

**FORM 10-Q**

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

**For the Quarterly Period ended September 30, 2013**

or

**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.**

(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 1000**  
**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.

Large accelerated filer       Accelerated filer       Non-accelerated filer       Smaller reporting company  
(Do not check if a 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 29, 2013 was 30,185,802.

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

PDF SOLUTIONS, INC.  
 CONDENSED CONSOLIDATED BALANCE SHEETS  
 (unaudited)  
 (in thousands, except par value)

	September 30, 2013	December 31, 2012
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 85,233	\$ 61,637
Accounts receivable, net of allowance of \$269 and \$351, respectively	28,288	33,959
Deferred tax assets - current portion	4,868	3,589
Prepaid expenses and other current assets	3,524	3,413
Total current assets	121,913	102,598
Property and equipment, net	6,265	3,898
Deferred tax assets - non-current portion	10,971	16,471
Other non-current assets	1,893	1,293
Total assets	<u>\$ 141,042</u>	<u>\$ 124,260</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 659	\$ 2,054
Accrued compensation and related benefits	6,871	10,723
Accrued and other current liabilities	1,352	2,882
Deferred revenues	2,375	3,232
Billings in excess of recognized revenues	286	807
Total current liabilities	11,543	19,698
Non-current liabilities	3,557	3,502
Total liabilities	<u>15,100</u>	<u>23,200</u>
Commitments and contingencies (Note 10)		
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 34,968 and 34,027, respectively; shares outstanding 30,159 and 29,226, respectively	5	4
Additional paid-in-capital	231,125	220,361
Treasury stock at cost, 4,809 and 4,801 shares, respectively	(28,017)	(27,778)
Accumulated deficit	(77,471)	(91,578)
Accumulated other comprehensive income	300	51
Total stockholders' equity	125,942	101,060
Total liabilities and stockholders' equity	<u>\$ 141,042</u>	<u>\$ 124,260</u>

*See accompanying Notes to Condensed Consolidated Financial Statements (unaudited).*

**PDF SOLUTIONS, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME**  
**(unaudited)**  
**(in thousands, except per share amounts)**

	Three Months Ended September		Nine Months Ended September	
	30,		30,	
	2013	2012	2013	2012
<b>Revenues:</b>				
Design-to-silicon-yield solutions	\$ 17,015	\$ 15,305	\$ 46,813	\$ 42,484
Gainshare performance incentives	8,474	7,246	27,562	23,241
Total revenues	<u>25,489</u>	<u>22,551</u>	<u>74,375</u>	<u>65,725</u>
<b>Costs of design-to-silicon-yield solutions:</b>				
Direct costs of design-to-silicon-yield solutions	10,507	9,457	29,905	26,830
Amortization of acquired technology	—	—	—	261
Total costs of design-to-silicon-yield solutions	<u>10,507</u>	<u>9,457</u>	<u>29,905</u>	<u>27,091</u>
Gross profit	14,982	13,094	44,470	38,634
<b>Operating expenses:</b>				
Research and development	3,396	3,203	9,944	9,651
Selling, general and administrative	3,812	4,498	13,010	14,122
Amortization of other acquired intangible assets	19	51	56	153
Restructuring charges (credits)	8	—	(35)	83
Total operating expenses	<u>7,235</u>	<u>7,752</u>	<u>22,975</u>	<u>24,009</u>
Income from operations	7,747	5,342	21,495	14,625
Interest and other income (expense), net	(283)	(179)	(109)	(166)
Income before income taxes	7,464	5,163	21,386	14,459
Income tax provision	2,640	170	7,279	1,147
Net income	<u>\$ 4,824</u>	<u>\$ 4,993</u>	<u>\$ 14,107</u>	<u>\$ 13,312</u>
<b>Net income per share:</b>				
Basic	<u>\$ 0.16</u>	<u>\$ 0.17</u>	<u>\$ 0.48</u>	<u>\$ 0.47</u>
Diluted	<u>\$ 0.15</u>	<u>\$ 0.17</u>	<u>\$ 0.45</u>	<u>\$ 0.45</u>
<b>Weighted average common shares:</b>				
Basic	<u>30,000</u>	<u>28,720</u>	<u>29,668</u>	<u>28,555</u>
Diluted	<u>31,623</u>	<u>30,180</u>	<u>31,198</u>	<u>29,596</u>
Net income	\$ 4,824	\$ 4,993	\$ 14,107	\$ 13,312
<b>Other comprehensive income:</b>				
Foreign currency translation adjustments, net of tax	236	257	249	(10)
Reclassification adjustment for other-than-temporary impairment on auction-rate-securities recognized in earnings	—	—	—	216
Comprehensive income	<u>\$ 5,060</u>	<u>\$ 5,250</u>	<u>\$ 14,356</u>	<u>\$ 13,518</u>

*See accompanying Notes to Condensed Consolidated Financial Statements (unaudited).*

**PDF SOLUTIONS, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(unaudited)  
(in thousands)

	Nine Months Ended September 30,	
	2013	2012
<b>Operating activities:</b>		
Net income	\$ 14,107	\$ 13,312
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	961	316
Stock-based compensation expense	4,942	3,476
Amortization of acquired intangible assets	56	413
Deferred taxes	4,220	(32)
Losses (gains) on disposal of property and equipment	(9)	8
Purchases of treasury stock in connection with tax withholdings on restricted stock grants	(395)	(187)
Provisions for (reversal of) doubtful accounts	(82)	97
Gains on sale of investments	—	(50)
Net impairment of investments	—	75
Tax benefit related to stock-based compensation expense	454	—
Excess tax benefit from stock-based compensation	(439)	—
Changes in operating assets and liabilities:		
Accounts receivable	6,021	(12,692)
Prepaid expenses and other assets	(1,106)	(811)
Accounts payable	(1,261)	(281)
Accrued compensation and related benefits	(3,972)	3,393
Accrued and other liabilities	(1,293)	(532)
Deferred revenues	(796)	(555)
Billings in excess of recognized revenues	(521)	(1,306)
Net cash provided by operating activities	<u>20,887</u>	<u>4,644</u>
<b>Investing activities:</b>		
Proceeds from the sale of short-term investments	—	475
Purchases of property and equipment	(3,372)	(2,066)
Net cash used in investing activities	<u>(3,372)</u>	<u>(1,591)</u>
<b>Financing activities:</b>		
Proceeds from exercise of stock options	4,270	4,753
Proceeds from employee stock purchase plan	1,317	977
Excess tax benefit from stock-based compensation	439	—
Purchases of treasury stock	—	(3,891)
Net cash provided by financing activities	<u>6,026</u>	<u>1,839</u>
Effect of exchange rate changes on cash and cash equivalents	55	(1)
Net change in cash and cash equivalents	23,596	4,891
Cash and cash equivalents, beginning of period	61,637	46,041
Cash and cash equivalents, end of period	<u>\$ 85,233</u>	<u>\$ 50,932</u>
<b>Supplemental disclosure of cash flow information:</b>		
Cash paid during the period for:		
Income Taxes	<u>\$ 3,252</u>	<u>\$ 1,807</u>

*See accompanying Notes to Condensed Consolidated Financial Statements (unaudited).*

**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”) 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, 2012.

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.

The condensed consolidated balance sheet at December 31, 2012 has been derived from the audited consolidated financial statements but does not include all disclosures required by accounting principles generally accepted in the United States of America.

*Use of Estimates* — The preparation of financial statements in conformity with generally accepted accounting principles in the United States (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates in these financial statements include stock-based compensation expense, allowances for doubtful accounts receivable, estimates for useful lives associated with long-lived assets, restructuring charges, fair value of financial instruments and income taxes and tax valuation allowances. Actual results could differ from those estimates.

*Revenue Recognition* — The Company derives revenue from two sources: Design-to-silicon-yield solutions 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. The Company recognizes revenue of Design-to-silicon-yield solutions as follows:

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 reliable estimation of costs to perform obligations and the overall scope of each engagement. Revenue under project-based 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 fixed-price solution implementation contracts are recognized in the period when they become probable. Revisions in profit estimates are reflected in the period in which the conditions that require the revisions become known and can be estimated. Revenue under time and materials contracts for solution implementation services are recognized as the services are performed. On occasion, the Company licenses its software products as a component of its 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 at each customer’s option over the license term. The amount of product and service revenue recognized in a given period is affected by the Company’s judgment as to whether an arrangement includes multiple deliverables and, if so, the Company’s determination of the fair value of each deliverable. In general, vendor-specific objective evidence of selling price (“VSOE”) does not exist for the Company’s solution implementation services and software products and because the Company’s services and products include our unique technology, the Company is not able to determine third-party evidence of selling price (“TPE”). Therefore, in such circumstances the Company uses best estimated selling prices (“BESP”) in the allocation of arrangement consideration. In determining BESP, the Company applies significant judgment as the Company’s weighs a variety of factors, based on the facts and circumstances of the arrangement. The Company typically arrives at BESP for a product or service that is not sold separately by considering company-specific factors such as geographies, internal costs, gross margin objectives, pricing practices used to establish bundled pricing, and existing portfolio pricing and discounting. After fair value is established for each deliverable, the total transaction amount is allocated to each deliverable based upon its relative fair value. Fees allocated to solution implementation services are recognized using the cost-to-cost percentage of completion method of contract accounting. Fees allocated to software and related support and maintenance are recognized under software revenue recognition guidance.

The Company also licenses its software products separately from its 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. 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 incentive component where the customer may pay a contingent variable fee, usually after the fixed fee period has ended. Revenue derived from Gainshare performance incentives represents profit sharing and performance incentives earned contingent 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.

## **2. RECENT ACCOUNTING PRONOUNCEMENTS**

In July 2013, the Financial Accounting Standards Board ("FASB") amended its guidance related to the presentation of unrecognized tax benefits. The standard provides that an unrecognized tax benefit, or a portion of an unrecognized tax benefit, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward, except as follows. To the extent a net operating loss carryforward, a similar tax loss, or a tax credit carryforward is not available at the reporting date under the tax law of the applicable jurisdiction to settle any additional income taxes that would result from the disallowance of a tax position or the tax law of the applicable jurisdiction does not require the entity to use, and the entity does not intend to use, the deferred tax asset for such purpose, the unrecognized tax benefit should be presented in the financial statements as a liability and should not be combined with deferred tax assets. This guidance is effective for annual reporting periods beginning on or after December 15, 2013, and interim periods within those annual periods. The guidance is to be applied prospectively to all unrecognized tax benefits that exist at the effective date. Retrospective application is permitted. The Company is currently assessing the impacts of this guidance.

In December 2011, the Financial Accounting Standards Board ("FASB") amended its guidance related to the disclosures about offsetting assets and liabilities. The standard requires the Company to disclose information about offsetting and related arrangements to enable users of its financial statements to understand the effect of those arrangements on its financial position. The guidance is effective for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods. The disclosures are applied retrospectively for all comparative periods presented. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements as it is disclosure-only in nature.

In June 2011, the FASB amended its guidance related to the presentation of comprehensive income to increase comparability between U.S. GAAP and International Financial Reporting Standards ("IFRS"). This amended guidance eliminates the current option to report other comprehensive income and its components in the statement of changes in equity and instead requires presenting in one continuous statement or two separate but consecutive statements. Additionally, the amendment requires entities to present reclassification adjustments to show the effect of reclassifications on both the components of other comprehensive income and the components of net income in interim and annual financial statements. The amendments are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011 with early adoption permitted. The guidance is effective for the Company's fiscal year beginning January 1, 2012. In December 2011, the FASB issued an amendment to defer the presentation on the face of the financial statements the effects of reclassifications out of accumulated other comprehensive income on the components of net income and other comprehensive income for annual and interim financial statements. In February 2013, the FASB issued amendments to disclosure requirements for presentation of comprehensive income. The standard requires presentation (either in a single note or parenthetically on the face of the financial statements) of the effect of significant amounts reclassified from each component of accumulated other comprehensive income based on its source and the income statement line items affected by the reclassification. If a component is not required to be reclassified to net income in its entirety, a cross reference to the related footnote for additional information is required. The amendments are effective prospectively for reporting periods beginning after December 15, 2012. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

### 3. BALANCE SHEET COMPONENTS

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 \$7.5 million and \$7.7 million as of September 30, 2013 and December 31, 2012, respectively.

Property and equipment consists of (in thousands):

	September 30, 2013	December 31, 2012
Property and equipment, net:		
Computer equipment	\$ 10,964	\$ 10,319
Software	3,633	3,552
Furniture, fixtures and equipment	935	971
Leasehold improvements	1,045	1,021
Test equipment	4,555	2,005
Construction-in-progress	821	864
	21,953	18,732
Less: accumulated depreciation	(15,688)	(14,834)
Total	<u>\$ 6,265</u>	<u>\$ 3,898</u>

Depreciation and amortization expense was \$0.4 million and \$0.1 million for the three months ended September 30, 2013 and 2012, respectively. Depreciation and amortization expense was \$1.0 million and \$0.3 million for the nine months ended September 30, 2013 and 2012, respectively.

Intangible assets balance was \$49,000 and \$104,000 as of September 30, 2013 and December 31, 2012, respectively. The balance was included in other non-current assets in the accompanying condensed consolidated balance sheets. For the three months ended September 30, 2013 and 2012, intangible asset amortization expense was \$19,000 and \$51,000, respectively. For the nine months ended September 30, 2013 and 2012, intangible asset amortization expense was \$56,000 and \$414,000, respectively. The Company expects the amortization of its existing intangible assets to be \$18,000 for the remaining three months in 2013 and \$31,000 in 2014.

Intangible assets are amortized over their useful lives unless these lives are determined to be indefinite. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. During the nine months ended September 30, 2013, there were no indicators of impairment related to the Company's intangible assets.



#### 4. 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, generally four years. Stock-based compensation expenses before taxes related to the Company's stock plans and employee stock purchase plan were allocated as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Cost of design-to-silicon yield-solutions	\$ 812	\$ 513	\$ 1,995	\$ 1,264
Research and development	484	288	1,143	726
Selling, general and administrative	628	452	1,804	1,486
Stock-based compensation expenses	<u>\$ 1,924</u>	<u>\$ 1,253</u>	<u>\$ 4,942</u>	<u>\$ 3,476</u>

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 Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Expected life (in years)	4.78	4.58	4.78	4.82
Volatility	50.30%	57.42%	55.83%	59.41%
Risk-free interest rate	1.31%	0.66%	0.94%	0.77%
Expected dividend	—	—	—	—
Weighted average fair value per share of options granted during the period	\$ 9.13	\$ 4.77	\$ 7.55	\$ 4.26

##### Employee Stock Purchase Plan:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Expected life (in years)	1.25	1.25	1.25	1.25
Volatility	41.21%	51.92%	45.29%	51.59%
Risk-free interest rate	0.20%	0.19%	0.19%	0.18%
Expected dividend	—	—	—	—
Weighted average fair of purchase rights granted during the period	\$ 6.95	\$ 3.46	\$ 5.56	\$ 2.99

On September 30, 2013, the Company has in effect the following stock-based compensation plans:

*Stock Plans* — At the annual meeting of stockholders on November 16, 2011, the Company's stockholders approved the 2011 Stock Incentive Plan (the "2011 Plan"). Under the 2011 Plan, the Company may award stock options, stock appreciation rights, stock grants or stock units covering shares of the Company's common stock to employees, directors, non-employee directors and contractors. The aggregate number of shares reserved for awards under this plan is 3,200,000 shares, plus up to 3,500,000 shares previously issued under the 2001 Plan that are forfeited or repurchased by the Company or shares subject to awards previously issued under the 2001 Plan that expire or that terminate without having been exercised or settled in full on or after November 16, 2011. In case of awards other than options or stock appreciation rights, the aggregate number of shares reserved under the plan will be decreased at a rate of 1.33 shares issued pursuant to such awards. The exercise price for stock options must generally be at prices no less than the fair market value at the date of grant. Stock options generally expire ten years from the date of grant and become vested and exercisable over a four-year period.

On May 28, 2013, the Company's stockholders approved the Company's First Amended and Restated 2011 Stock Incentive Plan to increase the number of authorized shares under such plan by 1,600,000 shares for a total of 4,800,000 shares.

In 2001, the Company adopted a 2001 Stock Plan (the "2001 Plan"). In 2003, in connection with its acquisition of IDS Systems Inc., the Company assumed IDS' 2001 Stock Option / Stock Issuance Plan (the "IDS Plan"). Both of the 2001 and the IDS Plans expired in 2011. Stock options granted under the 2001 and IDS Plans generally expire ten years from the date of grant and become vested and exercisable over a four-year period. Although no new awards may be granted under the 2001 or IDS Plans, awards made under the 2001 and IDS Plans that are currently outstanding remain subject to the terms of each such plan.

As of September 30, 2013, 5.2 million shares of common stock were reserved to cover stock-based awards under the 2011 Plan, of which 2.7 million shares were available for future grant. The number of shares reserved and available under the 2011 Plan includes 0.4 million shares that were subject to awards previously made under the 2001 Plan and were forfeited, expired or repurchased by the Company after adoption of the 2011 Plan through September 30, 2013. As of September 30, 2013, there were no outstanding awards that had been granted outside of the 2011, 2001 or the IDS Plans (collectively, the "Stock Plans").

Stock option activity under the Company's Stock Plans during the nine months ended September 30, 2013 was as follows:

	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, 2013	3,810	\$ 6.91		
Granted	65	\$ 16.07		
Exercised	(682)	\$ 6.22		
Canceled	(92)	\$ 8.51		
Expired	(18)	\$ 5.97		
Outstanding, September 30, 2013	<u>3,083</u>	\$ 7.21	<u>6.81</u>	<u>\$ 43,248</u>
Vested and expected to vest, September 30, 2013	<u>2,942</u>	\$ 7.14	<u>6.73</u>	<u>\$ 41,451</u>
Exercisable, September 30, 2013	<u>1,859</u>	\$ 6.65	<u>5.85</u>	<u>\$ 27,108</u>

The aggregate intrinsic value in the table above represents the total intrinsic value based on the Company's closing stock price of \$21.23 per share as of September 30, 2013, which would have been received by the option holders had all "in-the-money" option holders exercised their options as of that date. The total intrinsic value of options exercised during the nine months ended September 30, 2013 was \$8.6 million.

As of September 30, 2013, there was \$4.4 million of total unrecognized compensation cost related to unvested stock options. That cost is expected to be recognized over a weighted average period of 2.22 years. The total fair value of shares vested during the nine months ended September 30, 2013 was \$2.3 million.

Nonvested restricted stock units activity during the nine months ended September 30, 2013 was as follows:

	Shares (in thousands)	Weighted Average Grant Date Fair Value Per Share
Nonvested, January 1, 2013	450	\$ 7.97
Granted	550	\$ 18.15
Vested	(90)	\$ 8.87
Forfeited	(22)	\$ 8.72
Nonvested, September 30, 2013	<u>888</u>	<u>\$ 14.06</u>

As of September 30, 2013, there was \$9.4 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.

*Employee Stock Purchase Plan* — In July 2001, the Company adopted a ten-year 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 the purchase period. The Purchase Plan consists of twenty-four-month offering periods with four six-month purchase periods in each 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. At the annual meeting of stockholders on May 18, 2010, the Company’s stockholders approved an amendment to the Purchase Plan to extend it through May 17, 2020. During the three months and nine months ended September 30, 2013, a total of 80,000 and 184,000 shares, respectively, were issued at a weighted-average purchase price of \$9.66 and \$7.16 per share, respectively, under the Purchase Plan. During the three months and nine months ended September 30, 2012, a total of 104,000 and 202,000 shares, respectively, were issued at a weighted-average purchase price of \$4.89 and \$4.85 per share, respectively, under the Purchase Plan. For the three months and nine months ended September 30, 2013, the Purchase Plan compensation expense was \$0.1 million and \$0.5 million, respectively. For the three months and nine months ended September 30, 2012, the Purchase Plan compensation expense was \$0.1 million and \$0.3 million, respectively. As of September 30, 2013, there was \$0.7 million of unrecognized compensation cost related to the Purchase Plan. That cost is expected to be recognized over a weighted average period of 1.4 years. As of September 30, 2013, 1.3 million shares were available for future issuance under the Purchase Plan.

*Stock Repurchase Program* — On October 29, 2007, the Board of Directors adopted a program to repurchase up to \$10.0 million of the Company’s common stock on the open market. The initial program was for three years, but on October 19, 2010, the Board of Directors authorized an extension of, and an increase in, the program and the aggregate amount available to repurchase between October 19, 2010 and October 29, 2012 was reset to \$10.0 million of the Company’s common stock, meaning a total of \$19.3 million was available. The program expired on October 29, 2012, as of which date, 3.8 million shares had been repurchased at the average price of \$4.53 per share and a total purchase price of \$17.0 million. On November 8, 2012, the Board of Directors adopted a new program to repurchase up to \$20.0 million of the Company’s common stock on the open market over the next two years. As of September 30, 2013, 36,100 shares had been repurchased at the average price of \$13.23 per share under this new program, at a total purchase of \$0.5 million, and \$19.5 million remained available for future repurchases.

## 5. RESTRUCTURING

The Company implemented restructuring plans during fiscal years 2012 and 2008, and recorded total restructuring expense of \$8,000 and zero for the three months ended on September 30, 2013 and 2012. The Company recorded total restructuring credits of \$35,000 for the nine months ended September 30, 2013 and restructuring expense of \$83,000 for the nine months ended September 30, 2012. As of September 30, 2013, the remaining restructuring accrual was \$49,000, which represents employee severance charges, which the Company expects to pay out by the end of 2013. This remaining accrual balance was included in accrued and other current liabilities in the accompanying consolidated balance sheets.

### *October 2012 Plan*

On October 24, 2012, the Company announced a restructuring plan as part of the Company’s continuing efforts to simplify the organization, leverage cross-training and learning, and reduce annual operations expenses. Under this plan, the Company has recorded restructuring charges of \$1.8 million, which primarily consisted of employee severance costs of \$1.7 million. The following table summarizes the activities of these restructuring liabilities (in thousands) for the periods covered below:

	<b>Three Months Ended September 30, 2013</b>	<b>Nine Months Ended September 30, 2013</b>
Beginning balance	\$ 66	\$ 896
Restructuring charges (credits)	8	67
Cash payments	(25)	(914)
Ending balance	<u>\$ 49</u>	<u>\$ 49</u>

On October 28, 2008, the Company announced a restructuring plan to better allocate its resources to improve its operational results in light of the market conditions. Under this plan, the Company has recorded restructuring charges of \$7.4 million, primarily consisting of employee severance costs of \$4.7 million and facility exit costs of \$2.7 million. The following table summarizes the activities of these restructuring liabilities (in thousands) for the periods covered below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Beginning balance	\$ 105	\$ 697	\$ 448	\$ 728
Restructuring charges (credits)	—	—	(102)	83
Adjustments	—	4	3	170
Cash payments	(105)	(134)	(349)	(414)
Ending balance	\$ —	\$ 567	\$ —	\$ 567

## 6. INCOME TAXES

Income tax provision increased \$6.1 million for the nine months ended September 30, 2013 to \$7.3 million as compared to an income tax provision of \$1.1 million for the nine months ended September 30, 2012. The Company's effective tax rate was 34.04% and 7.93% for the nine months ended September 30, 2013 and September 30, 2012, respectively. The income tax provision for the nine months ended September 30, 2013 was less than the provision at the statutory rate primarily due to changes in unrecognized tax benefits and the benefit of the research and development tax credit. The income tax provision for the nine months ended September 30, 2012 was significantly less than the provision at the statutory rate primarily due to the utilization of U.S. tax credits, offset by foreign withholding taxes, statutory taxes, and changes in unrecognized tax benefits.

On January 2, 2013, the President signed into law the American Taxpayer Relief Act which reinstated the U.S. Federal Research and Development tax credit retroactive to January 1, 2012 and extended the tax credit through December 31, 2013. As a result of the new legislation, the Company recognized a benefit in the three months ended March 31, 2013 related to 12 months of fiscal 2012 as well as a benefit to the annual effective tax rate for the full year research tax credit for fiscal 2013.

The Company's total amount of unrecognized tax benefits, excluding interest and penalties, as of September 30, 2013 was \$9.6 million, of which \$5.9 million, if recognized, would affect the Company's effective tax rate. The Company's total amount of unrecognized tax benefits, excluding interest and penalties, as of December 31, 2012 was \$9.6 million, of which \$6.0 million, if recognized, would affect the Company's effective tax rate. As of September 30, 2013, the Company has recorded unrecognized tax benefits of \$2.9 million, including interest and penalties, as long-term taxes payable in its condensed consolidated balance sheet. The remaining \$7.2 million has been recorded net of our deferred tax assets, of which \$3.7 million is subject to a full valuation allowance.

As of September 30, 2013, the Company believes that most of its deferred tax assets are "more likely than not" to be realized with the exception of California R&D tax credits that have not met the "more likely than not" realization threshold criteria because on an annual basis and pursuant to current law, the Company generates more California credits than California tax. As a result, at September 30, 2013, the excess California R&D tax credits continue to be subject to a full valuation allowance. In the event the Company concludes at a future financial reporting period that there has been a change in its ability to realize the California R&D credit deferred tax assets, and it is at such time no longer "more likely than not" that the Company will realize the tax credits before applicable expiration dates, the Company's tax provision will increase in the period in which the Company makes such determination.

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 2002 for federal and California tax purposes. The Company is not subject to income tax examinations in any other of its major foreign subsidiaries' jurisdictions.

## 7. NET INCOME PER SHARE

Basic net income per share is computed by dividing net income by weighted average number of common shares outstanding for the period (excluding outstanding stock options and shares subject to repurchase). Diluted net income per share is computed using the weighted-average number of common shares outstanding for the period plus the potential effect of dilutive securities which are convertible into common shares (using the treasury stock method), except in cases in which the effect would be anti-dilutive. Under the treasury stock method, the amount that the employee must pay for exercising stock options, the amount of compensation cost for future service that the Company has not yet recognized, and the amount of the tax benefits that would be recorded in additional paid-in capital when the award becomes deductible are assumed to be used to repurchase shares. The following is a reconciliation of the numerators and denominators used in computing basic and diluted net income per share (in thousands except per share amount):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Numerator:				
Net income	\$ 4,824	\$ 4,993	\$ 14,107	\$ 13,312
Denominator:				
Basic weighted average common shares outstanding	30,000	28,720	29,668	28,555
Dilutive effect of equity incentive plans	1,623	1,460	1,530	1,041
Diluted weighted average common shares outstanding	31,623	30,180	31,198	29,596
Net income per share:				
Basic	\$ 0.16	\$ 0.17	\$ 0.48	\$ 0.47
Diluted	\$ 0.15	\$ 0.17	\$ 0.45	\$ 0.45

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Outstanding options	60	1,229	48	1,633
Nonvested restricted stock units	—	9	1	24
Total	60	1,238	49	1,657

## 8. 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 regularly 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 companies designing and/or manufacturing integrated circuits.

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

Customer	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
A	35%	11%	26%	12%
B	28%	35%	31%	39%
C	13%	25%	17%	21%

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

Customer	September 30,	
	2013	December 31, 2012
A	34%	11%
B	30%	42%
C	8%	18%

Revenues from customers by geographic area based on the location of the customers' work sites are as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
Asia	11,752	5,309	28,159	16,642
United States	7,685	10,877	28,367	26,437
Europe	6,052	6,365	17,849	22,646
Total	<u>\$ 25,489</u>	<u>\$ 22,551</u>	<u>\$ 74,375</u>	<u>\$ 65,725</u>

Long-lived assets, net by geographic area are as follows (in thousands):

	September 30, 2013	December 31, 2012
United States	\$ 5,773	\$ 3,527
Asia	367	295
Europe	125	76
Total long-lived assets, net	<u>\$ 6,265</u>	<u>\$ 3,898</u>

## 9. FAIR VALUE MEASUREMENTS

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, 2013 and the basis for that measurement (in thousands):

<u>Assets</u>	<u>Total</u>	<u>Quoted Prices in Active Markets for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>
Money market mutual funds	\$ 26,352	\$ 26,352	\$ —	\$ —

The following table represents the Company's assets measured at fair value on a recurring basis as of December 31, 2012 and the basis for that measurement (in thousands):

<u>Assets</u>	<u>Total</u>	<u>Quoted Prices in Active Markets for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>
Money market mutual funds	\$ 26,341	\$ 26,341	\$ —	\$ —

## 10. COMMITMENTS AND CONTINGENCIES

### *Leases*

The Company leases administrative and sales offices and certain equipment under noncancelable operating leases, which contain various renewal options and, in some cases, require payment of common area costs, taxes and utilities. These operating leases expire at various times through 2018. Rent expense was \$0.5 million for both the three months ended September 30, 2013 and 2012, respectively. Rent expense was \$1.5 million and \$1.7 million for the nine months ended September 30, 2013 and 2012, respectively.

Future minimum lease payments under noncancelable operating leases at September 30, 2013 are as follows (in thousands):

<u>Year Ending December 31,</u>	<u>Amount</u>
2013 (remaining three months)	\$ 446
2014	1,655
2015	1,571
2016	1,574
2017	1,294
Thereafter	695
Total future minimum lease payments	<u>\$ 7,235</u>

*Litigation* — From time to time, the Company is subject to various claims and legal proceedings that arise in the ordinary course of business. The Company accrues for losses related to litigation when a potential loss is probable and the loss can be reasonably estimated in accordance with FASB requirements. During the reported period, the Company was not party to any material legal proceedings, thus no loss was probable and no amount was accrued at September 30, 2013.

## **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," "target" or "continue," 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 at the end of Item 1A in our Annual Report on Form 10-K for the year ended December 31, 2012 filed with the Securities and Exchange Commission on March 18, 2013.

### **Overview**

We analyze our customers' 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. 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, is usually contingent upon our achieving certain yield targets by a deadline. Variable fees are currently typically tied to wafer volume on the node size of the manufacturing facility where we performed the yield improvement solutions. We 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.

### **Industry Trend**

We believe that the largest logic foundries will continue to increase their investment in leading edge nodes and capacity in 2013, consistent with the trend since 2010. Leading foundries are also investing in new technologies such as double-patterned lithography and 3-D transistor architecture. These trends resulted in an increase in our business, and have improved results of operations in 2011, 2012 and to date in 2013.

Generally, the 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 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 ICs at nodes below 28 nanometers 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

Financial highlights for the three months ended September 30, 2013 were as follows:

- Total revenues for the three months ended September 30, 2013 were \$25.5 million, an increase of \$2.9 million, or 13%, compared to \$22.6 million for the three months ended September 30, 2012. Design-to-silicon-yield solutions revenue for the three months ended September 30, 2013 was \$17.0 million, an increase of \$1.7 million, or 11%, compared to \$15.3 million for the three months ended September 30, 2012. The increase in Design-to-silicon-yield solutions revenue was primarily due to an increase in fixed fee integrated solutions, the result of more billable hours to revenue-generating projects in the period due to increased business activity. Gainshare performance incentives revenue for the three months ended September 30, 2013 was \$8.5 million, an increase of \$1.3 million, or 17%, compared to \$7.2 million for the three months ended September 30, 2012. The increase in revenue from Gainshare performance incentives was primarily the result of a higher number of projects reaching performance measures for achieving Gainshare and higher wafer volumes at customers' manufacturing facilities.
- Net income for the three months ended September 30, 2013 was \$4.8 million, compared to \$5.0 million for the three months ended September 30, 2012. The decrease in net income was primarily attributable to an increase in income tax provision of \$2.5 million, an increase in interest and other expense of \$0.1 million, offset by an increase in income from operations of \$2.4 million. The increase in income from operations is due to an increase in gross margin of \$1.9 million and a decrease of total operating expenses of \$0.5 million. The increase in gross margin is reflective of the mix shift between Design-to-silicon yield solutions and Gainshare performance incentive revenue.
- Net income per basic and diluted share was \$0.16 and \$0.15, respectively, for the three months ended September 30, 2013 compared to net income per basic and diluted share of \$0.17 and \$0.17, respectively, for the three months ended September 30, 2012, a decrease of \$0.01 and \$0.02 per basic and diluted share, respectively.
- Cash and cash equivalents increased \$23.6 million from \$61.6 million at December 31, 2012 to \$85.2 million at September 30, 2013, primarily due to an increase in cash from operating and financing activities during the period.

Financial highlights for the nine months ended September 30, 2013 were as follows:

- Total revenues for the nine months ended September 30, 2013 were \$74.4 million, an increase of \$8.7 million, or 13%, compared to total revenues of \$65.7 million for the nine months ended September 30, 2012. Design-to-silicon-yield solutions revenue for the nine months ended September 30, 2013 was \$46.8 million, an increase of \$4.3 million, or 10%, compared to \$42.5 million for the nine months ended September 30, 2012. The increase in Design-to-silicon-yield solutions revenue was primarily due to an increase in fixed fee integrated solutions, the result of more billable hours to revenue-generating projects in the period due to increased business activity. Gainshare performance incentives revenue for the nine months ended September 30, 2013 was \$27.6 million, an increase of \$4.4 million, or 19%, compared to Gainshare performance incentive revenues of \$23.2 million for the nine months ended September 30, 2012. The increase in Gainshare performance incentives was primarily the result of higher number of projects reaching performance measures for achieving Gainshare combined with higher wafer volumes at customers' manufacturing facilities.
- Net income for the nine months ended September 30, 2013 was \$14.1 million, compared to net income of \$13.3 million for the nine months ended September 30, 2012. The increase in net income was primarily attributable to an increase in gross margin of \$5.8 million, a result of the mix shift between Design-to-silicon yield solutions and Gainshare performance incentive revenue, a decrease in operating expense of \$1.0 million, offset by an increase in income tax provision of \$6.1 million.
- Net income per basic and diluted share was \$0.48 and \$0.45, respectively, for the nine months ended September 30, 2013 compared to net income per basic and diluted share of \$0.47 and \$0.45, respectively, for the nine months ended September 30, 2012, an increase of \$0.01 per basic share.

## Critical Accounting Policies

There were no significant changes in our critical accounting policies. Please refer to Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2012. 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 conditions, results of operations and cash flows 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, stock-based compensation and the realization of deferred tax assets. Actual amounts may differ from such estimates under different assumptions or conditions.

## *Revenue Recognition*

We derive revenue from two sources: Design-to-silicon-yield solutions, 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 Design-to-silicon-yield solutions as follows:

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 reliable estimation of costs to perform obligations and the overall scope of each engagement. Revenue under project-based 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 probable. 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. Revenue under certain time and materials contracts for solution implementation services is recognized as the services are performed. On occasion, we license 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 at each customer's option over the license term. The amount of product and service revenue recognized in a given period is affected by our judgment as to whether an arrangement includes multiple deliverables and, if so, our determination of the fair value of each deliverable. In general, vendor-specific objective evidence of selling price ("VSOE") does not exist for our solution implementation services and software products and because our services and products include our unique technology, we are not able to determine third-party evidence of selling price ("TPE"). Therefore, in such circumstances, we use best estimated selling prices ("BESP") in our allocation of arrangement consideration. In determining BESP, we apply significant judgment as we weigh a variety of factors, based on the facts and circumstances of the arrangement. We typically arrive at BESP for a product or service that is not sold separately by considering company-specific factors such as geographies, internal costs, gross margin objectives, pricing practices used to establish bundled pricing, and existing portfolio pricing and discounting. After fair value is established for each deliverable, the total transaction amount is allocated to each deliverable based upon its relative fair value. Fees allocated to solution implementation services are recognized using the cost-to-cost percentage of completion method of contract accounting. Fees allocated to software and related support and maintenance are recognized under software revenue recognition guidance.

We also license our software products separately from our solution implementation services. 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 revenues. 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. Revenues for software licenses with extended payment terms are not recognized in excess of amounts due. For software license arrangements that require significant modification or customization of the underlying software, the software license revenues are recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting, and such revenues are 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 contingent variable fee, usually after the fixed fee period has ended. Revenues derived from Gainshare performance incentives represent profit sharing and performance incentives earned contingent 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 revenues (to the extent of completion of the related solution implementation services) 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, which can include 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.

### ***Stock-Based Compensation***

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, generally four years. As stock-based compensation expense recognized is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

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

### ***Income Taxes***

We are required to assess the likelihood that our deferred tax assets will be recovered from future taxable income and if we believe that they are not likely to be realizable before the expiration dates applicable to such assets then, to the extent we believe that recovery is not likely, establish a valuation allowance. Changes in the net deferred tax assets, less offsetting valuation allowance, in a period are recorded through the income tax provision in the condensed consolidated statements of operations. As of September 30, 2013, we believe that most of our deferred tax assets are "more likely than not" to be realized with the exception of California R&D tax credits that have not met the "more likely than not" realization threshold criteria because on an annual basis and pursuant to current law, we generate more California credits than California tax. As a result, at September 30, 2013, the excess California R&D tax credits continue to be subject to a full valuation allowance. See Note 6 to the condensed consolidated financial statements for further disclosures regarding our income taxes. In the event we conclude at a future financial reporting period that there has been a change in our ability to realize our California R&D credit deferred tax assets, and it is at such time no longer "more likely than not" that we will realize the tax credits before applicable expiration dates, our tax provision will increase in the period in which we make such determination.

Our income tax calculations are based on application of the respective U.S. federal, state or foreign tax law. Our tax filings, however, are subject to audit by the respective tax authorities. Accordingly, we recognize tax liabilities based upon our estimate of whether, and the extent to which, additional taxes will be due when such estimates are more-likely-than-not to be sustained. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. To the extent the final tax liabilities are different than the amounts originally accrued, the increases or decreases are recorded as income tax expense or benefit in the consolidated statements of operations.

### ***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 revenues represented by the line items reflected in our condensed consolidated statements of operations:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
<b>Revenues:</b>				
Design-to-silicon-yield solutions	67%	68%	63%	65%
Gainshare performance incentives	33	32	37	35
Total revenues	100%	100%	100%	100%
<b>Costs of design-to-silicon-yield solutions:</b>				
Direct costs of design-to-silicon-yield solutions	41	42	40	41
Amortization of acquired technology	—	—	—	—
Total costs of design-to-silicon-yield solutions	41	42	40	41
Gross profit	59	58	60	59
<b>Operating expenses:</b>				
Research and development	13	14	13	15
Selling, general and administrative	15	20	18	22
Amortization of other acquired intangible assets	—	—	—	—
Restructuring charges (credits)	—	—	—	—
Total operating expenses	28	34	31	37
Income from operations	31	24	29	22
Interest and other income (expense), net	(1)	(1)	—	—
Income before taxes	30	23	29	22
Income tax provision	11	1	10	2
Net income	19%	22%	19%	20%

### Comparison of the Three Months Ended September 30, 2013 and 2012

Revenues	Three Months Ended September 30,		\$ Change	% Change
	2013	2012		
<b>(in thousands, except for percentages)</b>				
Design-to-silicon-yield solutions	\$ 17,015	\$ 15,305	\$ 1,710	11%
Gainshare performance incentives	8,474	7,246	1,228	17%
Total	\$ 25,489	\$ 22,551	\$ 2,938	13%

*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 increased \$1.7 million for the three months ended September 30, 2013 compared to the three months ended September 30, 2012, primarily due to an increase in fixed fee integrated solutions, the result of more billable hours to revenue-generating projects in the period due to increased business activity. Our Design-to-silicon-yield solutions revenue may fluctuate in the future and is dependent on a number of factors, including the semiconductor industry's continued acceptance of our solutions, the timing of purchases by existing customers, and our ability to attract new customers and penetrate new markets including photovoltaic and LED, and further penetration of our current customer base. Fluctuations in future results may also occur if any of our significant customers renegotiate pre-existing contractual commitments due to adverse changes in their own business or, in the case of a time and materials contract, may take advantage of contractual provisions that permit the suspension of contracted work for a period if their business experiences a financial hardship.

*Gainshare Performance Incentives.* Gainshare performance incentives revenues represent profit sharing and performance incentives earned contingent upon our customers reaching certain defined operational levels. Revenue derived from Gainshare performance incentives increased \$1.2 million for the three months ended September 30, 2013 compared to the three months ended September 30, 2012. The increase was primarily the result of a higher number of projects reaching performance measures for achieving gainshare combined with higher wafer volumes at customers' manufacturing facilities. 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 at facilities at which we generate gainshare, 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.

<b>Cost of Design-to-Silicon-Yield Solutions</b> <b>(in thousands, except for percentages)</b>	<b>Three Months Ended September</b>		<b>\$</b>	<b>%</b>
	<b>2013</b>	<b>2012</b>		
Direct costs of design-to-silicon-yield solutions	\$ 10,507	\$ 9,457	\$ 1,050	11%

*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, employee compensation and related benefits, overhead costs, travel and facilities-related costs. Software license costs consist of costs associated with licensing third-party software sold in conjunction with our software products. Direct costs of Design-to-silicon-yield solutions increased \$1.0 million for the three months ended September 30, 2013 compared to the three months ended September 30, 2012. The increase was primarily due to an increase of \$0.9 million in personnel-related expense as a result of additional headcount to support the growth in revenue-generating engagements, an increase of \$0.2 million in depreciation expense, an increase of \$0.1 million in third-party software royalty expense, an increase of \$0.1 million in equipment cost, an increase of \$0.1 million in facility cost, offset by a decrease of \$0.2 million in travel expense and a \$0.2 million decrease in outside service expense.

<b>Research and Development</b> <b>(in thousands, except for percentages)</b>	<b>Three Months Ended</b>		<b>\$</b>	<b>%</b>
	<b>2013</b>	<b>2012</b>		
Research and development	\$ 3,396	\$ 3,203	\$ 193	6%

*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 increased \$0.2 million for the three months ended September 30, 2013 compared to the three months ended September 30, 2012, primarily due to an increase of \$0.3 million in personnel-related expense, offset by a decrease of \$0.1 million in outside service expense. We anticipate our expenses in research and development will fluctuate in absolute dollars from period to 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.

<b>Selling, General and Administrative</b> <b>(in thousands, except for percentages)</b>	<b>Three Months Ended</b>		<b>\$</b>	<b>%</b>
	<b>2013</b>	<b>2012</b>		
Selling, general and administrative	\$ 3,812	\$ 4,498	\$ (686)	(15)%

*Selling, General and Administrative.* Selling, general and administrative expenses consist primarily of compensation and benefits for sales, marketing and general and administrative personnel, legal and accounting services, marketing communications, travel and facilities cost allocations, and stock-based compensation charges. Selling, general and administrative expenses decreased \$0.7 million for the three months ended September 30, 2013 compared to the three months ended September 30, 2012, primarily due to a decrease of \$0.4 million in personnel-related expense due to a decrease in headcount, a decrease of \$0.1 million in travel expense, a decrease in \$0.1 million in accounting and legal expense and a decrease of \$0.1 million in the provision for doubtful accounts as a result of the decrease in our accounts receivable balance due to strong cash collections in the period. 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.

	Three Months Ended September		\$ Change	% Change
	2013	2012		
<b>Amortization of Other Acquired Intangible Assets</b> (in thousands, except for percentages)				
Amortization of other acquired intangible assets	\$ 19	\$ 51	\$ (32)	(63)%

*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, 2013 decreased \$32,000 compared to the three months ended September 30, 2012, primarily the result of certain intangible assets becoming fully amortized. We anticipate amortization of our existing other acquired intangible assets to be \$18,000 for the remaining three months in 2013, and \$31,000 in 2014.

	Three Months Ended September		\$ Change	% Change
	2013	2012		
<b>Restructuring Charges</b> (in thousands, except for percentages)				
Restructuring charges	\$ 8	\$ —	\$ 8	—%

*Restructuring Charges.* Restructuring charges for both the three months ended September 30, 2013 and 2012 were not significant.

	Three Months Ended September		\$ Change	% Change
	2013	2012		
<b>Interest and Other Income (Expense), Net</b> (in thousands, except for percentages)				
Interest and other income (expense), net	\$ (283)	\$ (179)	\$ (104)	58%

*Interest and Other Income (expense), net.* Interest and other income (expense), net decreased \$0.1 million for the three months ended September 30, 2013 compared to the three months ended September 30, 2012. During the three months ended September 30, 2013, we recorded \$0.3 million losses on foreign currency exchange, primarily related to Euro to U.S Dollar exchange rate. During the three months ended September 30, 2012, we recorded \$0.4 million of losses related to the Euro to U.S. Dollar exchange rate, offset by gains on auction-rate securities of \$0.2 million. We anticipate interest and other income (expense) will fluctuate in future periods as a result of our projected use of cash and fluctuations of foreign exchange rates.

	Three Months Ended September		\$ Change	% Change
	2013	2012		
<b>Income Tax Provision</b> (in thousands, except for percentages)				
Income tax provision	\$ 2,640	\$ 170	\$ 2,470	1,453%

*Income Tax Provision.* Income tax provision increased \$2.5 million for the three months ended September 30, 2013 compared to three months ended September 30, 2012, primarily due to an increase in level of income. The income tax provision for the three months ended September 30, 2012 was significantly less than the provision at the statutory rate primarily due to the reduction of the valuation allowance related to the utilization of U.S tax credits, offset by foreign withholding taxes, statutory taxes, and changes in unrecognized tax benefits.

#### *Comparison of the Nine Months Ended September 30, 2013 and 2012*

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Revenues</b> (In thousands, except for percentages)				
Design-to-silicon-yield solutions	\$ 46,813	\$ 42,484	\$ 4,329	10%
Gainshare performance incentives	27,562	23,241	4,321	19%
Total	\$ 74,375	\$ 65,725	\$ 8,650	13%

*Design-to-Silicon-Yield Solutions.* Design-to-silicon-yield solutions revenue increased \$4.3 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012, primarily due to an increase in fixed fee integrated solutions, the result of more billable hours to revenue-generating projects in the period due to increased business activity. Our Design-to-silicon-yield solutions revenue may fluctuate in the future and are dependent on a number of factors, including the semiconductor industry's continued acceptance of our solutions, the timing of purchases by existing customers, and our ability to attract new customers and penetrate new markets including photovoltaic and LED, and further penetration of our current customer base. Fluctuations in future results may also occur if any of our significant customers renegotiate pre-existing contractual commitments due to adverse changes in their own businesses or, in the case of a time and materials contract, may take advantage of contractual provisions that permit the suspension of contracted work for a period if their business experiences a financial hardship.

*Gainshare Performance Incentives.* Revenue derived from gainshare performance incentives increased \$4.3 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012. The increase was primarily the result of a higher number of projects reaching performance measures for achieving gainshare and higher wafer volumes at customers' manufacturing facilities. 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 at facilities at which we generate gainshare, 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.

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Cost of Design-to-Silicon-Yield Solutions</b> (In thousands, except for percentages)				
Direct costs of design-to-silicon-yield solutions	\$ 29,905	\$ 26,830	\$ 3,075	11%
Amortization of acquired technology	—	261	(261)	(100)%
<b>Total</b>	<b>\$ 29,905</b>	<b>\$ 27,091</b>	<b>\$ 2,814</b>	<b>10%</b>

*Direct Costs of Design-to-Silicon-Yield Solutions.* Direct costs of Design-to-silicon-yield solutions increased \$3.1 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012. The increase was primarily due to an increase of \$2.5 million in personnel-related expense, an increase of \$0.4 million in depreciation expense, an increase of \$0.4 million in third-party software royalty expense, an increase of \$0.3 million in facility expense, offset by a decrease of \$0.3 million in travel expense and a decrease of \$0.2 million in outside service expense.

*Amortization of Acquired Technology.* Amortization of acquired technology expense was \$0.3 million for the nine months ended September 30, 2012. All acquired technology intangible assets were fully amortized as of December 31, 2012, resulting in no amortization of acquired technology for the nine months ended September 30, 2013.

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Research and Development</b> (In thousands, except for percentages)				
Research and development	\$ 9,944	\$ 9,651	\$ 293	3%

*Research and Development.* Research and development expenses increased \$0.3 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012, primarily due to an increase of \$0.7 million in personnel-related expense, an increase of \$0.1 million in depreciation expense, offset by a decrease of \$0.4 million in outside service expense and a decrease of \$0.1 million in lab supply cost. We anticipate our expenses in research and development will fluctuate in absolute dollars from period to 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 and revenue generating activity requirements.

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Selling, General and Administrative</b> (In thousands, except for percentages)				
Selling, general and administrative	\$ 13,010	\$ 14,122	\$ (1,112)	(8)%

*Selling, General and Administrative.* Selling, general and administrative expenses decreased \$1.1 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012, primarily due to a decrease of \$0.6 million in personnel-related expense due to a decrease in headcount, a decrease in \$0.2 million in accounting and legal expense, a decrease of \$0.2 million in provision for doubtful accounts as a result of the decrease in our accounts receivable balance due to strong cash collections in the period and a decrease of \$0.1 million in travel expense.

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Amortization of Other Acquired Intangible Assets</b> (In thousands, except for percentages)				
Amortization of other acquired intangible assets	\$ 56	\$ 153	\$ (97)	(63)%

*Amortization of Other Acquired Intangible Assets.* Amortization of other acquired intangible assets decreased \$0.1 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012 due to certain intangible assets becoming fully amortized. We anticipate amortization of our existing other acquired intangible assets to be \$18,000 in the remaining three months in 2013 and \$31,000 in 2014.

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Restructuring Charges (Credits)</b> (In thousands, except for percentages)				
Restructuring charges (credits)	\$ (35)	\$ 83	\$ (118)	(142)%

*Restructuring Charges (Credits).* For the nine months ended September 30, 2013, we recorded restructuring credits, which were primarily due to the change in estimate. For the nine months ended September 30, 2012, we incurred restructuring charges of \$0.1 million, which was primarily related to a decision to restructure additional square footage of office facilities.

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Interest and Other Income (Expense), Net</b> (In thousands, except for percentages)				
Interest and other income (expense), net	\$ (109)	\$ (166)	\$ 57	(34)%

*Interest and Other Income (Expense), Net.* Interest and other income (expense), net increased \$0.1 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012. The increase is primarily due to the non-recurring losses from the sale of auction-rate-securities during the nine months ended September 30, 2012.

	Nine Months Ended September		\$ Change	% Change
	2013	2012		
<b>Income Tax Provision</b> (In thousands, except for percentages)				
Income tax provision	\$ 7,279	\$ 1,147	\$ 6,132	535%

*Income Tax Provision.* Income tax provision increased \$6.1 million for the nine months ended September 30, 2013 compared to the nine months ended September 30, 2012, primarily due to an increase in level of income. The income tax provision for the nine months ended September 30, 2013 was less than the provision at the statutory rate primarily due to changes in unrecognized tax benefits and the benefit of the research and development tax credit. The income tax provision for the nine months ended September 30, 2012 was significantly less than the provision at the statutory rate primarily due to the reduction of the valuation allowance related to the utilization of U.S tax credits, offset by foreign withholding taxes, statutory taxes, and changes in unrecognized tax benefits.



## **Liquidity and Capital Resources**

### ***Operating Activities***

Cash flows provided by operating activities was \$20.9 million for the nine months ended September 30, 2013. This resulted from net income of \$14.1 million, the addition of \$9.7 million from non-cash charges, offset by the cash decrease of \$2.9 million reflected in the net change of operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of \$4.9 million, deferred taxes of \$4.2 million, depreciation and amortization of \$1.0 million, tax benefit related to stock-based compensation plan of \$0.5 million, partially offset by purchases of treasury stock in connection with tax withholdings on restricted stock grants of \$0.4 million, reversal of doubtful accounts of \$0.1 million and excess tax benefit from stock-based compensation of \$0.4 million. Cash flow decreases resulting from the net change in operating assets and liabilities primarily consisted of \$0.4 million decrease in accrued compensation and related benefits, \$1.3 million decrease in accounts payable, \$1.3 million decrease in accrued and other liabilities, \$1.1 million decrease in prepaid expenses and other assets, \$0.8 million decrease in deferred revenues and \$0.5 million decrease in billings in excess of recognized revenues, offset by \$6.0 million decrease in accounts receivable. The \$4.7 million combined cash flow increase resulted from the decrease in accounts receivable, the decrease in deferred revenue and the decrease in billings in excess of recognized revenues was primarily due to the timing of billing milestones and payments received.

Cash flows provided by operating activities of \$4.6 million for the nine months ended September 30, 2012 consisted primarily of net income of \$13.3 million, the addition of \$4.1 million from non-cash charges, offset by \$12.8 million of cash flow decreases reflected in the net change of operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of \$3.5 million, amortization of acquired intangible assets of \$0.4 million, depreciation and amortization of \$0.3 million, provision for doubtful account of \$0.1 million, partially offset by purchases of treasury stock of \$0.2 million for employee income tax withholdings due upon vesting of restricted stock units. Cash flow decreases resulting from the net change in operating assets and liabilities primarily consisted of \$12.7 million increase in accounts receivable, a \$0.8 million increase in prepaid expense and other assets, a \$0.3 million decrease in accounts payable, a \$0.5 decrease in accrued and other liabilities, a \$0.5 million decrease in deferred revenues, and a \$1.3 million decrease in billings in excess of recognized revenue, partially offset by a \$3.4 million increase in accrued compensation and related benefits. The \$14.6 million combined cash flow decrease resulted from the increase in accounts receivable and decrease in combined billings in excess of recognized revenues and deferred revenue due to the timing of billing milestones and payments received.

### ***Investing Activities***

Cash flows used in investing activities of \$3.4 million for the nine months ended September 30, 2013 consisted of payments for capital expenditures, primarily test equipment. Cash flow used in investing activities of \$1.6 million for the nine months ended September 30, 2012 was attributable of \$2.1 million payment for capital expenditures, offset by \$0.5 million proceeds from the sale of auction-rate-securities.

### ***Financing Activities***

Cash flows provided by financing activities of \$6.0 million for the nine months ended September 30, 2013 consisted primarily of \$4.3 million of proceeds from the exercise of stock options, \$1.3 million of proceeds from our Employee Stock Purchase Plan and \$0.4 million of excess tax benefit from stock-based compensation.

Cash flows used in financing activities of \$1.8 million for the nine months ended September 30, 2012 consisted primarily of \$4.7 million of proceeds from the exercise of stock options and \$1.0 million of proceeds from our Employee Stock Purchase Plan, partially offset by \$3.9 million cash used to repurchase 389,000 shares of our common stock on the open market during the period.

## **Liquidity**

As of September 30, 2013, our working capital, defined as total current assets less total current liabilities, was \$110.4 million, compared with \$82.9 million as of December 31, 2012. Cash and cash equivalents were \$85.2 million as of September 30, 2013, compared to \$61.6 million as of December 31, 2012. As of both September 30, 2013 and December 31, 2012, cash and cash equivalents held by our foreign subsidiaries were \$2.0 million. 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 or fund potential investments in, or acquisitions of complementary products, technologies or businesses. We believe that our existing cash resources and anticipated funds from operations will satisfy our cash requirements to fund our operating activities, capital expenditures and other obligations for at least the next twelve months. However, in the event that during such period, or thereafter, we are not successful in generating sufficient cash flows from operations we may need to raise additional capital through private or public financings, strategic relationships or other arrangements, which may not be available to us on acceptable terms or at all.

## Off-Balance Sheet Agreements

We do not have any off-balance sheet arrangements, investments in special purpose entities or undisclosed borrowings or debt.

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

## Contractual Obligations

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

Contractual Obligations (1)	Payments Due by Period						Total
	2013 (remaining three months)	2014	2015	2016	2017	Thereafter	
Operating lease obligations	\$ 446	\$ 1,655	\$ 1,571	\$ 1,574	\$ 1,294	\$ 695	\$ 7,235

- (1) The contractual obligation table above excludes liabilities for uncertain tax positions of \$2.9 million, which are not practicable to assign to any particular years, due to the inherent uncertainty of the tax positions. See Note 6 of "Notes to Consolidated Financial Statements" for further discussion.

## 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.

*Interest Rate Risk.* As of September 30, 2013, we had cash and cash equivalents of \$85.2 million. Cash and cash equivalents consisted of cash and highly liquid money market instruments. We would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest on our portfolio. A hypothetical increase in market interest rates of 100 basis points from the market rates in effect at September 30, 2013 would cause the fair value of these investments to decrease by an immaterial amount which would not have significantly impacted our financial position or results of operations. Declines in interest rates over time will result in lower interest income and interest expense.

*Foreign Currency and Exchange Risk.* Certain of our payables for our international offices are denominated in the local currency, including the Euro, Yen and RMB. Therefore, a portion of our operating expenditures is subject to foreign currency risks. The effect of an immediate 10% adverse change in exchange rates on foreign denominated payables as of September 30, 2013 would result in a loss of approximately \$0.7 million. As of September 30, 2013, 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 principal financial and accounting officer, evaluated the effectiveness of our "disclosure controls and procedures" as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) as of September 30, 2013 in connection with the filing of this Quarterly Report on Form 10-Q. Based on that evaluation as of September 30, 2013, our principal executive officer and principal financial and accounting officer concluded that our disclosure controls and procedures were effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in rules and forms of the SEC and accumulated and communicated to our management as appropriate to allow timely decisions regarding required disclosure.

### **Changes in Internal Control over Financial Reporting**

There were no changes in the Company's internal control over financial reporting during the three months ended September 30, 2013 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

## **PART II — OTHER INFORMATION**

### **Item 1. Legal Proceedings**

From time to time, we are subject to various claims and legal proceedings that arise in the ordinary course of business. We accrue for losses related to litigation when a potential loss is probable and the loss can be reasonably estimated in accordance with FASB requirements. During the reported period, we were not party to any material legal proceedings, thus no loss was probable and no amount was accrued at September 30, 2013.

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

Item 1A, "Risk Factors," on pages 9 through 16 of the Company's Annual Report on Form 10-K for the year ended December 31, 2012, provides information on the significant risks associated with our business. There have been no subsequent material changes to these risks.

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

None.

**Item 3. Defaults Upon Senior Securities**

None.

**Item 4. Mine Safety Disclosures**

None.

**Item 5. Other Information**

None.

**Item 6. Exhibits**

<b>Exhibit Number</b>	<b>Description</b>
31.01	Certification of the principal 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 principal financial and accounting officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.01	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.02	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.

## 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 6, 2013

By: /s/ JOHN K. KIBARIAN

\_\_\_\_\_  
John K. Kibarian  
President and Chief Executive Officer  
(principal executive officer)

Date: November 6, 2013

By: /s/ GREGORY C. WALKER

\_\_\_\_\_  
Gregory C. Walker  
Vice President, Finance and Chief Financial Officer  
(principal financial and accounting officer)

## INDEX TO EXHIBITS

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## CERTIFICATIONS

I, John K. Kibarian, certify that:

1. I have reviewed this quarterly report on Form 10-Q of PDF Solutions, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ JOHN K. KIBARIAN

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John K. Kibarian  
*President and Chief Executive Officer*  
*(principal executive officer)*

Date: November 6, 2013



## CERTIFICATIONS

I, Gregory C. Walker, certify that:

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

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

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

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

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

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

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

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

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

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

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

By: /s/ GREGORY C. WALKER

Gregory C. Walker

*Vice President, Finance and Chief Financial Officer  
(principal financial and accounting officer)*

Date: November 6, 2013

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

In connection with the Quarterly Report of PDF Solutions, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2013 as filed with the Securities and Exchange Commission on November 6, 2013 (the "Report"), I, John K. Kibarian, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

By: /s/ JOHN K. KIBARIAN  
John K. Kibarian  
*President and Chief Executive Officer*  
*(principal executive officer)*

Date: November 6, 2013

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

In connection with the Quarterly Report of PDF Solutions, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2013 as filed with the Securities and Exchange Commission on November 6, 2013 (the "Report"), I, Gregory C. Walker, Vice President, Finance and Chief Financial Officer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

By: /s/ GREGORY C. WALKER  
Gregory C. Walker  
*Vice President, Finance and Chief Financial Officer*  
*(principal financial and accounting officer)*

Date: November 6, 2013

