

PDF SOLUTIONS INC  
Form 10-Q  
November 09, 2009  
Table of Contents

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

---

## FORM 10-Q

---

- x **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Quarterly Period ended September 30, 2009

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 000-31311

---

**PDF SOLUTIONS, INC.**

Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

(Exact name of Registrant as Specified in its Charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**25-1701361**  
(I.R.S. Employer  
Identification No.)

**333 West San Carlos Street, Suite 700**  
**San Jose, California**  
(Address of Principal Executive Offices)

**95110**  
(Zip Code)

**(408) 280-7900**

(Registrant's Telephone Number, Including Area Code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer  
(Do not check if a smaller reporting company)

Smaller reporting company

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

The number of shares outstanding of the Registrant's Common Stock as of October 30, 2009 was 26,528,407.

Table of Contents

**TABLE OF CONTENTS**

	<b>Page</b>
<b><u>PART I FINANCIAL INFORMATION</u></b>	
<u>Item 1. Financial Statements</u>	3
<u>Condensed Consolidated Balance Sheets (Unaudited)</u>	3
<u>Condensed Consolidated Statements of Operations (Unaudited)</u>	4
<u>Condensed Consolidated Statements of Cash Flows (Unaudited)</u>	5
<u>Notes to Condensed Consolidated Financial Statements (Unaudited)</u>	6
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	15
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	26
<u>Item 4. Controls and Procedures</u>	27
<b><u>PART II OTHER INFORMATION</u></b>	
<u>Item 1. Legal Proceedings</u>	27
<u>Item 1A. Risk Factors</u>	27
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	35
<u>Item 3. Defaults Upon Senior Securities</u>	35
<u>Item 4. Submission of Matters to a Vote of Security Holders</u>	35
<u>Item 5. Other Information</u>	35
<u>Item 6. Exhibits</u>	36
<b><u>SIGNATURES</u></b>	37
<b><u>INDEX TO EXHIBITS</u></b>	38

Table of Contents**PART I FINANCIAL INFORMATION****Item 1. Financial Statements.****PDF SOLUTIONS, INC.****CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)**

	September 30, 2009	December 31, 2008
	(In thousands, except par values)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 33,176	\$ 31,686
Short-term investments		9,051
Accounts receivable, net of allowance of \$254 in 2009 and 2008	18,254	24,989
Prepaid expenses, deferred tax assets, and other current assets	2,771	5,147
Total current assets	54,201	70,873
Property and equipment, net	1,724	2,675
Non-current investments	718	718
Intangible assets, net	3,395	4,730
Deferred tax assets and other non-current assets	1,150	631
Total assets	\$ 61,188	\$ 79,627
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
Current liabilities:		
Current portion of long-term debt	\$ 117	\$ 370
Accounts payable	1,438	1,384
Accrued compensation and related benefits	4,443	6,525
Taxes payable and other accrued liabilities	2,335	3,723
Deferred revenue	1,540	1,792
Billings in excess of recognized revenue	88	748
Total current liabilities	9,961	14,542
Long-term debt	148	512
Long-term taxes payable	3,506	3,356
Long-term other liabilities	1,494	1,447
Total liabilities	15,109	19,857
Stockholders' equity:		
Preferred stock, \$0.00015 par value, 5,000 shares authorized: no shares issued and outstanding		
Common stock, \$0.00015 par value, 70,000 shares authorized: shares issued 30,014 in 2009 and 29,339 in 2008; shares outstanding 26,525 in 2009 and 25,923 in 2008	4	4
Additional paid-in-capital	193,247	189,132
Treasury stock at cost, 3,489 shares in 2009 and 3,416 shares in 2008	(18,535)	(18,402)
Accumulated deficit	(129,410)	(112,620)
Accumulated other comprehensive income	773	1,656
Total stockholders' equity	46,079	59,770
Total liabilities and stockholders' equity	\$ 61,188	\$ 79,627



Table of Contents

## PDF SOLUTIONS, INC.

## CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

	Three Months Ended September 30, 2009		Nine Months Ended September 30, 2008					
	(In thousands, except per share amounts)							
<b>Revenues:</b>								
Design-to-silicon-yield solutions	\$	8,439	\$	13,348	\$	23,525	\$	43,824
Gainshare performance incentives		5,439		5,417		10,126		16,402
Total revenues		13,878		18,765		33,651		60,226
<b>Cost of design-to-silicon-yield solutions:</b>								
Direct costs of design-to-silicon-yield solutions		5,270		7,152		16,423		22,185
Amortization of acquired technology		360		631		1,079		1,893
Total cost of design-to-silicon-yield solutions		5,630		7,783		17,502		24,078
Gross margin		8,248		10,982		16,149		36,148
<b>Operating expenses:</b>								
Research and development		4,689		7,835		15,547		26,045
Selling, general and administrative		4,321		5,401		12,842		17,346
Amortization of other acquired intangible assets		86		194		260		583
Restructuring charges		1,743				3,578		1,471
Total operating expenses		10,839		13,430		32,227		45,445
Loss from operations		(2,591)		(2,448)		(16,078)		(9,297)
Interest and other income (expense), net		7		(343)		121		397
Loss before income taxes		(2,584)		(2,791)		(15,957)		(8,900)
Income tax provision		247		9,433		833		7,777
Net loss	\$	(2,831)	\$	(12,224)	\$	(16,790)	\$	(16,677)
Net loss per share basic and diluted	\$	(0.11)	\$	(0.44)	\$	(0.64)	\$	(0.60)
Weighted average common shares basic and diluted		26,499		27,540		26,306		27,663

*See notes to unaudited condensed consolidated financial statements*

Table of Contents**PDF SOLUTIONS, INC.****CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)**

	Nine Months Ended September 30,	
	2009	2008
	(In thousands)	
Operating activities:		
Net loss	\$ (16,790)	\$ (16,677)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	1,097	1,447
Stock-based compensation expense	3,545	5,450
Losses on sale of investment security and disposal of fixed assets	70	450
Amortization of acquired intangible assets	1,339	2,476
Deferred taxes	(165)	8,446
Gain on debt extinguishment	(393)	
Changes in operating assets and liabilities:		
Accounts receivable, net of allowances	6,733	5,213
Prepaid expenses and other assets	2,034	189
Accounts payable	47	(1,638)
Accrued compensation and related benefits	(2,113)	(28)
Taxes payable and other accrued liabilities	(1,205)	(1,513)
Deferred revenues	(251)	(232)
Billings in excess of recognized revenue	(660)	(438)
Net cash provided by (used in) operating activities	(6,712)	3,145
Investing activities:		
Purchases of available-for-sale securities		(27,094)
Maturities and sales of available-for-sale securities	9,054	20,665
Purchases of property and equipment	(294)	(1,007)
Net cash provided by (used in) investing activities	8,760	(7,436)
Financing activities:		
Proceeds from exercise of stock options		63
Proceeds from Employee Stock Purchase Plan	570	590
Purchases of treasury stock	(133)	(3,108)
Principal payments on long-term debt	(234)	(361)
Net cash provided by (used in) financing activities	203	(2,816)
Effect of exchange rate changes on cash	(761)	(1,182)
Net increase (decrease) in cash and cash equivalents	1,490	(8,289)
Cash and cash equivalents, beginning of period	31,686	35,315
Cash and cash equivalents, end of period	\$ 33,176	\$ 27,026
Supplemental disclosure of cash flow information:		
Cash paid during the year for:		
Taxes	\$ 1,000	\$ 1,837
Interest	\$ 15	\$ 31

*See notes to unaudited condensed consolidated financial statements*

Table of Contents

**PDF SOLUTIONS, INC.**

**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)**

**1. BASIS OF PRESENTATION**

*Basis of Presentation*

The interim unaudited condensed consolidated financial statements included herein have been prepared by PDF Solutions, Inc. ( the Company ), without audit, pursuant to the rules and regulations of the Securities and Exchange Commission ( SEC ), including the instructions to the Quarterly Report on Form 10-Q and Article 10 of Regulation S-X. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted. The interim unaudited condensed consolidated financial statements reflect, in the opinion of management, all adjustments necessary (consisting only of normal recurring adjustments), to present a fair statement of results for the interim periods presented. The operating results for any interim period are not necessarily indicative of the results that may be expected for other interim periods or the full fiscal year. The accompanying interim unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto in the Company s Annual Report on Form 10-K for the year ended December 31, 2008.

We have evaluated subsequent events through November 9, 2009, the date these financial statements were available for issuance and the filing date of this Quarterly Report on Form 10-Q. Subsequent events are events that occur after the balance sheet date but before financial statements are issued or are available to be issued.

The preparation of the condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. A significant portion of the Company s revenues require estimates with respect to total costs which may be incurred and revenues earned. Actual results could differ from these estimates.

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

*Revenue Recognition*

The Company derives revenue from two sources: Design-to-Silicon-Yield Solutions, which include Services and Software Licenses, and Gainshare Performance Incentives.



## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

*Design-to-Silicon-Yield Solutions* Revenue that is derived from Design-to-Silicon-Yield solutions comes from services and software licenses. The Company recognizes revenue for each element of Design-to-Silicon-Yield solutions as follows:

*Services* The Company generates a significant portion of its Design-to-Silicon-Yield solutions revenue from fixed-price solution implementation service contracts delivered over a specific period of time. These contracts require accurate estimation of costs to perform obligations and the overall scope of each engagement. Revenue under contracts for solution implementation services is recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting. Losses on solution implementation contracts are recognized in the period when they become evident. 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 service contract. In such instances, the software products are licensed to customers over a 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 ) exists for the support and maintenance element, the support and maintenance revenue is recognized separately over the term of the supporting period. The remaining fee is recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting. VSOE for maintenance, in these instances, is generally established based upon a negotiated renewal rate. Under arrangements where software products are licensed as a component of its fixed-price service contract and where VSOE does not exist to allocate a portion of the total fixed-price to the undelivered elements, revenue is recognized for the total fixed-price as the lesser of either the percentage of completion method of contract accounting or ratably over the longer of either the term of the agreement or the support period. Costs incurred under these arrangements are deferred and recognized in proportion to revenue recognized under these arrangements.

Table of Contents

Revenue from related 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 services are performed. When bundled with software licenses in multiple element arrangements, support and maintenance, consulting (other than for its 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 for maintenance is generally established 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. When VSOE does not exist to allocate a portion of the total fee to the undelivered elements, revenue is recognized ratably over the longest period of the undelivered elements.

*Software Licenses* The Company also licenses its software products separately from its integrated solution implementations. For software license arrangements that do not require significant modification or customization of the underlying software, software license revenue is recognized under the residual method when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred, (3) the fee is fixed or determinable, (4) collectability is probable, and (5) 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 its 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 services revenue. VSOE for maintenance is generally established 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. When VSOE does not exist to allocate a portion of the total fee to the undelivered elements, revenue is recognized ratably over the longest period of the undelivered elements, and such revenue is recorded as services revenue. Revenue for software licenses with extended payment terms is not recognized in excess of amounts due. For software license arrangements that require significant modification or customization of the underlying software, the software license revenue is recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting, and such revenue is recorded as services revenue.

*Gainshare Performance Incentives* When the Company enters into a contract to provide yield improvement services, the contract usually includes two components: (1) a fixed fee for performance by the Company of services delivered over a specific period of time; and (2) a gainshare performance incentives component where the customer may pay a variable fee, usually after the fixed fee period has ended. Revenue derived from gainshare performance incentives represents profit sharing and performance incentives earned based upon the Company's customers reaching certain defined operational levels established in related solution implementation service contracts. Gainshare performance incentives periods are usually subsequent to the delivery of all contractual services and therefore have no cost to the Company. Due to the uncertainties surrounding attainment of such operational levels, the Company recognizes gainshare performance incentives 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. 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.

## **2. RECENT ACCOUNTING PRONOUNCEMENTS AND ACCOUNTING CHANGES**

In October 2009, the Financial Accounting Standards Boards ( FASB ) issued an Accounting Standard Update on revenue recognition in relation to multiple-deliverable revenue arrangements. This update provides guidance on accounting for multiple deliverable arrangements to enable vendors to account for products or services (deliverables) separately rather than as a combined unit. The amendments in this update will replace the term fair value in the revenue allocation guidance with selling price to clarify that the allocation of revenue is based on entity-specific assumptions rather than assumptions of a marketplace participant. This update is effective prospectively for revenue arrangements entered into

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

or materially modified in fiscal years beginning on or after June 15, 2010. The Company is currently evaluating the impact, if any, that the adoption of this updated standard will have on its financial results and position.

In October 2009, the FASB issued an Accounting Standard Update on software revenue recognition in relation to revenue arrangements that include software elements. This standard scopes out from software revenue recognition accounting, revenue arrangements for tangible products that contain both software and non-software components that function together to deliver the tangible products' essential functionality. It also amends the determination of how arrangement consideration should be allocated to deliverables in a multiple-deliverable revenue arrangement. This update is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. The Company is currently evaluating the impact, if any, that the adoption of this update will have on its financial results and position.

Table of Contents

Effective April 1, 2009, the Company adopted FASB's Accounting Standard Update on the disclosure of subsequent events that occur after the balance sheet date but before financial statements are issued or are available to be issued. This standard requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for that date, that is, whether that date represents the date the financial statements were issued or were available to be issued. The adoption of this accounting standard did not have a material impact on the Company's financial results and position.

Effective April 1, 2009, the Company adopted FASB's Accounting Standard Update on how to determine fair value when the volume and level of activity for assets or liabilities have significantly decreased and for identifying transactions that are not orderly. The adoption of this accounting standard did not have a material impact on the Company's financial results and position.

Effective April 1, 2009, the Company adopted FASB's Accounting Standard Update on how to account for recognition and presentation of other-than-temporary impairments of debt securities. This update amends the other-than-temporary impairment guidance for debt securities to make the guidance more operational and to improve the presentation and disclosure of other-than-temporary impairments in the financial statements. The adoption of this standard did not have a material impact on the Company's financial results and position.

Effective April 1, 2009, the Company adopted FASB's Accounting Standard Update for disclosures about fair value of financial instruments. This update requires disclosures about the fair value of financial instruments for interim reporting periods of publicly traded companies as well as in annual financial statements. These standards also require those disclosures in summarized financial information in interim reporting periods. The adoption of these standards had no impact on the Company's financial results and position.

Effective January 1, 2009, the Company adopted FASB's Accounting Standard Update for business combinations. These standards establish principles and requirements for how an acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any noncontrolling interest in the acquiree, and the goodwill acquired. These standards also establish disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. The adoption of this standard did not have an effect on the Company's financial results and position.

**3. INVESTMENTS**

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

	September 30, 2009			
	Amortized Costs	Unrealized Holding Gains	Unrealized Holding Losses	Fair Value
Auction-rate securities	\$ 1,000	\$	\$ (282)	\$ 718
Included in non-current investments				\$ 718

December 31, 2008

Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

	Amortized Costs	Unrealized Holding Gains	Unrealized Holding Losses	Fair Value
Commercial paper	\$ 2,043	\$ 4	\$	\$ 2,047
Agency obligations	6,544	68		6,612
Auction-rate securities	1,000		(282)	718
Corporate Securities	400		(8)	392
	\$ 9,987	\$ 72	\$ (290)	\$ 9,769
Included in short-term investments				\$ 9,051
Included in non-current investments				718
Total				\$ 9,769

As of September 30, 2009, the Company's investments consisted entirely of auction-rate securities. As of December 31, 2008, all securities, other than auction-rate securities held by the Company, had a maturity of one year or less. Please refer to Note 12 Fair Value for further discussion of auction-rate securities.

Table of Contents**4. 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 \$6.8 million and \$10.5 million as of September 30, 2009 and December 31, 2008, respectively.

**5. GOODWILL AND ACQUIRED INTANGIBLE ASSETS**

Impairment on goodwill and acquired intangible assets is evaluated on an annual basis (or more frequently if indicators of impairment exist). Acquired intangible assets other than goodwill are amortized over their useful lives unless these lives are determined to be indefinite. The Company completed its annual impairment test in the fourth quarter of 2008 when the Company observed impairment indicators including the trading of common stock below the Company's book value and a further deterioration in the semiconductor industry, brought on by the deteriorating global economic environment. The Company also evaluated its acquired intangible assets for impairment. As a result of the impairment analyses, the Company recorded an impairment charge of \$64.0 million related to goodwill and \$6.3 million relating to its acquired intangible assets during the fourth quarter of 2008. During the nine months ended September 30, 2009, there were no indicators of impairment related to the Company's intangible assets.

The following table provides information relating to the intangible assets and goodwill as of September 30, 2009 and December 31, 2008 (in thousands):

	Amortization Period (Years)	December 31, 2008 Net Carrying Amount	Amortization	Foreign Currency Translation	September 30, 2009 Net Carrying Amount
<b>Acquired Identifiable Intangibles</b>					
Acquired technology	4 - 5	\$ 3,608	\$ (1,079)	\$	\$ 2,529
Brand name	4	129	(53)		76
Customer relationships and backlog	1 - 6	489	(96)		393
Patent and applications	7	400	(54)		346
Other acquired intangibles	4	104	(57)	4	51
Total		\$ 4,730	\$ (1,339)	\$ 4	\$ 3,395

	Amortization Period (Years)	December 31, 2007 Net Carrying Amount	Acquisitions	Purchase Price Adjustments	Amortization	Foreign Currency Translation	Impairment	December 31, 2008 Net Carrying Amount
Goodwill	N/A	\$ 65,170	\$ 147	\$ (216)	\$	\$ (1,102)	\$ (63,999)	\$
Acquired identifiable intangibles:								
Acquired technology	4-5	\$ 9,184	\$ 420	\$	\$ (2,576)	\$	\$ (3,420)	\$ 3,608
Brand name	4	361			(128)		(104)	129
Customer relationships and backlog	1-6	1,812	1,230		(509)		(2,044)	489

Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

Patents and applications	7	1,283			(200)		(683)	400
Other acquired intangibles	4	178			(72)	(2)		104
Total		\$ 12,818	\$ 1,650	\$	(3,485)	(2)	\$ (6,251)	\$ 4,730

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

Year Ending December 31,	Amount
2009 (remaining three-month period)	\$ 446
2010	1,579
2011	830
2012	435
2013	74
2014 and thereafter	31
Total	\$ 3,395

Table of Contents**6. STOCKHOLDERS EQUITY**

Stock-based compensation is estimated at the grant date based on the award's fair value and is recognized on a straight-line basis over the vesting periods of the applicable stock purchase rights and stock options, generally four years. Stock-based compensation expenses before taxes related to the Company's employee stock purchase plan and stock-option plans were allocated as follows (in thousands):

	Three Months		Nine Months	
	Ended September 30,		Ended September 30,	
	2009	2008	2009	2008
Cost of design-to-silicon-yield solutions	\$ 278	\$ 453	\$ 1,111	\$ 1,383
Research and development	341	537	1,093	1,843
Selling, general and administrative	465	723	1,341	2,224
Stock-based compensation expenses	\$ 1,084	\$ 1,713	\$ 3,545	\$ 5,450

The Company estimated the fair value of share-based awards granted during the period using the Black-Scholes-Merton option-pricing model with the following weighted average assumptions, resulting in the following weighted average fair values:

*Stock Plans:*

	Three Months		Nine Months	
	Ended September 30,		Ended September 30,	
	2009	2008	2009	2008
Expected life (in years)	5.16	5.77	5.16	5.77
Volatility	63.5%	58.6%	63.1%	58.6%
Risk-free interest rate	2.54%	3.48%	2.44%	3.27%
Expected dividend				
Weighted average fair value per share of options granted during the period	\$ 1.24	\$ 2.75	\$ 1.11	\$ 3.13

*Employee Stock Purchase Plan:*

	Three Months		Nine Months	
	Ended September 30,		Ended September 30,	
	2009	2008	2009	2008
Expected life (in years)	1.25	1.26	1.25	1.31
Volatility	79.1%	69.8%	79.6%	60.8%
Risk-free interest rate	1.19%	2.33%	1.23%	2.80%
Expected dividend				
Weighted average fair value per share of employee stock issued during the period	\$ 1.12	\$ 2.43	\$ 0.90	\$ 3.13



## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

On September 30, 2009, 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 Company's 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 (1) 3,000,000 shares, (2) 5% of the outstanding common stock on the last day of the immediately preceding year, or (3) the number of shares determined by the board of directors. Under the 2001 Stock Plan, the Company may grant stock purchase rights and stock options to purchase shares of common stock to employees, directors and consultants. The exercise price for stock options must generally be 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 non-statutory stock options. Stock options generally expire ten years from the date of grant and become vested and exercisable ratably over a four-year period.

Stock option activity under the Company's plan during the nine months ended September 30, 2009 was as follows:

Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

Table of Contents

	Number of Options (in thousands)	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding, January 1, 2009	4,412	\$ 8.93		
Granted	152	2.08		
Exercised				
Canceled	(235)	9.09		
Expired	(186)	9.12		
Outstanding, September 30, 2009	4,143	8.64	6.62	\$ 301
Vested and expected to vest, September 30, 2009	4,001	8.84	6.40	\$ 249
Exercisable, September 30, 2009	2,911	9.45	5.65	\$ 78

The aggregate intrinsic value in the table above represents the total intrinsic value based on the Company's closing stock price of \$3.49 per share as of September 30, 2009, which would have been received by the option holders had all in-the-money option holders exercised their options as of that date. No stock options were exercised during the nine months ended September 30, 2009.

As of September 30, 2009, there was \$4.4 million of total unrecognized compensation cost related to nonvested stock options. That cost is expected to be recognized over a weighted average period of 2.1 years. The total fair value of shares vested during the nine months ended September 30, 2009 was \$2.6 million.

Nonvested shares (restricted stock units) activity during the nine months ended September 30, 2009 were as follows:

	Shares (in thousands)	Weighted Average Grant Date Fair Value Per Share
Nonvested, January 1, 2009	852	\$ 8.64
Granted		
Vested	(217)	5.52
Forfeited	(102)	8.41
Nonvested, September 30, 2009	533	9.95

As of September 30, 2009, there was \$3.2 million of total unrecognized compensation cost related to nonvested restricted stock units. That cost is expected to be recognized over a weighted average period of 3.0 years. The total compensation expense related to shares vested during the nine months ended September 30, 2009 was \$1.3 million.

*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 (1) 675,000 shares, (2) 2% of the Company's outstanding common stock on the last day of the immediately preceding year, or (3) the number of shares determined by the board of directors. For the nine months ended September 30, 2009, the Purchase Plan compensation

expense was \$174,000.

*Stock Repurchase Program* On March 26, 2003, the Company's Board of Directors approved a share repurchase program to purchase up to \$10.0 million of its outstanding common stock. This program was completed in August 2007 with 988,000 shares repurchased at the average price of \$10.12 per share. On October 29, 2007, the Board of Directors approved a new program to repurchase up to an additional \$10.0 million of the Company's common stock on the open market. The right to repurchase stock under this program will expire on October 29, 2010. As of September 30, 2009, 2.5 million shares have been repurchased at the average price of \$3.41 per share under this program and \$1.5 million remained available for future repurchases.

## **7. RESTRUCTURING**

In 2008, the Company announced two restructuring plans to better allocate its resources to improve its operational results in light of current market conditions, one on April 29, 2008 and the other on October 28, 2008.

For the plan announced on April 29, 2008, the Company recorded restructuring charges of \$1.5 million during the three months ended June 30, 2008, which primarily consisted of employee severance costs of \$1.4 million. All severance costs and related fees were paid out and the activities were completed as of March 31, 2009.

Table of Contents

For the plan announced on October 28, 2008, the Company recorded restructuring charges of \$5.5 million, primarily consisting of employee severance costs of \$4.4 million and facility exit costs of \$1.0 million. Of the \$5.5 million, \$3.6 million was recorded during the nine months ended September 30, 2009, which primarily consisted of employee severance costs. The following table summarizes the activities of these restructuring liabilities (in thousands):

<b>Restructuring Announced on October 28, 2008</b>	<b>Severance</b>		<b>Facility Exit</b>		<b>Professional and Other Fees</b>		<b>Total</b>
Balance, January 1, 2009	\$	860	\$	1,108	\$	31	\$ 1,999
Restructuring charges		3,446				132	3,578
Payments		(3,730)		(336)		(145)	(4,211)
Balance, September 30, 2009	\$	576	\$	772	\$	18	\$ 1,366

As of September 30, 2009, of the remaining accrual of \$1.4 million, \$908,000 was included in accrued liabilities and \$458,000 was included in long-term other liabilities. Accrued severance of \$582,000 and accrued professional and other fees of \$18,000 are expected to be paid out in the three months ending December 31, 2009. Accrued facility exit costs will be paid in accordance with the lease payment schedule through 2013.

**8. INCOME TAXES**

The Company accounts for temporary differences between the book and tax basis of assets and liabilities by recording deferred tax assets and liabilities. The Company must assess the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent the Company believes that recovery is not likely, the Company must establish a valuation allowance. Changes in the Company's net deferred tax assets and valuation allowance in a period are recorded through the income tax provision in the condensed consolidated statements of operations.

The Company classifies its liabilities related to unrecognized tax benefits as long-term. The Company includes interest and penalties related to unrecognized tax benefits within the Company's income tax provision. As of September 30, 2009 and December 31, 2008, the Company had \$674,000 and \$562,000, respectively, accrued for payment of interest and penalties related to unrecognized tax benefits.

The Company's total amount of unrecognized tax benefits as of September 30, 2009 was \$8.4 million, of which \$2.8 million, if recognized, would affect the Company's effective tax rate. The Company's total amount of unrecognized tax benefits as of December 31, 2008 was \$8.2 million, of which \$2.8 million, if recognized, would affect the Company's effective tax rate. As of September 30, 2009, the Company has recognized a net amount of \$3.5 million as long-term taxes payable for unrecognized tax benefits in its condensed consolidated balance sheets. The Company does not expect the change in unrecognized tax benefits over the next twelve months to materially impact its results of operations and financial position.

The Company conducts business globally and, as a result, files numerous consolidated and separate income tax returns in the U.S. federal, various state and foreign jurisdictions. Because the Company used some of the tax attributes carried forward from previous years to tax years that are still open, statutes of limitation remain open for all tax years to the extent of the attributes carried forward into tax year 2001 for federal tax purposes and tax year 2002 for California tax purposes. With few exceptions, the Company is no longer subject to income tax examinations in its major foreign subsidiaries' jurisdictions for years before 2004.

**9. NET LOSS PER SHARE**

Basic net loss per share is computed by dividing net loss by the weighted average common shares outstanding for the period (excluding outstanding stock options and shares subject to repurchase). Diluted net 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 where the effect would be anti-dilutive. The following is a reconciliation of the numerators and denominators used in computing basic and diluted net loss per share (in thousands, except per share amounts):

Table of Contents

	Three Months		Nine Months	
	Ended September 30,		Ended September 30,	
	2009	2008	2009	2008
Net loss	\$ (2,831)	\$ (12,224)	\$ (16,790)	\$ (16,677)
Denominator for basic calculation:				
Weighted average common shares outstanding basic	26,499	27,540	26,306	27,663
Dilutive items				
Stock options outstanding				
Denominator for diluted computation	26,499	27,540	26,306	27,663
Net loss per share basic and diluted	\$ (0.11)	\$ (0.44)	\$ (0.64)	\$ (0.60)

**10. COMPREHENSIVE LOSS**

The components of comprehensive loss are as follows (in thousands):

	Three Months		Nine Months	
	Ended September 30,		Ended September 30,	
	2009	2008	2009	2008
Net loss	\$ (2,831)	\$ (12,224)	\$ (16,790)	\$ (16,677)
Unrealized loss on investments, net of income tax effects	(4)	(97)	(65)	(182)
Foreign currency translation adjustments, net of income tax effects	223	(3,002)	(818)	(938)
Comprehensive loss	\$ (2,612)	\$ (15,323)	\$ (17,673)	\$ (17,797)

**11. CUSTOMER AND GEOGRAPHIC INFORMATION**

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	Three Months		Nine Months	
	Ended September 30,		Ended September 30,	
	2009	2008	2009	2008
A	25%	21%	15%	19%

Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

B	17%	19%	22%	16%
C	11%	*%	10%	*%

---

\* represents less than 10%

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

Customer	September 30, 2009	December 31, 2008
B	21%	17%
A	15%	12%
D	13%	12%
E	11%	11%
F	10%	*%

---

\* represents less than 10%

Table of Contents

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

	Three Months		Nine Months	
	Ended September 30,		Ended September 30,	
	2009	2008	2009	2008
Asia	\$ 9,680	\$ 10,499	\$ 20,724	\$ 33,032
United States	3,084	5,307	10,128	16,072
Europe	1,114	2,959	2,799	11,122
Total	\$ 13,878	\$ 18,765	\$ 33,651	\$ 60,226

As of September 30, 2009 and December 31, 2008, long-lived assets related to PDF Solutions S.A.S. (formerly Si Automation S.A.), located in France, totaled \$150,000 and \$336,000, respectively. The majority of the Company's remaining long-lived assets are in the United States.

**12. FAIR VALUE**

Fair value is the exit price, or the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. The multiple assumptions used to value financial instruments are referred to as inputs, and a hierarchy for inputs used in measuring fair value is established, that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs reflect assumptions market participants would use in pricing an asset or liability based on market data obtained from independent sources while unobservable inputs reflect a reporting entity's pricing based upon its own market assumptions. These inputs are ranked according to a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels.

- Level 1 Inputs are quoted prices in active markets for identical assets or liabilities.
- Level 2 Inputs are quoted prices for similar assets or liabilities in an active market, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable and market-corroborated inputs which are derived principally from or corroborated by observable market data.
- Level 3 Inputs are derived from valuation techniques in which one or more significant inputs or value drivers are unobservable.

The following table represents the Company's assets measured at fair value on a recurring basis as of September 30, 2009 and the basis for that measurement (in thousands):

Assets	Total	Quoted Prices in	Significant Other	Significant
		Active Markets for	Significant Other	Unobservable Inputs
		Identical Assets	Observable Inputs	Unobservable Inputs
		(Level 1)	(Level 2)	(Level 3)
Money market mutual funds	\$ 30,231	\$ 30,231	\$	
Auction-rate securities	718			718
Total	\$ 30,949	\$ 30,231	\$	718



The Company holds investments in auction-rate securities (ARS), which are variable rate debt instruments whose interest rates are reset through a dutch auction process at regular intervals, typically every 28 days. All ARS are backed by pools of student loans guaranteed by governmental agencies and private entities, and were rated AAA/Aaa at the date of acquisition. The liquidity and fair value of these securities has been reduced by the uncertainty in the credit markets and the exposure of these securities to the financial condition of bond insurance companies, as evidenced by the rating downgrade of MBIA (bond insurer on one of the Company's ARS) from Aaa to A2, by Moody's Investor Services on June 19, 2008. All ARS have failed to sell at auction since February 2008, and as a result, their interest rates were reset to the maximum LIBOR + 150 basis points. The only activity associated with these instruments since February 2008 was the repurchase of \$500,000 of ARS at par by issuers. As a result of these auction failures, there was limited active market with observable prices for these securities as of September 30, 2009; therefore, the Company computed the fair value of these securities based on a discounted cash flow model, using significant level 3 inputs, to take into account the lack of liquidity. The Company does not believe that the student loans backing these securities, the principal of these assets, is at risk. Furthermore, the Company intends to hold these securities until the credit markets recover and these securities resume pricing at or near par and it is not more likely than not that the Company will be required to sell the securities before recovery of the principal. As a result, the Company recorded a temporary impairment to other comprehensive income and classified these securities as non-current investments. The valuation may be revised in future periods as market conditions evolve.

Table of Contents

There was no change in the beginning and ending balance of assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the nine months ended September 30, 2009.

**Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

**Forward-Looking Statements**

The following discussion of our financial condition and results of operations contains 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. In some cases, you can identify forward-looking statements by terminology such as may, could, should, expect, plan, anticipate, believe, estimate, predict, potential, or the negative effect of terms like these or other similar expressions. Any statement concerning future financial performance (including future revenues, earnings or growth rates), ongoing business strategies or prospects, and possible actions taken by us or our subsidiaries, which may be provided by us are also forward-looking statements. These forward-looking statements are only predictions. Forward-looking statements are based on current expectations and projections about future events and are inherently subject to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those anticipated or projected. All forward-looking statements included in this document are based on information available to us on the date of filing and we further caution investors that our business and financial performance are subject to substantial risks and uncertainties. We assume no obligation to update any such forward-looking statements. In evaluating these statements, you should specifically consider various factors, including the risk factors set forth in Part II, Item 1A in this Quarterly Report and set forth at the end of Item 1A in our Annual Report on Form 10-K for the year ended December 31, 2008 filed with the Securities and Exchange Commission on March 16, 2009.

**Overview**

We analyze our customers' integrated circuit ( IC ) design and manufacturing processes to identify, quantify, and correct the issues that cause yield loss to improve our customers' profitability by improving time-to-market, increasing yield and reducing total design and manufacturing costs. We package our solutions in various ways to meet our customers' specific business and budgetary needs, each of which provides us various revenue streams. We receive a mix of fixed fees and variable, performance-based fees for the vast majority of our Yield Improvement Solutions offerings. The fixed fees are typically reflective of the length of time and the resources needed to characterize a customer's manufacturing process and receive preliminary results of proposed yield improvement suggestions. The variable fee, or what we call gainshare performance incentives, usually depends on our achieving certain yield targets by a deadline. Variable fees are currently typically tied to wafer volume on the node size of the process on which we performed the yield improvement. We also receive license fees and service fees for related installation, integration, training, and maintenance and support services for our software that we license on a stand-alone basis.

**History**

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, under the term Design-to-Silicon-Yield solutions,

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

reflecting our current business model. In April 2000, we expanded our research and development team and gained additional technology by acquiring AISS. AISS now operates as PDF Solutions GmbH, a German company, 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, including increased software applications, through the acquisitions of IDS and WaferYield. In 2006, we further complemented our technology offering by acquiring Si Automation S.A. and adding its Fault Detection and Classification ( FDC ) software capabilities to our integrated solution. In 2007, we increased our intellectual property solutions portfolio, particularly in logic design technology, through the acquisition of Fabbrix, Inc. In 2008, we solidified our market leading position in the FDC software market, particularly in Korea, and now provide complementary technology to our mæstria product through the acquisition of certain assets of Triant Holdings, Inc.

### *Industry Trend*

Subject to the current general economic downturn, demand for consumer electronics and communications devices continues to drive technological innovation in the semiconductor industry as the need for products with greater performance, lower power consumption, reduced costs and smaller size continues to grow with each new product generation. In addition, advances in computing systems and mobile devices have fueled demand for higher capacity memory chips. To meet these demands, IC manufacturers and designers are constantly challenged to improve the overall performance of their ICs by designing and manufacturing ICs with more

Table of Contents

embedded applications to create greater functionality while lowering cost per transistor. As a result, both logic and memory manufacturers have migrated to more and more advanced manufacturing nodes, capable of integrating more devices with higher performance, higher density, and lower power. As this trend continues, companies will continually be challenged to improve process capabilities to optimally produce ICs with minimal random and systematic yield loss, which is driven by the lack of compatibility between the design and its respective manufacturing process. We believe that as volume production of deep submicron ICs continues to grow, the difficulties of integrating IC designs with their respective processes and ramping new manufacturing processes will create a greater need for products and services that address the yield loss and escalating cost issues the semiconductor industry is facing today and will face in the future.

***Financial Highlights***

The semiconductor industry is currently experiencing significant challenges, primarily due to the poor macroeconomic environment, and it is unclear when a sustained rebound may occur. As a result of this downturn, some of our customers faced financial challenges in fiscal 2008 and have continued to face such challenges in fiscal 2009. The current economic downturn has contributed to the substantial reduction in our revenue and could continue to harm our business, operating results and financial condition.

We plan operating expense levels primarily based on forecasted revenue levels. To partially offset the impact of our expected decrease in revenue, we have implemented several cost saving initiatives, including reducing headcount and other discretionary spending. During the year ended December 31, 2008, we initiated two restructuring plans to improve our operating results and to align our cost structure with expected revenue.

Financial highlights for the three months ended September 30, 2009 were as follows:

- Total revenue for the three months ended September 30, 2009 was \$13.9 million, a decrease of \$4.9 million, or 26%, compared to the three months ended September 30, 2008. Design-to-Silicon-Yield solutions revenue for the three months ended September 30, 2009 was \$8.4 million, a decrease of \$4.9 million, or 37%, compared to \$13.3 million for the three months ended September 30, 2008. The decrease in Design-to-Silicon-Yield solutions revenue was primarily the result of lower bookings. The dramatic downturn in the semiconductor industry combined with weakness in worldwide economy have been the primary contributors to this reduction. Gainshare performance incentives revenue for the three months ended September 30, 2009 was \$5.4 million, the same as the three months ended September 30, 2008.
- Net loss for the three months ended September 30, 2009 was \$2.8 million, compared to \$12.2 million for the three months ended September 30, 2008. The decrease in net loss was primarily attributable to the establishment of a valuation allowance against deferred tax assets during the three months ended September 30, 2008, and decreases in operating expenses as the result of our cost control efforts, partially offset by a significant decrease in revenue.
- Net loss per basic and diluted share was \$0.11 for the three months ended September 30, 2009 compared to \$0.44 for the three months ended September 30, 2008, a decrease in net loss of \$0.33 per basic and diluted share.

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

Financial highlights for the nine months ended September 30, 2009 were as follows:

- Total revenue for the nine months ended September 30, 2009 was \$33.7 million, a decrease of \$26.6 million, or 44%, compared to the nine months ended September 30, 2008. Revenue from Design-to-Silicon-Yield solutions for the nine months ended September 30, 2009 decreased \$20.3 million to \$23.5 million, or 46%, compared to \$43.8 million for the nine months ended September 30, 2008. The decrease in Design-to-Silicon-Yield solutions revenue was primarily the result of lower bookings, as customers have delayed purchases for capacity expansion and investment in leading-edge technology. The dramatic downturn in the semiconductor industry combined with weakness in worldwide economy have been the primary contributors to this reduction. Revenue from gainshare performance incentives for the nine months ended September 30, 2009 decreased \$6.3 million to \$10.1 million from the nine months ended September 30, 2008. The decrease in revenue from gainshare performance incentives was primarily the result of reduced volumes at our customers' manufacturing facilities.

- Net loss for the nine months ended September 30, 2009 was \$16.8 million, an increase of \$113,000 compared to \$16.7 million for the nine months ended September 30, 2008. The increase in net loss was primarily attributable to a significant decrease in revenue, partially offset by decreases in operating expenses as the result of our cost control efforts and the establishment of a valuation allowance against deferred tax assets during the three months ended September 30, 2008.

Table of Contents

- Net loss per basic and diluted share was \$0.64 for the nine months ended September 30, 2009 compared to \$0.60 for the nine months ended September 30, 2008, an increase in net loss of \$0.04 per basic and diluted share.
- Cash, cash equivalents and investments decreased \$7.6 million to \$33.9 million during the nine months ended September 30, 2009, primarily due to payments of \$4.2 million for restructuring charges.

**Critical Accounting Policies**

Item 7 of the Annual Report on Form 10-K for the year ended December 31, 2008, includes a summary of the significant accounting policies and methods used in the preparation of our condensed consolidated financial statements. The following is a brief discussion of the more significant accounting policies and methods that we use.

**General**

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

*Design-to-Silicon-Yield Solutions* Revenue that is derived from Design-to-Silicon-Yield solutions comes from services and software licenses. We recognize revenue for each element of Design-to-Silicon-Yield solutions as follows:

*Services* We generate a significant portion of our Design-to-Silicon-Yield solutions revenue from fixed-price solution implementation service contracts delivered over a specific period of time. These contracts require accurate estimation of cost to perform obligations and the overall scope of each engagement. Revenue under contracts for solution implementation services is recognized as services are performed using the

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

cost-to-cost percentage of completion method of contract accounting. Losses on solution implementation contracts are recognized in the period when they become evident. 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 contracts were 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 service contracts. In such instances, the software products are licensed to customers over a 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 ) exists for the support and maintenance element, the support and maintenance revenue is recognized separately over the term of the supporting period. The remaining fee is recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting. VSOE for maintenance, in these instances, is generally established based upon a negotiated renewal rate. Under arrangements where software products are licensed as a component of its fixed-price service contract and where VSOE does not exist to allocate a portion of the total fixed-price to the undelivered elements, revenue is recognized for the total fixed-price as the lesser of either the percentage of completion method of contract accounting or ratably over the longer of either the term of the agreement or the supporting period. Costs incurred under these arrangements are deferred and recognized in proportion to revenue recognized under these arrangements.

Revenue from related 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 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

Table of Contents

based upon its fair value as determined by our VSOE. VSOE for maintenance is generally established 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 longest service period of the undelivered elements.

*Software Licenses* We also license our software products separately from our integrated solution implementations. For software license arrangements that do not require significant modification or customization of the underlying software, software license revenue is recognized under the residual method when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred, (3) the fee is fixed or determinable, (4) collectability is probable, and (5) 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 our VSOE and such services are recorded as services revenue. VSOE for maintenance is generally established 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. When VSOE does not exist to allocate a portion of the total fee to the undelivered elements, revenue is recognized ratably over the longest period of the undelivered elements. Revenue for software licenses with extended payment terms is not recognized in excess of amounts due. For software license arrangements that require significant modification or customization of the underlying software, the software license revenue is recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting, and such revenue is recorded as services revenue.

*Gainshare Performance Incentives* When we enter into a contract to provide yield improvement services, the contract usually includes two components: (1) a fixed fee for performance by us of services delivered over a specific period of time; and (2) a gainshare performance incentives component where the customer may pay a variable fee, usually after the fixed fee period has ended. Revenue derived from gainshare performance incentives represents profit sharing and performance incentives earned based upon our customers reaching certain defined operational levels established in related solution implementation service contracts. Gainshare performance incentives periods are usually subsequent to the delivery of all contractual services and therefore have no cost to us. Due to the uncertainties surrounding attainment of such operational levels, we recognize gainshare performance incentives 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. Gainshare performance incentives 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 provisions for gainshare performance incentives.

*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. 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 September 30, 2009 and December 31, 2008, the recorded value of our intangible assets was \$3.4 million and \$4.7 million, respectively, and the recorded value of goodwill was zero. In assessing the valuation and recoverability 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 annually and we have selected December 31 as the date upon which to perform our annual testing for goodwill impairment. During the fourth quarter of fiscal 2008, we observed impairment indicators, relating to our long-lived assets, including the trading of our common stock below our book value and a further deterioration in the semiconductor industry brought on by the deteriorating global economic environment which triggered the necessity of an impairment test for our intangible and long lived assets as of December 31, 2008. We assessed the recoverability of our intangible and long-lived assets by comparing the carrying value of those intangible and long lived assets to the undiscounted cash flows of each asset group. The analysis indicated that the carrying value of certain assets exceeded the undiscounted cash flows. As such, we determined that certain acquired intangible assets were impaired. We measured the amount of impairment by calculating the amount by which the carrying value of the intangible assets exceeded their estimated fair values, which were based on projected discounted future net cash flows. As a result of this impairment analysis, we recorded an impairment charge of \$6.3 million during the fourth quarter of 2008. During the nine months ended September 30, 2009, there were no indicators of impairment related to the Company's intangible assets.

Table of Contents

We completed our annual impairment analysis of goodwill as of December 31, 2008. We determined the fair value of our goodwill by allocating the estimated fair value of our reporting unit to our assets and liabilities, including the estimated fair value of our unrecorded intangible assets, on a fair value basis. After allocating its assets and liabilities on a fair value basis, we recorded an impairment of all of our goodwill of \$64.0 million.

We are currently amortizing our acquired intangible assets over estimated useful lives of one to seven years, which are based on the estimated period of benefit to be derived from such assets. However, a decrease in the estimated useful lives of such assets would cause additional amortization expense or an impairment of such assets in future periods.

*Income Taxes*

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*

Stock-based compensation cost is estimated at the grant date based on the award's fair-value as calculated by the Black-Scholes-Merton ( BSM ) option-pricing model and is recognized as expense ratably over the requisite service period. The BSM model requires various highly judgmental assumptions including volatility, forfeiture rates, and expected option life. If any of the assumptions used in the BSM model change significantly, stock-based compensation expense may differ materially in the future from that recorded in the current period.

**Recent Accounting Pronouncements and Accounting Changes**

See Note 2 of Notes to Condensed Consolidated Financial Statements (Unaudited) of this Quarterly Report on Form 10-Q for a description of recent accounting pronouncements and accounting changes, including the expected dates of adoption and estimated effects, if any, on our consolidated financial statements.

*Results of Operations*

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



Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

Table of Contents

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2009	2008	2009	2008
<b>Revenues:</b>				
Design-to-silicon-yield solutions	61%	71%	70%	73%
Gainshare performance incentives	39	29	30	27
Total revenues	100%	100%	100%	100%
<b>Cost of design-to-silicon-yield solutions:</b>				
Direct cost of design-to-silicon-yield solutions	38	38	49	37
Amortization of acquired technology	3	3	3	3
Total cost of design-to-silicon-yield solutions	41	41	52	40
Gross margin	59	59	48	60
<b>Operating expenses:</b>				
Research and development	34	42	46	43
Selling, general and administrative	31	29	38	29
Amortization of other acquired intangible assets		1	1	1
Restructuring charges	13		11	2
Total operating expenses	78	72	96	75
Loss from operations	(19)	(13)	(48)	(15)
Interest and other income (expense), net		(2)	1	
Loss before income taxes	(19)	(15)	(47)	(15)
Income tax provision	1	50	3	13
Net loss	(20)%	(65)%	(50)%	(28)%

*Comparison of the Three Months Ended September 30, 2009 and 2008*

Revenue (In thousands, except for % s)	Three Months Ended September 30,		\$ Change	% Change	Three Months Ended September 30,	
	2009	2008			% of Revenue	% of Revenue
Design-to-silicon-yield solutions	\$ 8,439	\$ 13,348	\$ (4,909)	(37)%	61%	71%
Gainshare performance incentives	5,439	5,417	22	%	39%	29%
Total	\$ 13,878	\$ 18,765	\$ (4,887)	(26)%	100%	100%

*Design-to-Silicon-Yield Solutions.* Design-to-Silicon-Yield solutions revenue is derived from services (including solution implementations, software support and maintenance, consulting, and training) and software licenses, provided during our customer yield improvement engagements as well as during solution product sales. Design-to-Silicon-Yield solutions revenue decreased \$4.9 million for the three months ended September 30, 2009 compared to the three months ended September 30, 2008, primarily due to a decrease of \$3.3 million in fixed fee integrated solutions and a decrease of \$1.7 million in software and software related services. The decreases were primarily the result of lower bookings, as some of our customers have delayed purchases for capacity expansion and investment in leading edge technology. The dramatic downturn in the semiconductor industry combined with weakness in worldwide economies have been the primary contributors to this shortfall. Our Design-to-Silicon-Yield 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.

*Gainshare Performance Incentives.* Gainshare performance incentives revenue represents profit sharing and performance incentives earned based upon our customers reaching certain defined operational levels. Revenue derived from gainshare performance incentives increased

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

\$22,000 for the three months ended September 30, 2009 compared to the three months ended September 30, 2008. The revenue from gainshare performance incentives was generated from six customers and seven engagements for the three months ended September 30, 2009 and six customers and eight engagements for the three months ended September 30, 2008. Our gainshare performance incentives revenue may continue to fluctuate from period to period. Gainshare performance incentives 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 provisions for gainshare performance incentives.

Table of Contents

Cost of Design-to-Silicon-Yield Solutions (In thousands, except for % s)	Three Months Ended September 30,		\$	%	Three Months Ended September 30,	
	2009	2008			2009	2008
Direct costs of design-to-silicon-yield solutions	\$ 5,270	\$ 7,152	\$ (1,882)	(26)%	38%	38%
Amortization of acquired technology	360	631	(271)	(43)%	3%	3%
Total	\$ 5,630	\$ 7,783	\$ (2,153)	(28)%	41%	41%

*Costs of Design-to-Silicon-Yield Solutions.* Costs of Design-to-Silicon-Yield solutions consist of costs incurred to provide and support our services, costs recognized in connection with licensing our software, and amortization of acquired technology.

*Direct Costs of Design-to-Silicon-Yield Solutions.* Direct costs of Design-to-Silicon-Yield solutions consist of services costs and software licenses costs. Services costs consist of material, labor, overhead costs, and stock-based compensation charges associated with solution implementations. Costs include purchased materials, employee compensation and related benefits, travel and facilities-related costs. 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. Direct costs of Design-to-Silicon-Yield solutions decreased \$1.9 million for the three months ended September 30, 2009 compared to the three months ended September 30, 2008, primarily due to a decrease of \$892,000 in domestic personnel expenses, a decrease of \$688,000 in the use of outside consultants, and a decrease of \$290,000 in travel expenses, all as a result of our cost control efforts. 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 contracts were executed. Any such reductions in contract margin could have a material negative impact on our operating results.

*Amortization of Acquired Technology.* Amortization of acquired technology consists of amortization of intangible assets acquired as a result of certain business combinations. Amortization of acquired technology expense decreased \$271,000 for the three months ended September 30, 2009 compared to the three months ended September 30, 2008, primarily due to decreased amortization as a result of the impairment of acquired technology recorded in the fourth quarter of 2008. We anticipate amortization of acquired technology to be \$360,000 for the remaining three months in 2009, \$1.3 million in 2010, \$626,000 in 2011, and \$261,000 in 2012.

Research and Development (In thousands, except for % s)	Three Months Ended September 30,		\$	%	Three Months Ended September 30,	
	2009	2008			2009	2008
Research and development	\$ 4,689	\$ 7,835	\$ (3,146)	(40)%	34%	42%

*Research and Development.* Research and development expenses consist primarily of personnel-related costs to support product development activities, including compensation and benefits, outside development services, travel and facilities cost allocations, and stock-based compensation charges. Research and development expenses decreased \$3.1 million for the three months ended September 30, 2009 compared to the three months ended September 30, 2008, primarily due to a decrease of \$1.1 million in domestic personnel expenses and a decrease of \$1.1 million in expenses at European subsidiaries, both the results of our cost control efforts, and a decrease of \$251,000 in support costs associated with third-party software applications. We anticipate our expenses in research and development will fluctuate in absolute dollars from period to

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

period as a result of cost control initiatives and the timing of when we hire personnel as a result of the size and the timing of product development projects.

Selling, General and Administrative (In thousands, except for % s)	Three Months Ended September 30,		\$ Change	% Change	Three Months Ended September 30,	
	2009	2008			% of Revenue	% of Revenue
Selling, general and administrative	\$ 4,321	\$ 5,401	\$ (1,080)	(20)%	31%	29%

*Selling, General and Administrative.* Selling, general and administrative expenses consist primarily of compensation and benefits for sales, marketing and general and administrative personnel in addition to outside sales commissions, legal and accounting services, marketing communications, travel and facilities cost allocations, and stock-based compensation charges. Selling, general and administrative expenses decreased \$1.1 million for the three months ended September 30, 2009 compared to the three months ended September 30, 2008, primarily due to a decrease of \$451,000 in legal fees and a decrease of \$258,000 in stock-based compensation expense. We anticipate our selling, general and administrative expenses will fluctuate in absolute dollars from period to period as a result of cost control initiatives and to support increased selling efforts in the future.

Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

Table of Contents

Amortization of Other Acquired Intangible Assets (In thousands, except for % s)	Three Months Ended September 30,		\$ Change	% Change	Three Months Ended September 30,	
	2009	2008			% of Revenue	% of Revenue
Amortization of other acquired intangible assets	\$ 86	\$ 194	\$ (108)	(56)%	%	1%

*Amortization of Other Acquired Intangible Assets.* Amortization of other acquired intangible assets consists of amortization of intangibles acquired as a result of certain business combinations. Amortization of other acquired intangible assets for the three months ended September 30, 2009 decreased \$108,000 compared to the three months ended September 30, 2008, primarily due to decreased amortization as a result of the impairment of other acquired intangible assets recorded in the fourth quarter of fiscal 2008. We anticipate amortization of other acquired intangible assets to be \$86,000 in the remaining three months in 2009, \$293,000 in 2010, \$204,000 in 2011, \$174,000 in 2012, and \$105,000 in 2013 and thereafter.

Restructuring Charges (In thousands, except for % s)	Three Months Ended September 30,		\$ Change	% Change	Three Months Ended September 30,	
	2009	2008			% of Revenue	% of Revenue
Restructuring charges	\$ 1,743	\$ 1,743	\$ 1,743	N/A	13%	%

*Restructuring Charges.* Restructuring charges for the three months ended September 30, 2009 increased \$1.7 million compared to the three months ended September 30, 2008. Restructuring charges for the three months ended September 30, 2009 consisted primarily of employee severance costs resulting from our cost control efforts in light of current market conditions.

Interest and Other Income (Expense), net (In thousands, except for % s)	Three Months Ended September 30,		\$ Change	% Change	Three Months Ended September 30,	
	2009	2008			% of Revenue	% of Revenue
Interest and other income (expense), net	\$ 7	\$ (343)	\$ 350	(102)%	%	(2)%

*Interest and Other Income (Expense), net.* Interest and other income increased \$350,000 for the three months ended September 30, 2009 compared to interest and other expense of \$343,000 for the three months ended September 30, 2008, primarily due to a gain of \$393,000 on debt extinguishment associated with the forgiveness of a loan we assumed at the time of acquisition of Si Automation S.A., and a loss of \$445,000 on the sale of commercial paper from a bankrupt financial institution during the three months ended September 30, 2008, partially offset by an increase of \$214,000 in foreign currency exchange losses associated with intercompany payments to fund our foreign operations and a decrease of \$117,000 in interest income from lower average cash, cash equivalent, and investments balances and lower interest rates. We anticipate interest and other income will fluctuate in future periods as a result of our projected use of cash.

Three Months Ended September 30,	\$	%	Three Months Ended September 30,
----------------------------------	----	---	----------------------------------



Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

<b>Income Tax Provision (In thousands, except for % s)</b>	<b>2009</b>	<b>2008</b>	<b>Change</b>	<b>Change</b>	<b>2009 % of Revenue</b>	<b>2008 % of Revenue</b>
Income tax provision	\$ 247	\$ 9,433	\$ (9,186)	(97)%	1%	50%

*Income Tax Provision.* Income tax provision decreased \$9.2 million for the three months ended September 30, 2009 compared to the three months ended September 30, 2008, primarily due to the establishment of a valuation allowance against deferred tax assets during the three months ended September 30, 2008.

Table of Contents*Comparison of the Nine Months Ended September 30, 2009 and 2008*

Revenue (In thousands, except for % s)	Nine Months Ended September 30,		\$ Change	% Change	Nine Months Ended September 30,	
	2009	2008			% of Revenue	% of Revenue
Design-to-silicon-yield solutions	\$ 23,525	\$ 43,824	\$ (20,299)	(46)%	70%	73%
Gainshare performance incentives	10,126	16,402	(6,276)	(38)%	30%	27%
Total	\$ 33,651	\$ 60,226	\$ (26,575)	(44)%	100%	100%

*Design-to-Silicon-Yield Solutions.* Design-to-Silicon-Yield solutions revenue decreased \$20.3 million for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008, primarily due to a decrease of \$13.5 million in fixed fee integrated solutions and a decrease of \$6.6 million in software and software related services. The decreases were primarily the result of lower bookings, as some of our customers have delayed purchases for capacity expansion and investment in leading edge technology. The dramatic downturn in the semiconductor industry combined with weakness in worldwide economies have been the primary contributors to this shortfall.

*Gainshare Performance Incentives.* Revenue derived from gainshare performance incentives decreased \$6.3 million for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008, primarily due to decreases in wafer volumes at our customer sites. Revenue derived from gainshare performance incentives was generated from six customers and eight engagements for the nine months ended September 30, 2009, and seven customers and eleven engagements for the nine months ended September 30, 2008.

Cost of Design-to-Silicon-Yield Solutions (In thousands, except for % s)	Nine Months Ended September 30,		\$ Change	% Change	Nine Months Ended September 30,	
	2009	2008			% of Revenue	% of Revenue
Direct costs of design-to-silicon-yield solutions	\$ 16,423	\$ 22,185	\$ (5,762)	(26)%	49%	37%
Amortization of acquired technology	1,079	1,893	(814)	(43)%	3%	3%
Total	\$ 17,502	\$ 24,078	\$ (6,576)	(27)%	52%	40%

*Costs of Design-to-Silicon-Yield Solutions.*

*Direct Costs of Design-to-Silicon-Yield Solutions.* Direct costs of Design-to-Silicon-Yield solutions decreased \$5.8 million for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008, primarily due to a decrease of \$2.1 million in domestic personnel expenses, a decrease of \$1.2 million in the use of outside consultants, and a decrease of \$920,000 in travel expenses, the results of our cost control efforts.

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

*Amortization of Acquired Technology.* Amortization of acquired technology decreased \$814,000 for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008. The decrease in amortization of acquired technology was primarily due to decreased amortization as a result of the impairment of acquired technology recorded in the fourth quarter of 2008.

	Nine Months Ended September 30,		\$	%	Nine Months Ended September 30,	
	2009	2008	Change	Change	% of Revenue	% of Revenue
<b>Research and Development</b> (In thousands, except for % s)						
Research and development	\$ 15,547	\$ 26,045	\$ (10,498)	(40)%	46%	43%

*Research and Development.* Research and development expenses decreased \$10.5 million for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008, primarily due to a decrease of \$4.3 million in domestic personnel expenses, decreases of \$3.8 million in expenses at our European subsidiaries, a decrease of \$658,000 in maintenance expense on third-party software applications, and a decrease of \$388,000 in travel expenses, all as a result of our cost control efforts.

Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

Table of Contents

Selling, General and Administrative (In thousands, except for % s)	Nine Months Ended September 30,		\$ Change	% Change	Nine Months Ended September 30,	
	2009	2008			2009 % of Revenue	2008 % of Revenue
Selling, general and administrative	\$ 12,842	\$ 17,346	\$ (4,504)	(26)%	38%	29%

*Selling, General and Administrative.* Selling, general and administrative expenses decreased \$4.5 million for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008, primarily due to a decrease of \$1.3 million in domestic personnel expenses, a decrease of \$933,000 in legal fees, a decrease of \$311,000 in the use of outside services, and a decrease of \$245,000 in travel expenses, all as a result of our cost control efforts.

Amortization of Other Acquired Intangible Assets (In thousands, except for % s)	Nine Months Ended September 30,		\$ Change	% Change	Nine Months Ended September 30,	
	2009	2008			2009 % of Revenue	2008 % of Revenue
Amortization of other acquired intangible assets	\$ 260	\$ 583	\$ (323)	(55)%	1%	1%

*Amortization of Other Acquired Intangible Assets.* Amortization of other acquired intangible assets decreased \$323,000 for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008, primarily due to decreased amortization as a result of the impairment of other acquired intangible assets recorded in the fourth quarter of fiscal 2008.

Restructuring Charges (In thousands, except for % s)	Nine Months Ended September 30,		\$ Change	% Change	Nine Months Ended September 30,	
	2009	2008			2009 % of Revenue	2008 % of Revenue
Restructuring charges	\$ 3,578	\$ 1,471	\$ 2,107	143%	11%	2%

*Restructuring Charges.* Restructuring charges increased \$2.1 million for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008. Restructuring charges for the nine months ended September 30, 2009 and 2008 consisted primarily of employee severance costs and were the result of our cost control efforts implemented in light of current market conditions.

Interest and Other Income, net (In thousands, except for % s)	Nine Months Ended September 30,		\$ Change	% Change	Nine Months Ended September 30,	
	2009	2008			2009 % of Revenue	2008 % of Revenue
	\$ 121	\$ 397	\$ (276)	(70)%	1%	%

Interest and other income,  
net

*Interest and Other Income, net.* Interest and other income decreased \$276,000 for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008, primarily due to a decrease of \$581,000 in interest income from lower average cash, cash equivalent, and investments balances and lower interest rates and an increase of \$432,000 in foreign currency exchange losses associated with inter-company payments to fund our foreign operations, partially offset by a gain of \$393,000 on debt extinguishment associated with the forgiveness of a loan we assumed at the time of acquisition of Si Automation S.A., and a loss of \$445,000 on the sale of commercial paper from a bankrupt financial institution during the three months ended September 30, 2008.

<b>Income Tax Provision (In thousands, except for % s)</b>	<b>Nine Months Ended September 30,</b>		<b>\$ Change</b>	<b>% Change</b>	<b>Nine Months Ended September 30,</b>	
	<b>2009</b>	<b>2008</b>			<b>2009 % of Revenue</b>	<b>2008 % of Revenue</b>
Income tax provision	\$ 833	\$ 7,777	\$ (6,944)	(89)%	3%	13%

*Income Tax Provision.* Income tax provision decreased \$6.9 million for the nine months ended September 30, 2009 as compared to the nine months ended September 30, 2008, primarily due to the establishment of a valuation allowance against deferred tax assets during the nine months ended September 30, 2008.

Table of Contents

**Liquidity and Capital Resources**



***Operating Activities***

Cash flows from operating activities consist of net loss adjusted for certain non-cash items and changes in assets and liabilities. Net cash used in operating activities was \$6.7 million for the nine months ended September 30, 2009, an increase of \$9.9 million compared to net cash provided by operating activities of \$3.1 million for the nine months ended September 30, 2008, primarily due to a higher net loss after adjusting non-cash items, decreases in accrued compensation and related benefits, partially offset by decreases in accounts receivable and prepaid expenses and other assets, and an increase in accounts payable. Deferred taxes and other assets decreased \$8.6 million for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 primarily due to the establishment of a valuation allowance for our deferred tax assets during the three months ended September 30, 2008. Stock-based compensation decreased \$1.9 million primarily due to a reduction in headcount.

Accrued compensation decreased \$2.1 million during the nine months ended September 30, 2009 compared to a decrease of \$28,000 during the nine months ended September 30, 2008. The decrease in accrued compensation during the nine months ended September 30, 2009 was primarily due to the increased usage of accrued vacation as a result of Company work furloughs. Accounts receivable decreased \$6.7 million during the nine months ended September 30, 2009 compared to a decrease of \$5.2 million during the nine months ended September 30, 2008. The decrease in accounts receivable during the nine months ended September 30, 2009 and 2008 was primarily due to decreased revenue and the timing of billing milestones and payments received. Prepaid expenses and other assets decreased \$2.0 million during the nine months ended September 30, 2009 compared to a decrease of \$189,000 during the nine months ended September 30, 2008. The decrease in prepaid expenses and other assets during the nine months ended September 30, 2009 was primarily due to the collection of income tax refunds. Accounts payable increased \$47,000 during the nine months ended September 30, 2009 compared to a decrease of \$1.6 million during the nine months ended September 30, 2008. The decrease in accounts payable during the nine months ended September 30, 2008 was primarily due to the timing of vendor payments and lower purchasing activity.

***Investing Activities***

Cash flows from investing activities consist of proceeds from investment maturities and sales, offset by payments for investments acquired and payments for capital expenditures. Net cash provided by investing activities was \$8.8 million for the nine months ended September 30, 2009, an increase of \$16.2 million compared to net cash used in investing activities of \$7.4 million for the nine months ended September 30, 2008. The increase was primarily due to the absence of purchases of investments during the nine months ended September 30, 2009 while we purchased \$27.1 million of investments during the nine months ended September 30, 2008. The increase was partially offset by a decrease of \$11.6 million in proceeds from investment maturities and sales. As of September 30, 2009, we had no investments in derivative securities.

***Financing Activities***

Cash flows from financing activities consist primarily of proceeds from sales of shares through employee equity incentive plans, offset by payments for the purchase of treasury stock, and principal payments on long-term obligations. Net cash provided by financing activities was \$203,000 for the nine months ended September 30, 2009, an increase of \$3.0 million compared to net cash used in financing activities of \$2.8 million for the nine months ended September 30, 2008. During the nine months ended September 30, 2009, we repurchased 73,000 shares of common stock for \$133,000 whereas we repurchased 562,000 shares of common stock for \$3.1 million during the nine months ended September 30, 2008.

***Liquidity***



## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

As of September 30, 2009, our working capital was \$44.2 million, compared with \$56.3 million as of December 31, 2008. Cash and cash equivalents were \$33.2 million as of September 30, 2009 compared to \$40.7 million as of December 31, 2008, a decrease of \$7.6 million. The decrease in cash, cash equivalents, and short-term investments was primarily attributable to the payments of \$4.2 million in accrued restructuring during the nine months ended September 30, 2009. 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.

Table of Contents

As of September 30, 2009, our non-current investments included auction-rate securities with a fair value of \$718,000. See Note 12 to Notes to Condensed Consolidated Financial Statements (Unaudited) in Part I, and Item 3. Quantitative and Qualitative Disclosures About Market Risk in this Quarterly Report on Form 10-Q for further discussion.

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. As of September 30, 2009, other than Euro and Japanese Yen denominated receivables, we had no foreign currency contracts outstanding.

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

Contractual obligations	Payments due by period					Total
	2009 (three months remaining)	2010-2011	2012-2013	Other		
Debt principal (1)	\$ 29	\$ 236	\$	\$	\$	\$ 265
Debt interest	3	11				14
Operating lease obligations	763	5,697	3,993			10,453
Unrecognized tax benefits (2)				3,506		3,506
Total	\$ 795	\$ 5,944	\$ 3,993	\$ 3,506	\$	\$ 14,238

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

(2) Due to the inherent uncertainty of the tax positions, it is not practicable to assign this liability to any particular years in the table.

Operating lease amounts include minimum rental payments under our operating leases for our office facilities, as well as computers, office equipment, and vehicles that we utilize under lease agreements. These minimum rental payments include payments on those facilities abandoned as part of the restructuring activities. These agreements expire at various dates through 2013.

**Item 3. 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.

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

*Interest Rate Risk.* As of September 30, 2009, we had cash and cash equivalents of \$33.2 million. Cash and cash equivalents consisted of cash and highly liquid money market instruments. We had no exposure to interest rate risk as of September 30, 2009 as our short-term investment portfolio consisted entirely of money market instruments. Declines in interest rates over time will result in decreased interest income.

As of September 30, 2009, we held auction-rate securities (ARS) with a par value of \$1.0 million. ARS are variable rate debt instruments whose interest rates are reset through a dutch auction process at regular intervals, typically every 28 days. A portion of these securities are insured by third party bond insurers and are collateralized by student loans guaranteed by governmental agencies and private entities. The liquidity of the securities has been negatively impacted by the uncertainty in the credit markets and the exposure of these securities to the financial condition of bond insurance companies. All of our ARS have failed to sell at auction since February 2008 due to an insufficient number of bidders. The only activity associated with these instruments since February 2008 was the repurchase of \$500,000 of ARS at par by issuers. We do not believe that the student loans backing these securities, the principal of these assets, is at risk. Furthermore, we intend to hold these securities until the credit markets recover and these securities resume pricing at or near par and it is not more likely than not that we will be required to sell the securities before recovery of the principal. We reviewed the value of these securities for impairment as of September 30, 2009, and concluded that these securities continued to be temporarily impaired. During the year ended December 31, 2008, there was an unrealized loss of \$282,000 recorded as a component of accumulated other comprehensive income related to these auction-rate securities. There was no additional impairment recorded during the nine months ended September 30, 2009. In future periods, the estimated fair value of our ARS could decline further based on market conditions, which could result in additional impairment.

Table of Contents

*Foreign Currency and Exchange Risk.* Certain of our sales contracts are denominated in a currency other than the functional currency of the selling entity. Therefore, a portion of our revenue is subject to foreign currency risks. The effect of an immediate 10% adverse change in exchange rates on foreign currency denominated receivables as of September 30, 2009 would result in a loss of an immaterial amount. As of September 30, 2009, we did not have outstanding hedging contracts, although we may enter into such contracts in the future. We intend to monitor our foreign currency exposure. Future exchange rate fluctuations may have a material negative impact on our business.

**Item 4. Controls and Procedures.**

*Evaluation of Disclosure Controls and Procedures.* Our management, with the participation of our principal executive officer and our principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as such items are defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the Exchange Act)), as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our principal executive officer and our principal financial officer have concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures are effective and designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is (1) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and (2) is accumulated and communicated to our management, including our principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

*Changes in Internal Controls Over Financial Reporting.* There was no change in 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 period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**PART II OTHER INFORMATION**

**Item 1. Legal Proceedings.**

From time to time, we are subject to various legal proceedings and claims that arise in the ordinary course of business. If a claim arises, the Company records a contingent liability when the probable outcome of a claim against the Company can be reasonably assessed. In management's opinion, the probable outcome of any current claim against the Company cannot be reasonably estimated. Also, in management's opinion, the ultimate resolution of these claims will not materially impact our financial statements.

**Item 1A. Risk Factors.**

*The semiconductor market is volatile and unpredictable, which limits our ability to forecast our business and could negatively impact our results of operations.*

The semiconductor industry experienced significant challenges in 2008 and 2009 as a result of the decline in the macroeconomic environment. As a provider to global semiconductor companies, we are subject to business cycles, the timing, length and volatility of which can be difficult to predict. The semiconductor industry historically has been cyclical due to sudden changes in customers' manufacturing capacity requirements and spending, which depend in part on capacity utilization, demand for customers' integrated circuit ( IC ) products, inventory levels relative to demand, and access to affordable capital. These changes have affected the timing and amounts of customers' purchases and investments in our Design-to-Silicon-Yield solutions, and continue to affect our sales, operating expenses and net income. If we are not able to make adjustments to our business quickly to appropriately align our cost structure with prevailing market conditions in periods of low demand, or if we do not have sufficient resources to meet customers' demands in periods of high demand, results could be negatively impacted and could differ greatly from our expectations.

*Our business is subject to risks associated with the ongoing financial crisis and weakening global economy.*

The severe tightening of the credit markets, turmoil in the financial markets, and weakening global economy starting in 2008 and continuing in 2009 to date, contributed to slowdowns in the semiconductor industry, which impacts our ability to make sales. The markets for semiconductors depend largely on consumer spending. Economic uncertainty exacerbates negative trends in consumer spending and may cause some of our customers to delay or refrain altogether from entering into new engagements, licensing new or

Table of Contents

additional software products, or renewing maintenance and support for existing licensed software at historical levels. This will negatively affect our revenues. Difficulties in obtaining capital and deteriorating market conditions may also lead to the inability of some customers to obtain affordable financing for other purchases, which could tie up funds otherwise budgeted for purchases of our solutions and technologies. Customers with liquidity issues may also lead to additional bad debt expense. Further, these conditions and uncertainty about future economic conditions make it challenging for us to forecast our operating results, make business decisions, and identify the risks that may affect our business, financial condition and results of operations. If we are not able to timely and appropriately adapt to changes resulting from the difficult macroeconomic environment, our business, financial condition, and results of operations may be significantly negatively affected.

***If semiconductor designers and manufacturers do not continue to adopt, or they significantly delay adoption of, our Design-to-Silicon-Yield solutions, our revenue will suffer.***

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 will decline. We may not be successful if we do not continue to enter into agreements with existing customers and new customers that cover a larger number of IC products and processes. If we do not develop new customer relationships with companies that are integrated device manufacturers ( IDMs ), fabless semiconductor companies, and foundries, as well as system manufacturers, the market acceptance of our solutions will suffer. Factors that may limit adoption of our Design-to-Silicon-Yield solutions by semiconductor companies include:

- our existing and potential customers' delay in their adoption of the next process technology;
- IDMs of logic ICs discontinuing or significantly cutting 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;
- our inability to keep pace with the rapidly evolving technologies and equipment used in the semiconductor design and manufacturing processes;
- our customers' failure to achieve satisfactory yield improvements using our Design-to-Silicon-Yield solutions; and
- our inability to develop, market, or sell effective solutions that are outside of our traditional logic focus of manufacturing process solutions.

***Revenue from our gainshare performance incentives is dependent on factors outside of our control, including the volume of ICs that our customers are able to sell to their customers.***

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

Our gainshare performance incentives fee component ties the profits of our customers to our own. Through this component, 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. Decreased demand for semiconductor products decreases the volume of products our customers are able to sell, which directly decreases our gainshare performance incentives revenue. Important factors that could cause demand for semiconductor products to negatively fluctuate include:

- changes in business and economic conditions, including the current downturn in the semiconductor industry and the overall economy; and
- decreases in consumer confidence caused by changes in market conditions, including changes in the credit market.

Also, our customers may unilaterally decide to implement changes to their manufacturing processes during the period that is covered by gainshare performance incentives, which could negatively affect yield results. 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, or sustain significant volume manufacturing during the time we receive gainshare performance incentives, revenue from such customers 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 thus any of our related gainshare performance incentives, in the other product.

***We may not be able to effectively implement our restructuring plans, and our restructuring plans may not result in the expected benefits on our planned schedule, or at all, which could negatively impact our future results of operations.***

Table of Contents

During the year end December 31, 2008 and through the filing of this Quarterly Report, we have implemented restructuring plans in an effort to align our cost structure with expected revenue. We may not be able to successfully complete and realize the expected benefits of our restructuring plans, such as improvements in operating margins and cash flows, in the restructuring periods contemplated or at all. The restructuring plans may involve higher costs or a longer timetable than we currently anticipate, mainly due to the timing and execution of some plans and programs subject to local labor law requirements, and consultation with appropriate work councils. Our inability to realize these benefits may result in an inefficient business structure that could negatively impact our results of operations. We also expect our restructuring plans to cause us to incur substantial costs related to severance and other employee-related costs. Our restructuring plans may also subject us to litigation risks and expenses. In addition, our restructuring plans may have other consequences, such as attrition beyond our planned reduction in workforce or a negative impact on employee morale, and our competitors may seek to gain a competitive advantage over us. The restructuring plans could also cause our remaining employees to be less productive, which in turn may negatively affect our revenue and other operating results in the future.

***We generate a large percentage of our total revenue from a limited number of customers, so decreased volumes at any one of these customers, or 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 nine months ended September 30, 2009, three customers accounted for 47% of our total net revenue, with IBM representing 22%, Toshiba Corporation representing 15%, and Chartered Semiconductor Manufacturing representing 10%. In the nine months ended September 30, 2008, two customers accounted for 35% of our total net revenue, with Toshiba Corporation representing 19% and IBM representing 16%. We could lose a customer due to its 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 we do not effectively manage and support our operations and integrate recent and planned growth, our business strategy may fail.***

We have experienced in the past, and may experience in the future, 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. In addition, we must frequently expand our internal information system to meet increasing demand in storage, computing and communication. Our internal information system 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.

***Our stock price may be volatile, and our common stock could decline in value, increasing potential dilution to our stockholders, or we may be delisted from the NASDAQ Global Market.***

Our stock price has fluctuated widely during the last few years, from a low closing price of \$0.97 per share during March 2009 to a high closing price of \$19.36 per share during April 2006. This significant reduction in our stock price negatively impacts our ability to raise equity capital in



## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

the public markets and increases the cost to us, as measured by dilution to our existing shareholders, of equity financing. In addition, the reduced stock price also increases the cost to us, in terms of dilution, of using our equity for employee compensation or for acquisitions of other businesses. Additionally, in order for our common stock to continue to be quoted on the NASDAQ Global Market ( NASDAQ ), we must satisfy various listing maintenance standards established by NASDAQ, including, among other things, the general requirement that our stock price consistently trades at or above \$1.00 per share and that the total market value of our common stock exceed \$50,000,000. We have had in the past, and may have again in the future, periods when our stock does not trade at, or the market value of our common stock has been below, the levels required by NASDAQ rules. If we were to be delisted from the NASDAQ and move to an alternative market, which may be less efficient and less broad-based, we may have difficulty accessing capital markets for additional funding, and the ability of our stockholders to sell any of our common stock at all would be severely, if not completely, limited, which could cause our stock price to decline further. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest, and fewer business development opportunities. Also, significant volatility in the stock price could be followed by a securities class action lawsuit, which could result in substantial costs and a diversion of our management's attention and resources.

Table of Contents

***If we fail to protect our intellectual property ( IP ) 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 contractual, patent, copyright, trademark, and trade secret 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. Litigation may be necessary from time to time to enforce our IP 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.

***Competition in the market for yield improvement solutions and increased integration between IC design and manufacturing may intensify in the future, which could impede 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 could lead to increased pricing pressure. Our current and potential customers may choose to develop their own solutions internally, particularly if we are slow in deploying our solutions or improving them to meet market needs. Many of these companies have the financial and technical capability to develop their own solutions. Also, competitors may be able to operate with a lower cost structure than our engineering organization, which would give any such competitor's products a competitive advantage over our solutions. There may be other providers of commercial solutions for systematic IC yield and performance enhancement of which we are not aware. We currently face indirect competition from the internal groups at IC companies and some direct competition from providers of yield management or prediction software such as KLA-Tencor, MKS Instruments, Inc. ( MKS ) (through its acquisition of Yield Dynamics, Inc.), Mentor Graphics (through its acquisition of Ponte Solutions), TIBCO Software Inc. (through its acquisition of Spotfire Inc.), and Synopsys, Inc., and process control software, such as Applied Materials, Inc., BISTel Inc., and Tracom Technology, Inc., and MKS. Further, ARM Ltd. and Virage Logic Corporation provide standard cells in the physical IP space and Tela provides software for standard cell synthesis, each of which could compete with our pdBRIX solution. Some providers of yield management software or inspection equipment may seek to broaden their product offerings and compete with us. For example, KLA-Tencor has announced adding the use of test structures to one of their inspection product lines. In addition, we believe that the demand for solutions that address the need for better integration between the silicon design and manufacturing processes may encourage direct competitors to enter into our market. For example, large integrated organizations, such as IDMs, electronic design automation software providers, IC design service companies or semiconductor equipment vendors, may decide to spin-off a business unit that competes with us. Other potential competitors include fabrication facilities that may decide to offer solutions competitive with ours as part of their value proposition to their customers. In addition, Synopsys, Inc. now appears to offer directly competing design-for-manufacturability ( DFM ), while other electronic design automation 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 that could negatively impact our revenue.***

We have in the past expanded our non-U.S. operations and may in the future continue such expansion by establishing overseas subsidiaries, offices, or contractor relationships in locations, if and when, deemed appropriate by our management. Thus, the success of our business is subject to risks inherent in doing business internationally, including in particular:

- some of our key engineers and other personnel are foreign nationals and they 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;

Table of Contents

- compliance with, inconsistencies among, 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 employees, protection of our IP, and a wide variety of operational regulations and 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, interference with information or communication of networks or systems, and the resulting disruption to economic activity and business operations.

Revenues generated from customers in Asia accounted for 62% of total revenue in the nine months ended September 30, 2009 and 55% for the nine months ended September 30, 2008. Thus, in Asia, in particular, we face the following additional risks:

- a downturn in Asian economies which 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 local currencies, including for example, the Japanese Yen, the cost of our solutions will be more expensive to existing and potential local customers and therefore less competitive.

In the Middle East, we use a third-party service provider, whose headquarters are not located in a U.S. embargoed country, to provide software quality assurance and other services for certain of our software products. The political uncertainty surrounding the region could disrupt our third-party service provider's operations and thus negatively affect the range of services we are able to provide or our cost for such services.

***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.***

## Edgar Filing: PDF SOLUTIONS INC - Form 10-Q

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 has declined significantly in the recent past and may continue to decline if we fail to meet expectations about our revenue or expenses.

***Measurement of our gainshare performance incentives requires data collection and is subject to customer agreement, which can result in uncertainty and cause quarterly results to fluctuate.***

We can only recognize revenue based on gainshare performance incentives 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 revenue attributable to our gainshare performance incentives 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 gainshare performance incentives 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, including perpetual and term-based licenses, can adversely affect the amount 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 gainshare performance incentives component relative to the fixed fee component. We typically recognize the fixed fee component earlier than the gainshare performance incentives component so if we are successful in increasing the gainshare performance incentives 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. Due to acquisitions and expanded business strategies, the mix of elements in some of our contracts has changed recently and the relative importance of the software component in some of our contracts has increased. We have experienced, and may in the future experience, delays in the expected recognition of revenue associated with generally accepted accounting principles

Table of Contents

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. Further, if we mix term-based licenses with perpetual licenses, it will impact the timing of the recognition of revenue from that customer. In addition, by increasing the gainshare performance incentives 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 and into new markets, and that can result in uncertainty and delays in generating revenue.***

Our gainshare performance incentives business model is unique and our Design-to-Silicon-Yield solutions are often unfamiliar to new customers. This results in a lengthier sales cycle compared to some of our competitors 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 gainshare performance incentives 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. By way of example, one of the industries that we have recently targeted that we believe would greatly benefit from our yield management system and FDC technology is the rapidly growing solar panel industry. Our efforts to leverage our products in this industry may not be successful. Further, ongoing negotiations and evaluation projects with photovoltaic manufacturers may not result in significant revenue for us if we are unable to close new engagements in these markets on terms favorable to us, in a timely manner, or at all, or if we are unable to successfully deliver our products and services to such markets.

***We have a history of losses, we may incur losses in the future and we may be unable to reach, or thereafter maintain, profitability.***

We have experienced losses in the nine months ended September 30, 2009, the year ended December 31, 2008, and in the past. We may not achieve, and thereafter maintain, profitability if our revenue increases more slowly than we expect or if it decreases. 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 \$129.4 million as of September 30, 2009. 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 and stock-based compensation.

As a result, if we do not significantly increase revenue to reach or maintain profitability on a quarterly or annual basis, our stock price could decline. We may be subject to additional impairment of our long-lived assets.

*We intend to pursue additional strategic relationships, which are necessary to maximize our growth, but could substantially divert management attention and resources.*

We have sought in the past, and may seek in the future, to establish and maintain strategic relationships with industry leaders at each stage of the IC design and manufacturing processes. This requires us to expend significant resources and to commit a significant amount of management's time and attention, although any such relationship may not be successful. 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.

Table of Contents

***Our solution implementations may take longer than we anticipate, which could cause us to lose customers and may result in adjustments to our operating results.***

Our solution implementations require a team of engineers to collaborate with our customers to address complex yield loss issues by using our software and other technologies. We must estimate the amount of time needed to complete an existing solution implementation in order to estimate when the engineers will be able to commence a new solution implementation. In addition, our accounting for solution implementation contracts, which generate fixed fees, sometimes require adjustments to profit and loss based on revised estimates during the performance of the contract. These adjustments may have a material effect on our results of operations in the period in which they are made. The estimates giving rise to these risks, which are inherent in fixed-price contracts, include the forecasting of costs and schedules, and contract revenues related to contract performance.

***If we are not able to attract, retain, motivate, and strategically locate talented employees, including some key executives, our business may suffer.***

Our success and competitiveness depend on our ability to attract, retain, motivate, and strategically locate in our offices around the globe talented employees, including some of our key executives. Achieving this objective may be difficult due to many factors, including fluctuations in global economic and industry conditions, changes in our management or leadership, the hiring practices at our competitors or customers, cost reduction activities, and the effectiveness of our compensation programs, including equity-based programs. Further, we have had, and expect to continue to have, difficulty in obtaining visas permitting entry for some of our employees that are foreign nationals into the United States, and delays in obtaining visas permitting entry into other key countries, 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. If we do not successfully attract, retain, and motivate key employees, including key executives, we may be unable to realize our business objectives and our operating results may suffer.

***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, which could limit our revenue opportunities.

***Our technologies could infringe the IP 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 or damage our customer's property, 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 remedy these problems, which could reduce margins and result in the diversion of technical and other resources from our other development efforts.

Table of Contents

***Failing to maintain the effectiveness of our internal control over financial reporting could cause the cost related to remediation to increase and could cause our stock price to decline.***

In the future, our management may identify deficiencies regarding the design and operating effectiveness of our system of internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act ( Section 404 ). Such deficiencies could include 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 an independent registered public accounting firm with sufficient resources to attest to and report on our internal controls in a timely manner. Moreover, our independent registered public accounting firm may deem our controls ineffective if we are unable to remediate deficiencies on a timely basis. If in the future we are unable to assert 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 raise necessary funds to support our growth or execute our strategy.***

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 necessary funds on terms favorable to us, or at all.

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

Our success in realizing the strategic benefits, the timing of this realization, and growth opportunities to be gained from acquiring technology or companies and incorporating into PDF the operations of recently acquired businesses, including Si Automation S.A. ( SiA ), a French company, acquired in October 2006, Fabbrix, Inc. ( Fabbrix ), a U.S. company, acquired in May 2007, and Triant Holdings, Inc. and Triant Technologies (2005) Inc. ( Triant ), both Canadian companies acquired in October 2008, depend upon our ability to successfully identify the technology or company, negotiate favorable terms, close the related transaction in a timely manner, and integrate those businesses or assets. We may be unable to identify suitable acquisition or investment candidates at reasonable prices or on reasonable terms, or consummate future acquisitions or investments at all or in a timely manner, each of which could slow our growth strategy. Further, the integration of acquired businesses or assets is a complex, costly and time-consuming process. The difficulties of combining our existing operations associated with acquired businesses or assets include:

- consolidating research and development operations;
- integrating acquired products and business technology into our existing product lines;

- coordinating effective sales and marketing functions;
- preserving research and development, marketing, customer and other important relationships; and
- minimizing the diversion of management's attention from ongoing business concerns.

*Changes in effective tax rates could negatively affect our operating results.*

We conduct our business globally and, as a result, are subject to taxation in the United States and foreign countries. Our future tax rates could be affected by numerous factors, including changes in tax laws or the interpretation of such tax laws and changes in accounting policies. Our filings are subject to reviews or audit by the Internal Revenue Service and state, local and foreign taxing authorities. We cannot be sure that any final determination in an audit would not be materially different than the treatment reflected in our historical income tax provisions and accruals. If additional taxes are assessed as a result of an audit, there could be a significant negative effect on our income tax provision and our operating results in the period or periods for which that determination is made.

*The uncertainty in the credit markets might impact the value of certain auction-rate securities we have and we might have to record impairment charges in the future.*

Table of Contents

Credit concerns in the capital markets have significantly reduced our ability to liquidate auction-rate securities that we classify as non-current investment securities on our balance sheet. The liquidity of the securities has been reduced by the uncertainty in the credit markets and the exposure of these securities to the financial condition of bond insurance companies. All auction-rate securities we hold have been failing to sell at auction since February 2008 due to an insufficient number of bidders. We reviewed the value of these securities for impairment as of September 30, 2009, concluded that these securities were temporarily impaired, and have recorded an unrealized loss of \$282,000 as a component of accumulated other comprehensive income. In future periods, the estimated fair value of our auction-rate securities could decline further based on market conditions, which could result in additional impairment and could result in the need to classify such impairment as other than temporary, this resulting in a charge to operations.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**

(b) *Use of Proceeds.* Our first registration statement, filed on Form S-1 (Registration No. 333-43192), related to our initial public offering and was declared effective by the SEC on July 26, 2001. There has been no change to the disclosure contained in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2005 with respect to the use of proceeds generated by our initial public offering.

(c) *Stock Repurchase.* 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 three months ended September 30, 2009 (in thousands except per share amounts):

**ISSUER PURCHASES OF EQUITY SECURITIES**

<b>Period</b>	<b>Total Number of Shares (or Units) Purchased</b>	<b>Average Price Paid Per Share (or Unit)</b>	<b>Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs (1)</b>	<b>Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs(1)</b>
Month #1 (July 1, 2009 through July 31, 2009)		\$		1,467
Month #2 (August 1, 2009 through August 31, 2009)				1,467
Month #3 (September 1, 2009 through September 30, 2009)				1,467
Total		\$		

(1) On March 26, 2003, our Board of Directors approved a share repurchase program to purchase up to \$10.0 million of our outstanding common stock. The program was completed in August 2007 with 988,000 shares repurchased at the average price of \$10.12 per share. On October 29, 2007, the Board of Directors approved a new program to repurchase up to an additional \$10.0 million of the Company's common stock on the open market. The right to repurchase stock under this program will expire on October 29, 2010. As of September 30, 2009, 2.5 million shares had been repurchased at the average price of \$3.41 per share under this program and \$1.5 million remained available for future repurchases.

**Item 3. Defaults Upon Senior Securities.**

Not Applicable.

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

No matters were submitted to a vote of security holders during the third quarter of 2009.

**Item 5. Other Information.**

None.

Table of Contents

**Item 6. Exhibits.**

<b>Exhibit Number</b>	<b>Description</b>
3.01	Third Amended and Restated Certificate of Incorporation of PDF Solutions, Inc. (incorporated herein by reference to registrant's Registration Statement on Form S-1/A filed July 9, 2001.)
3.02	Amended and Restated Bylaws of PDF Solutions, Inc. (incorporated herein by reference to registrant's Quarterly Report on Form 10-Q filed August 9, 2005.)
4.01	Specimen Stock Certificate (incorporated herein by reference to registrant's Quarterly Report on Form 10-Q filed September 6, 2001.)
4.02	Second Amended and Restated Rights Agreement dated July 6, 2001 (incorporated herein by reference to registrant's Registration Statement on Form S-1/A filed July 9, 2001.)
10.01	PDF Solutions, Inc. 2001 Stock Plan (incorporated herein by reference to registrant's Quarterly Report on Form 10-Q filed May 10, 2007) and related agreements (incorporated herein by reference to registrant's Registration Statement on Form S-1/A filed on July 9, 2001.)
10.02	PDF Solutions, Inc. 2001 Employee Stock Purchase Plan (incorporated herein by reference to registrant's Registration Statement on Form S-8 filed January 14, 2003.)
31.01	Certification of the President and Chief Executive 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	Certification of the Chief Financial Officer and Vice President of Finance 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 of the President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. *
32.02	Certification the Chief Financial Officer and Vice President of Finance pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. *

---

\* As contemplated by SEC Release No. 33-8212, these exhibits are furnished with this Quarterly Report on Form 10-Q and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of PDF Solutions, Inc. under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

Table of Contents

**SIGNATURES**

Pursuant to the requirements 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.**

Date: November 9, 2009

By:

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

Date: November 9, 2009

By:

*/s/ KEITH A. JONES*  
Keith A. Jones  
Chief Financial Officer and Vice President of Finance  
(Principal Financial or Accounting Officer)

Table of Contents

**INDEX TO EXHIBITS**

<b>Exhibit Number</b>	<b>Description</b>
3.01	Third Amended and Restated Certificate of Incorporation of PDF Solutions, Inc. (incorporated herein by reference to registrant's Registration Statement on Form S-1/A filed July 9, 2001.)
3.02	Amended and Restated Bylaws of PDF Solutions, Inc. (incorporated herein by reference to registrant's Quarterly Report on Form 10-Q filed August 9, 2005.)
4.01	Specimen Stock Certificate (incorporated herein by reference to registrant's Quarterly Report on Form 10-Q filed September 6, 2001.)
4.02	Second Amended and Restated Rights Agreement dated July 6, 2001 (incorporated herein by reference to registrant's Registration Statement on Form S-1/A filed July 9, 2001.)
10.01	PDF Solutions, Inc. 2001 Stock Plan (incorporated herein by reference to registrant's Quarterly Report on Form 10-Q filed May 10, 2007) and related agreements (incorporated herein by reference to registrant's Registration Statement on Form S-1/A filed on July 9, 2001.)
10.02	PDF Solutions, Inc. 2001 Employee Stock Purchase Plan (incorporated herein by reference to registrant's Registration Statement on Form S-8 filed January 14, 2003.)
31.01	Certification of the President and Chief Executive 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	Certification of the Chief Financial Officer and Vice President of Finance 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 of the President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. *
32.02	Certification the Chief Financial Officer and Vice President of Finance pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. *

---

\* As contemplated by SEC Release No. 33-8212, these exhibits are furnished with this Quarterly Report on Form 10-Q and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of PDF Solutions, Inc. under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.