			
Taxes	$ 2,808	$ 241	$ 488
Interest	$ 5	$ 4	$ 4

See notes to consolidated financial statements.

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended December 31, 2006, 2005 and 2004

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, 2006, four customers accounted for 52% of the Company s gross accounts receivable and two customers accounted for 37% of the Company s total revenue. As of December 31, 2005, two customers accounted for 43% of the Company s gross accounts receivable and four customers accounted for 49% of the Company s total revenue. For year ended December 31, 2004, four customers accounted for 52% 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 fewer or remaining maturity of 90 days or fewer when acquired 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 $7.8 million and $1.8 million at December 31, 2006 and 2005, respectively.

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

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

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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, 2006 and December 31, 2005 (in thousands):

	Amortization Period (Years)	December 31, 2005 Net Carrying Amount	Purchase Price Acquisitions	Purchase Price Adjustments	Amortization	Foreign Currency Translation	December 31, 2006 Net Carrying Amount
Goodwill	N/A	$ 39,886	$ 21,071	$ (923)	$	$	$ 60,034
Acquired identifiable intangibles:							
Acquired core technology	4	$ 8,221	$ 4,950	$	$ (5,270)		$ 7,901
Brand name	4	833	510		(521)		822
Customer relationships and backlog	1-6		4,860		(498)		4,362
Other acquired intangibles	4	733	255		(477)	9	520
Total		$ 9,787	$ 10,575	$	$ (6,766)	$ 9	$ 13,605

	Amortization Period (Years)	December 31, 2004 Net Carrying Amount	Amortization	December 31, 2005 Net Carrying Amount
Goodwill	N/A	$ 39,886	$	$ 39,886
Acquired identifiable intangibles:				

Acquired core technology	4	$	13,285	$	(5,064)	$ 8,221
Brand name	4		1,333		(500)	833
Other acquired intangibles	4		1,173		(440)	733
Total		$	15,791	$	(6,004)	$ 9,787

SFAS No. 142 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. The Company completed its annual testing requirements for 2006 and determined that the carrying value of goodwill had not been impaired.

In 2006, the Company recorded a non-cash adjustment of $923,000 relating to the reduction of a valuation allowance established for deferred tax assets that were assumed in connection with the Company s acquisition of IDS Software Inc. in 2003. Such adjustment resulted in a decrease in goodwill.

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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

Year Ending December 31,	Amount
2007	$ 7,767
2008	1,806
2009	1,806
2010	1,541
2011	375
Thereafter	310
Total	$ 13,605

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 2006 that there were no events or changes in circumstances that would indicate that the carrying amounts of long-lived assets were impaired.

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 integrated solutions and software licenses. Revenue recognition for each element of Design-to-Silicon-Yield solutions is summarized as follows:

Integrated Solutions The Company generates a significant portion of its revenue from fixed-price contracts delivered over a specific period of time. These contracts require the accurate estimation of the cost to perform obligations and the overall scope of each engagement. Revenue under contracts for solution implementation services is recognized as the services are performed using the cost-to-cost percentage of completion method of contract accounting. Losses on solution implementation contracts are recognized when determined. Revisions in profit estimates are reflected in the period in which the conditions that require the revisions become known and can be estimated.

On occasion, the Company has licensed its software products as a component of its fixed price integrated 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 (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 agreement. Costs incurred under these arrangements are deferred and recognized in proportion to revenue recognized under these arrangements.

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

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

recognized as the services are performed. When bundled with software licenses in multiple element arrangements, support and maintenance, consulting (other than for our fixed price solution implementations), installation, and training 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 is established based upon the Company s customary pricing for such services when sold separately. 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.

Software Licenses The Company also licenses its software products separately from its integrated solution implementations. 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, revenue is allocated to each element of a transaction based upon its fair value as determined by the Company s VSOE and such services are recorded as integrated solutions. 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. No revenue has been recognized for software licenses with extended payment terms in excess of amounts due. During the year ended December 31, 2006, the Company entered into a barter transaction with another software company. As the fair value of the software licenses exchanged could not be reliably estimated, the Company did not record any revenue nor cost for the transaction.

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 Effective January 1, 2006, the Company adopted the provisions of SFAS No. 123 (Revised 2004), *Share-Based Payments*, (SFAS No. 123(R)). The statement eliminates the ability to account for share-based compensation transactions using Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees* (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 based on estimated fair values. SFAS No. 123(R) applies to all share-based payment transactions in which the Company 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 Company elected to use the

modified prospective transition method upon adopting this statement and accordingly prior periods have not been restated to reflect the impact of SFAS No. 123(R). Under this transition method, stock-based compensation expense during fiscal 2006 includes compensation expense for all stock-based compensation awards granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

accordance with the original provision of SFAS No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123). Stock-based compensation expense during fiscal 2006 also includes expense for all stock-based compensation awards granted after January 1, 2006 based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123(R). The Company recognizes the compensation costs of options granted after January 1, 2006 on a straight-line basis over the vesting periods of the applicable stock purchase rights and stock options, generally four years. Prior to the adoption of SFAS No. 123(R), the Company accounted for stock-based compensation in accordance with APB No. 25, and complied with the disclosure provisions of SFAS No. 123 as amended by SFAS No. 148, *Accounting for Stock-Based Compensation Transition and Disclosures* . Deferred compensation recognized under APB No. 25 was amortized to expense using the graded vesting method. Prior to adoption of SFAS No. 123(R), the Company presented all tax benefits resulting from stock options as operating cash flow in its statement of cash flows. In accordance with SFAS No. l23(R), the cash flows resulting from excess tax benefits are classified as financing cash flows.

In March 2005, the Securities and Exchange Commission (the SEC) issued Staff Accounting Bulletin No. 107 (SAB 107) regarding the SEC s interpretation of SFAS No. 123(R) and the valuation of share-based payments for public companies. The Company has applied the provisions of SAB 107 in its adoption of SFAS No. 123(R). See Note 7 to the Consolidated Financial Statements for a further discussion on stock-based compensation.

Income Taxes The Company accounts for income taxes in accordance with SFAS No. 109, *Accounting for Income Taxes*, (SFAS No. 109). In determining taxable income for financial statement reporting purposes, certain estimates and judgments must be made. These estimates and judgments are applied in the calculation of certain tax liabilities and in the determination of the recoverability of deferred tax assets, which arise from temporary differences between the recognition of assets and liabilities for tax and financial statement reporting purposes. The realization of deferred tax assets is dependent on the Company s ability to generate future taxable income and utilize tax planning strategies. The deferred tax asset amount recorded is more likely than not to be realized based on current estimations and assumptions. The valuation allowance is evaluated 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.

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, 2006 and 2005 is comprised of:

	Balance at December 31,	
	2006	2005
Foreign currency translation adjustments	$ 331,000	$ (16,000)

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 June, 2006, the Financial Accounting Standard Board (FASB) issued Financial Interpretation No. 48 (FIN No. 48), *Accounting for Uncertainty in Income Taxes* which clarifies the accounting for uncertainty in income taxes recognized in an enterprise s financial statements in accordance with SFAS No. 109. Additionally, the Interpretation provides guidance on measurement, de-recognition, classification, interest and penalties, accounting for interim periods, disclosure and transition. The Interpretation is effective for

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

fiscal years beginning after December 15, 2006. The Company is currently evaluating the provisions of FIN No. 48 and has not yet completed its determination of the impact of adoption on the Company s financial statements.

In June 2006, the FASB ratified the EITF consensus on EITF Issue No. 06-2 (EITF 06-2), *Accounting for Sabbatical Leave and Other Similar Benefits Pursuant to FASB Statement No. 43*). EITF 06-2 requires companies to accrue the cost of such compensated absences over the requisite service period. The Company currently accrues the cost of compensated absences for sabbatical programs when the eligible employee completes the requisite service period, which is three years of service. EITF 06-2 is effective for all financial statements issued after December 31, 2006. EITF 06-2 allows for adoption through retrospective application to all prior periods or through a cumulative-effect adjustment to retained earnings. The Company is currently evaluating the impact of the adoption of EITF 06-2 on its financial statements.

In September, 2006, the FASB issued SFAS No. 157 (SFAS No. 157), *Fair Value Measurement* that establishes a framework for measuring fair value in accounting principles generally accepted in the United States of America (GAAP), and expands disclosures about fair value measurements. Additionally, the pronouncement provides guidance on definition, measurement, methodology and use of assumptions and inputs in determining fair value. The pronouncement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The Company is currently evaluating the impact of the adoption of SFAS No. 157 on its financial statements.

In September 2006, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 108 (SAB 108), *Considering the Effects of Prior Year Misstatements When Quantifying Misstatements in Current Year Financial Statements*, which provides interpretive guidance on how the effects of the carryover or reversal of prior year misstatements should be considered in quantifying a current year misstatement. The provisions of SAB 108 were adopted in connection with the preparation of the annual financial statements for fiscal year 2006. The adoption of SAB 108 did not materially impact the consolidated financial statements.

2. Acquisitions

Si Automation S.A.

On October 31, 2006, the Company completed its acquisition of all the outstanding capital stock of Si Automation S.A., a privately held company based in Montpellier, France (SIA). SIA developed and licensed fault detection and classification software applications and services dedicated to the semiconductor industry that enables customers to rapidly identify sources of process variations and manufacturing excursions by monitoring equipment parameters through its proprietary data collection and analysis applications. The acquisition of SIA will allow the Company s customers greater capabilities for managing product yield improvement as a result of these process control solutions and services. At the closing of the acquisition, SIA became the Company s wholly owned subsidiary. The aggregate purchase price was $36.6 million which included the payment in cash of $25.5 million, the issuance of 699,298 shares of our common stock valued at $9.4 million, and acquisition costs of $1.7 million. In connection with the acquisition, $2.7 million in cash and approximately 119,000 shares of common stock were held in escrow as security against certain financial contingencies. The cash and shares held in escrow, less amounts deducted to satisfy contingencies, will be released upon the 18-month anniversary of the acquisition. Any remaining cash and shares held in escrow after satisfying contingencies will be released no later than the 36-month anniversary of the acquisition. In connection with

the acquisition, the Company recorded $21.1 million in goodwill. Goodwill reflects the excess of the purchase price paid over the identifiable assets assumed in 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 terms were announced (October 25, 2006). 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 October 31, 2006 include the impact of the acquisition.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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		$ 11,496
Fair value of intangible assets:		
Brand name	4	510
Contract backlog	1	2,610
Customer relationships	6	2,250
Core technology	4	4,950
Other	4	255
In-process research and development	N/A	800
Goodwill	N/A	21,071
Total assets acquired		43,942
Deferred tax liability		(3,440)
Bank debt and capital leases		(1,486)
Accrued liabilities		(1,104)
Accounts payable		(1,058)
Deferred revenue under maintenance obligations		(218)
Total liabilities assumed		(7,306)
Total consideration, net		$ 36,636

The acquisition was accounted for as a purchase transaction, and accordingly, the assets and liabilities of SIA 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, which vary from 1 to 6 years, with a weighted average life of 3.7 years. The acquired IPR&D technology was immediately expensed because technological feasibility had not been established and no future alternative use exists. In assessing SIA 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.

The acquisition of SIA was structured as a taxable acquisition. Therefore, the difference between the recognized fair values of the acquired net assets and their historical tax base are 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.

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following unaudited pro forma consolidated financial data represents the combined results of operations as if SIA 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):

		Year Ended December 31,	
		2006	2005
Revenue		$ 81,462	$ 81,794
Net income (loss)		$ (3,891)	$ 1,992
Pro forma net income (loss) per share	basic	$ (0.14)	$ 0.07
Pro forma net income (loss) per share	diluted	$ (0.14)	$ 0.07

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.

3. Investments

The following tables summarize the Company s investments (in thousands):

	December 31, 2006			
	Amortized Cost	Unrealized Holding Gains	Unrealized Holding Losses	Market Value
Commercial paper	$ 13,307	$ 1	$	$ 13,308
Auction rate securities	5,050			5,050
Corporate bonds and notes	1,984		(1)	1,983
Money market funds	23,744			23,744
	$ 44,085	$ 1	$ (1)	$ 44,085
Included in cash and cash equivalents				$ 27,683
Included in short-term investments				16,402
Total available-for-sale securities				$ 44,085

As of December 31, 2006 all securities held by the Company had a maturity of one year or less.

	December 31, 2005			
	Amortized Cost	Unrealized Holding Gains	Unrealized Holding Losses	Market Value
Money market funds	$ 57,652	$	$	$ 57,652
Included in cash and cash equivalents				$ 57,652
Included in short-term investments				
Total available-for-sale securities				$ 57,652

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. Property and Equipment

Property and equipment consist of (in thousands):

	December 31, 2006	2005
Computer equipment	$ 10,714	$ 9,197
Software	3,133	2,800
Furniture, fixtures, and equipment	1,254	999
Vehicles	60	
Leasehold improvements	523	337
	15,684	13,333
Accumulated depreciation	(11,768)	(10,005)
	$ 3,916	$ 3,328

The Company leases office equipment, computer hardware, vehicles and computer software under capital leases as defined in *SFAS No. 13, Accounting for Leases.* The following is an analysis of the leased property (included in table above) under capital leases by major classes (in thousands):

	December 31, 2006
Computer and office equipment	$ 424
Vehicles	60
Software	47
	531
Accumulated depreciation	(287)
	$ 244

5. Other Accrued Liabilities

Other accrued liabilities consist of (in thousands):

	December 31,

	2006	2005
Amounts due to SIA shareholders	$ 1,879	$
Other accrued expenses	1,964	1,469
Total other accrued expenses	$ 3,843	$ 1,469

6. 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 2011. Rent expense was $2.8 million, $2.6 million and $2.5 million in 2006, 2005 and 2004, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Future minimum lease payments under noncancelable operating leases at December 31, 2006 are as follows (in thousands):

Year Ended December 31,	
2007	$ 2,736
2008	661
2009	246
2010	160
2011	146
Total future minimum lease payments	$ 3,949

Future minimum lease payments under capital leases are as follows as of December 31, 2006 (in thousands):

Year Ended December 31,	
2007	$ 134
2008	94
2009	34
2010	8
2011	2
Net minimum lease payments	272
Less: amount representing interest	(26)
Present value of future minimum lease payments	$ 246

Debt During 2004 and 2005, the former SIA entered into two separate debt agreements with a government-backed agency in France. Such obligations were assumed by the Company at the time of acquisition. The Company obtained in 2004 a 550,000 loan to cover research and development expenses. The loan does not carry interest and its repayment is conditioned on meeting certain revenue targets. The Company met those targets in 2006, and as such, will reimburse the entire loan in four payments through 2010. The Company also entered into a long-term debt agreement in 2005 for a total amount of 400,000. The debt carries a variable interest rate based on the three month average EURIBOR plus 160 basis points. As of December 31, 2006, such rate was 5.31%. The debt is reimbursable in 20 equal principal quarterly installments from January 2007 through October 2011. Both debt agreements do not carry any financial covenant.

Future minimum debt payments under the current debt agreements are as follows (in thousands):

Year Ended December 31,	Principal	Interest
2007	$ 185	$ 26
2008	277	20
2009	317	15
2010	369	9
2011	106	4
Total future minimum debt payments	$ 1,254	$ 74

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

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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, 2006.

7. Stockholders Equity

Effective January 1, 2006 the Company adopted SFAS No. 123(R). As a result, the Company recorded total stock-based compensation expense and related income tax benefit of $7.4 million and $657,000 respectively, for the year ended December 31, 2006. The deferred compensation expense computed under APB No. 25 and unamortized as of January 1, 2006 in the amount of $27,000 was reversed to equity upon adopting SFAS No. 123(R).

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

For the year ended December 31, 2006 and December 31, 2005, stock-based compensation expense related to the Company s ESPP and stock-option plans was allocated as follows (in thousands):

	Year Ended December 31, 2006(1)	Year Ended December 31, 2005(2)	Year Ended December 31, 2004(2)
Cost of design-to-silicon yield solutions	$ 2,115	$	$ 39
Research and development	2,229	98	667
Selling, general and administrative	3,007	8	36
Stock based compensation expense before income taxes	7,351	106	742
Income tax benefit associated with stock options	(657)		
Stock-based compensation expense, net of taxes	$ 6,694	$ 106	$ 742
Reduction in net income (loss) per share:			
Basic	$ 0.25	$ 0.00	$ 0.03
Diluted	$ 0.25	$ 0.00	$ 0.03
Weighted average common shares:			
Basic	26,885	25,983	25,330
Diluted	26,885	27,473	25,330

(1) Stock-based compensation expense computed under SFAS No. 123(R)

(2) Stock-based compensation expense computed under APB No. 25

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Prior to January 1, 2006, the Company accounted for stock-based compensation in accordance with the provisions of APB No. 25 and complied with the disclosure only provisions of SFAS No. 123 as amended by SFAS No. 148, and accordingly, no expense computed under SFAS No. 123 had been recognized for options granted to employees under the various stock plans. Deferred compensation recognized under APB No. 25 was amortized to expense over the vesting period, usually four years, using the graded vesting method. For SFAS No. 123 as amended by SFAS No. 148 disclosure purposes, the Company amortized 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 provided 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 for employee awards based on the fair value at the grant date for the awards, consistent with the provisions of SFAS No. 123, the Company s pro forma net income and pro forma net income per share for the year ended December 31, 2005 and the year ended December 31, 2004 would have been as follows (in thousands, except per share data):

	Year Ended December 31,	
	2005	2004
Net income (loss) as reported:	$ 6,524	$ (614)
Add: stock-based employee compensation expense included in reported net income (loss) under APB No. 25	106	540
Deduct: total stock based employee compensation determined under fair value based method for all awards, net of related tax effects	(7,153)	(7,755)
Pro forma net loss	$ (523)	$ (7,829)
Basic net income (loss) per share:		
As reported	$ 0.25	$ (0.02)
Pro forma	$ (0.02)	$ (0.31)
Diluted net income (loss) per share:		
As reported	$ 0.24	$ (0.02)
Pro forma	$ (0.02)	$ (0.31)

Upon its adoption of the fair value recognition provisions of SFAS No. 123(R), the Company elected to use the modified prospective transition method, and accordingly, prior periods have not been restated to reflect the impact of SFAS No. 123(R). Stock-based compensation expense recognized during the period is based on the value of the portion of share-based payment awards that is ultimately expected to vest during the period. Under the modified prospective transition method, stock-based compensation expense recognized in the Company s consolidated statement of operations for the year ended December 31, 2006 included compensation expense for share-based payment awards

granted prior to, but not yet vested as of December 31, 2005 based on the grant date fair value estimated in accordance with the pro forma provisions of SFAS No. 123, and compensation expense for the share-based payment awards granted subsequent to December 31, 2005 based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R). In conjunction with the adoption of SFAS No. 123(R), the Company changed its method of attributing the value of stock-based compensation to expense from the graded vesting method to the straight-line method. Compensation expense for all share-based payment awards granted on or prior to December 31, 2005 will continue to be recognized using the graded vesting method while compensation expense for all share-based payment awards granted subsequent to December 31, 2005 is recognized using the straight-line method. As stock-based compensation expense recognized in the consolidated statements of operations for the year ended December 31, 2006 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. SFAS No. 123(R) requires forfeitures to be estimated at the time of grant and revised, if

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

necessary, in subsequent periods if actual forfeitures differ from those estimates. In the Company s pro forma information required under SFAS No. 123 for the periods prior to fiscal 2006, the Company accounted for forfeitures as they occurred. The Company estimated the forfeiture rate based on its employee turnover history over the last two fiscal years.

The Company has elected to use the Black-Scholes-Merton option-pricing model, which incorporates various assumptions including volatility, expected life and interest rates. The expected volatility is based on the historical volatility of the Company s common stock over the most recent period commensurate with the estimated expected life of the Company s stock options. The expected life of an award is based on historical experience and on the terms and conditions of the stock awards granted to employees. The interest rate assumption is based upon observed Treasury yield curve rates appropriate for the expected life of the Company s stock options.

The fair value of options granted was estimated on the date of grant with the following weighted average assumptions:

	Stock Plans			Employee Stock Purchase Plan		
	2006	2005	2004	2006	2005	2004
Expected life (in years)	5.7	5.5	5.5	0.95	0.79	1.5
Volatility	60.4%	55.3%	66.2%	50.3%	39%	51.2%
Risk-free interest rate	4.60%	4.15%	3.71%	4.08%	2.66%	1.64%
Expected dividend						

On December 31, 2006, the Company has in effect the following stock-based compensation plans:

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.

As of December 31, 2006 the Company has authorized 8,821,147 shares of common stock for issuance and exercise of options, of which 944,378 shares are available for grant.

At December 31, 2006 there were no outstanding options that had been granted outside of the Plans.

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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	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in 000 s)
Outstanding, January 1, 2004 (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		
Granted (weighted average fair value of $7.75 per share)	1,625,205	14.39		
Exercised	(669,175)	8.89		
Canceled	(215,888)	9.83		
Expired	(18,379)	14.33		
Outstanding, December 31, 2005 (2,877,674 shares vested and exercisable at a weighted average exercise price of $10.15 per share)	5,674,045	11.13		
Granted (weighted average fair value of $8.35 per share)	1,947,400	14.25		
Exercised	(638,610)	9.43		
Canceled	(300,034)	13.33		
Expired	(18,707)	11.44		
Outstanding, December 31, 2006	6,664,094	12.11	7.62	16,770

Vested and expected to vest	6,153,510		11.95	7.48		16,444
Exercisable, December 31, 2006	3,419,259	$	10.64	6.25	$	13,481

The aggregate intrinsic value in the table above represents the total pretax intrinsic value based on the Company s closing stock price of $14.45 as of December 31, 2006, which would have been received by the option holders had all option holders exercised their options as of that date.

The total intrinsic value of options exercised during the twelve months ended December 31, 2006 was $3.8 million.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Nonvested options as of December 31, 2006 and changes during the twelve months ended December 31, 2006 were as follows:

	Number of Options	Weighted Average Grant Date Fair Value
Nonvested, January 1, 2006	2,796,371	$ 6.94
Granted	1,947,400	8.35
Vested	(1,198,902)	6.62
Forfeited	(300,034)	7.95
Nonvested at December 31, 2006	3,244,835	7.84

As of December 31, 2006, there was $16.1 million of total unrecognized compensation cost related to nonvested stock options. That cost is expected to be recognized over a weighted average period of 3.2 years. The total fair value of shares vested during the year ended December 31, 2006 was $7.9 million. Additional information regarding options outstanding as of December 31, 2006 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	1.5	$ 0.15	3,332	$ 0.15
$0.53 - $0.53	333	3.0	0.53	333	0.53
$1.13 - $1.50	28,836	5.0	1.16	28,836	1.16
$1.88 - $1.88	16,666	3.4	1.88	16,666	1.88
$3.00 - $3.78	33,786	5.2	3.51	32,897	3.51
$4.95 - $7.00	742,172	6.0	6.15	687,331	6.13
$7.59 - $11.20	1,551,360	6.2	9.86	1,233,820	9.98
$11.41 - $16.88	4,197,609	8.3	14.07	1,396,044	13.82
$17.35 - $19.00	90,000	8.2	17.84	20,000	19.00
$0.15 - $19.00	6,664,094	7.6	12.11	3,419,259	10.64

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, 2006, 1,729,103 shares of the Company s common stock have been reserved for issuance under the Purchase Plan. During years 2006, 2005 and 2004, 175,977, 163,823 and 219,087 were issued at a weighted average price of $9.95, $9.72 and $6.18 per share, respectively and at December 31, 2006, 690,936 shares were available for future issuance under the Purchase Plan. The weighted average estimated fair value of shares granted under the Purchase Plan during 2006, 2005 and 2004 was $4.10, $3.15 and $2.78, 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

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 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 $106,000 and $742,000 in 2005 and 2004, respectively.

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. During the year ended December 31, 2005, the Company repurchased 44,942 shares of common stock from a Director of the Company at the closing price on the date of repurchase, which was $16.52 per share, in exchange for the repayment of a stockholder note receivable in the amount of approximately $743,000 consisting of the principal amount of the note and accrued interest. During the year ended December 31, 2006 the Company did not repurchase any shares of the Company s common stock. As of December 31, 2006, the Company has repurchased an aggregate of 550,521 shares at a weighted average price of $10.08 per share for a total cost of $5.5 million since the inception of the program. 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, 2006, $4.5 million remained available under the program to repurchase additional shares.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. 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):

	Year Ended December 31,		
	2006	2005	2004
Net income (loss)	$ (439)	$ 6,524	$ (614)
Denominator:			
Weighted average common shares outstanding	26,885	25,986	25,397
Weighted average common shares outstanding subject to repurchase		(3)	(67)
Denominator for basic calculation, weighted average shares	26,885	25,983	25,330
Dilutive common equivalent shares:			
Weighted average common shares outstanding subject to repurchase		3	
Stock options outstanding		1,487	
Denominator for diluted calculation, weighted average shares	26,885	27,473	25,330
Net income (loss) per share basic	$ (0.02)	$ 0.25	$ (0.02)
Net income (loss) per share diluted	$ (0.02)	$ 0.24	$ (0.02)

Note: potential shares of common stock, that would be antidilutive during periods in which the Company reported a net loss, are excluded from the calculation of diluted earnings per share.

The following table sets forth potential shares of common stock that are not included in the diluted net income (loss) per share calculation above because to do so would be anti-dilutive for the periods indicated (in thousands):

Year Ended December 31,		
2006	2005	2004

Shares of common stock subject to repurchase			67
Outstanding options	6,664	451	1,052

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Tax Provision (Benefit)

	Year Ended December 31,		
	2006	2005	2004
	(In thousands)		
U.S			
Current	$ 631	$ 1,678	$ 835
Deferred	(4,050)	(1,882)	(2,412)
Foreign			
Current	204	168	155
Withholding	335	150	311
Deferred	(253)	(18)	(5)
Total provision (benefit)	$ (3,133)	$ 96	$ (1,116)

During 2006, 2005 and 2004, respectively, income (loss) before taxes was ($3.2) million, $6.2 million and $(2.0) million from U.S. operations and income (loss) from foreign operations was ($393,000), $405,000 and $241,000, respectively.

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

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

	Year Ended December 31,	
	2006	2005
Net operating loss carryforward	$ 1,162	$
Research and development and other credit carryforward	7,559	3,372
Accruals deductible in different periods	1,917	856
Stock-based compensation	717	328
Deferred tax assets	11,355	4,556
Deferred tax liabilities intangible assets	(3,780)	(2,771)
Total	$ 7,575	$ 1,785

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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

	Year Ended December 31,		
	2006	2005	2004
Federal statutory tax provision (benefit)	$ (1,250)	$ 2,317	$ (606)
State tax expense	(632)	(151)	(1)
Stock compensation expense	1,697	(1,322)	(591)
Write-off of in-process research and development	280		
Meals and entertainment	18	22	6
Tax credits	(3,633)	(701)	(152)
Foreign tax, net	477	101	226
Other	(90)	(170)	2
Total	$ (3,133)	$ 96	$ (1,116)

As of December 31, 2006, the Company s subsidiary had $3.5 million in net operating loss carryforwards for income tax purposes in France, which are set to expire in 2011. In addition, as of December 31, 2006, the Company had federal and state research and experimental and other tax credit carryforwards of $3.5 million and $5.7 million, respectively. The federal credits begin to expire in 2022, 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 $998,000 are considered to be indefinitely reinvested and accordingly, no provision for federal and state income taxes has been provided thereon.

10. 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 revenues as follows:

Customer	Year Ended December 31, 2006	2005	2004
A	12%	10%	17%
B	5%	9%	13%
C	4%	11%	12%
E	1%	15%	10%
F	25%	13%	4%

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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

Customer	December 31, 2006	2005
A	12%	5%
E	%	18%
G	10%	2%
H	12%	%
F	18%	25%

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

	Year Ended December 31, 2006		2005		2004	
	Revenues	Percentage of Revenues	Revenues	Percentage of Revenues	Revenues	Percentage of Revenues
Asia	$ 38,129	50%	$ 40,982	55%	$ 39,969	64%
United States	29,850	39	25,610	35	15,751	25
Europe	8,205	11	7,336	10	6,626	11
Total	$ 76,184	100%	$ 73,928	100%	$ 62,346	100%

As of December 31, 2006 and 2005 long-lived assets related to AISS, located in Germany, totaled $876,000 and $880,000, respectively, of which $659,000 and $659,000, respectively, relates to acquired intangibles and goodwill.

As of December 31, 2006 long-lived assets related to SIA, located in France, totaled $31.5 million of which $30.9 million relates to acquired intangibles and goodwill. The majority of the Company s remaining long-lived assets are in the United States.

11. Litigation

The Company is not currently party to any material legal proceedings.

12. 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.

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PDF SOLUTIONS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Selected Quarterly Financial Data (Unaudited)

	Year Ended December 31, 2006			
	Q1	Q2	Q3	Q4
	(In thousands, except for per share amounts)			
Total revenue	$ 19,857	$ 18,010	$ 19,364	$ 18,953
Gross profit	$ 12,151	$ 10,070	$ 11,306	$ 9,760
Total operating expenses	$ 11,447	$ 11,972	$ 11,679	$ 14,588
Net income	$ 268	$ (847)	$ 570	$ (430)
Net income (loss) per share:				
Basic	$ 0.01	$ (0.03)	$ 0.02	$ (0.02)
Diluted	$ 0.01	$ (0.03)	$ 0.02	$ (0.02)

	Year Ended December 31, 2005			
	Q1	Q2	Q3	Q4
	(In thousands, except for per share amounts)			
Total revenue	$ 18,093	$ 18,356	$ 18,457	$ 19,022
Gross profit	$ 10,920	$ 11,223	$ 10,794	$ 11,315
Total operating expenses	$ 9,527	$ 10,211	$ 9,699	$ 9,853
Net income (loss)	$ 1,394	$ 1,342	$ 1,536	$ 2,252
Net income (loss) per share:				
Basic	$ 0.05	$ 0.05	$ 0.06	$ 0.09
Diluted	$ 0.05	$ 0.05	$ 0.06	$ 0.08

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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/ Keith A. Jones

Keith A. Jones
Chief Financial Officer and Vice President, Finance

Date: March 16, 2007

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John K. Kibarian and Keith A. Jones, 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/ KEITH A. JONES Keith A. Jones	Chief Financial Officer and Vice President, Finance (Principal Financial and Accounting Officer)
/s/ SUSAN BILLAT Susan Billat	Director
/s/ KIMON MICHAELS	Director

Kimon Michaels	
/s/ LUCIO L. LANZA	Chairman of the Board of Directors
Lucio L. Lanza	
/s/ ALBERT Y. C. YU	Director
Albert Y. C. Yu	
/s/ R. STEPHEN HEINRICHS	Director
R. Stephen Heinrichs	
/s/ TOM CAULFIELD	Director
Tom Caulfield	

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SCHEDULE II

PDF SOLUTIONS, INC.

VALUATION AND QUALIFYING ACCOUNT
Years Ended December 31, 2006, 2005 and 2004

	Balance at Beginning of Period	Charged to Costs and Expenses	Balance Assumed in Acquisition	Deductions/ Write-offs of Accounts	Balance at End of Period
Allowance for doubtful accounts					
2006	$ 254	$	$ 40	$	$ 294
2005	$ 254	$	$	$	$ 254
2004	$ 504	$	$	$ 250	$ 254

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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.(1)
3.02	Amended and Restated Bylaws of PDF Solutions, Inc.(9)
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)*
10.13	Indemnity Agreement with Kevin MacLean, incorporated by reference to the Registrant s standard form of Indemnification Agreement.(9)
10.14	Indemnity Agreement with Albert Y. C. Yu, incorporated by reference to the Registrant s standard form of Indemnification Agreement.(9)
10.15	Indemnity Agreement with R. Stephen Heinrichs, incorporated by reference to the Registrant s standard form of Indemnification Agreement.(9)
10.16	Offer letter to Keith A. Jones dated October 10, 2005.(10)*
21.01	Subsidiaries of Registrant.
23.01	Consent of Independent Registered Public Accounting Firm.
24.01	Power of Attorney (see Signature Page)
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.

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(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).

(9) Incorporated by reference to PDF s Report on Form 10-Q filed August 9, 2005 (File No. 000-31311).

(10) Incorporated by reference to Exhibit 10.1 to PDF s Current Report on Form 8-K filed on December 19, 2005.

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

* Indicates management contract or compensatory plan or arrangement.