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

washington, D.C. 20549

# **FORM 10-Q**

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

For the Quarterly Period ended March 31, 2014

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  $\boxtimes$  No  $\square$ 

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 ( $\S232.405$  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  $\square$  No  $\square$ 

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.

 $\Box$  Large accelerated filer  $\Box$  Accelerated filer

□ Non-accelerated filer (Do not check if a smaller reporting company)  $\Box$  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 May 5, 2014 was 30,520,645.

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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)

	March 31, 2014		,	
ASSETS				
Current assets:				
Cash and cash equivalents	\$	100,994	\$	89,371
Accounts receivable, net of allowance of \$327 and \$354, respectively		32,515		34,860
Deferred tax assets - current portion		4,185		5,920
Prepaid expenses and other current assets		4,110		3,632
Total current assets		141,804		133,783
Property and equipment, net		7,582		7,064
Deferred tax assets - non-current portion		8,448		8,599
Other non-current assets		1,479		1,718
Total assets	\$	159,313	\$	151,164
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	961	\$	1,129
Accrued compensation and related benefits		5,285		7,707
Accrued and other current liabilities		3,685		1,593
Deferred revenues		4,526		2,096
Billings in excess of recognized revenues		591		343
Total current liabilities		15,048		12,868
Non-current liabilities		3,366		3,584
Total liabilities		18,414		16,452
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 35,457 and 35,285,				
respectively; shares outstanding 30,439 and 30,437, respectively		5		5
Additional paid-in-capital		236,935		233,813
Treasury stock at cost, 5,018 and 4,848 shares, respectively		(32,043)		(28,905)
Accumulated deficit		(64,394)		(70,649)
Accumulated other comprehensive income		396		448
Total stockholders' equity		140,899		134,712
Total liabilities and stockholders' equity	\$	159,313	\$	151,164

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 Mon	ths Ended March 31,
	2014	2013
Revenues:		
Design-to-silicon-yield solutions	\$ 14,9	919 \$ 14,848
Gainshare performance incentives	12,1	9,262
Total revenues	27,0	24,110
Costs of Design-to-silicon-yield solutions	9,7	9,657
Gross profit	17,3	381 14,453
Operating expenses:		
Research and development	3,5	596 3,364
Selling, general and administrative	4,3	329 4,794
Amortization of other acquired intangible assets		18 18
Restructuring charges (credits)		57 (52)
Total operating expenses	8,0	8,124
Income from operations	9,3	6,329
Interest and other income (expense), net		(87) 250
Income before income taxes	9,2	6,579
Income tax provision	3,0	1,848
Net income	\$ 6,2	255 \$ 4,731
Net income per share:		
Basic	<u>\$</u> 0	0.21 \$ 0.16
Diluted	\$ 0	0.20 \$ 0.15
Weighted average common shares		
Basic	30,4	477 29,353
Diluted	31,9	965 30,815
Dirutou		
Net income	\$ 6,2	255 \$ 4,731
Other comprehensive income:		
Foreign currency translation adjustments, net of tax		(52) (169)
Comprehensive income	\$ 6,2	<u>203</u> <u>\$ 4,562</u>

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

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

	Three Months Ended March 31,			nded
		2014	,	2013
Operating activities:				
Net income	\$	6,255	\$	4,731
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization		458		258
Stock-based compensation expense		1,660		1,309
Amortization of acquired intangible assets		18		18
Deferred taxes		1,886		981
Losses on disposal of property and equipment		34		46
Purchases of treasury stock in connection with tax withholdings on restricted stock grants		(8)		(8
Reversal of doubtful accounts		(28)		
Unrealized loss on foreign currency forward contract		24		
Tax benefit related to stock-based compensation expense		44		888
Excess tax benefit from stock-based compensation		(41)		(747
Changes in operating assets and liabilities:				
Accounts receivable		2,373		1,844
Prepaid expenses and other assets		(264)		(2,528
Accounts payable		(279)		(1,064
Accrued compensation and related benefits		(2,386)		(4,832
Accrued and other liabilities		(442)		(1,055
Deferred revenues		2,537		668
Billings in excess of recognized revenues		248		(159
Net cash provided by operating activities		12,089		350
Investing activities:				
Purchases of property and equipment		(929)		(1,211
Net cash used in investing activities		(929)		(1,211
Financing activities:				
Proceeds from exercise of stock options		784		1,201
Proceeds from employee stock purchase plan		632		546
Excess tax benefit from stock-based compensation		41		747
Purchases of treasury stock		(968)		
Net cash provided by financing activities		489		2,494
Effect of exchange rate changes on cash and cash equivalents		(26)		(87
Net change in cash and cash equivalents		11,623		1,546
Cash and cash equivalents, beginning of period		89,371		61,637
Cash and cash equivalents, end of period	\$	100,994	\$	63,183
Supplemental disclosure of cash flow information:				
Cash paid during the period for:				
Taxes	\$	1,648	\$	779
14700	*	-,- 10	*	112
Property and equipment received and accrued in accounts payable and accrued and other liabilities	\$	400	\$	559

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, 2013.

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, 2013, 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 revenue recognition for fixed-price solution implementation service contracts, stock-based compensation expense and accounting for income taxes. 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-vield 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, 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 adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

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. 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 \$10.0 million and \$8.0 million as of March 31, 2014, and December 31, 2013, respectively.

Property and equipment consists of (in thousands):

	March 31, 2014	December 31, 2013
Property and equipment, net:		
Computer equipment	\$ 9,867	\$ 9,969
Software	3,439	3,441
Furniture, fixtures and equipment	737	734
Leasehold improvements	1,047	1,052
Test equipment	5,379	4,928
Construction-in-progress	 1,622	1,421
	22,091	21,545
Less: accumulated depreciation	 (14,509)	(14,481)
Total	\$ 7,582	\$ 7,064

Depreciation and amortization expense was \$0.5 million and \$0.3 million for the three months ended March 31, 2014 and 2013, respectively.

Intangible assets balance was \$12,000 and \$31,000 as of March 31, 2014, and December 31, 2013, respectively. The balance was included in other non-current assets in the accompanying condensed consolidated balance sheets. For both the three-month periods ended March 31, 2014 and 2013, intangible asset amortization expense was \$18,000. The Company expects the remaining balance of its intangible assets to be fully amortized in the second quarter ending June 30, 2014.

# 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**

	E	Ended March 31,			
	2014		2013		
Cost of Design-to-silicon-yield solutions	\$	724 \$	534		
Research and development		371	322		
Selling, general and administrative		565	453		
Stock-based compensation expenses	<u>\$</u>	1,660 \$	1,309		

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:

			Employee Stock Purchase Plan		
			Three Months End	ed March 31,	
	2014	2013	2014	2013	
Expected life (in years)	4.58	4.78	1.25	1.25	
Volatility	43.4%	56.4%	34.6%	46.1%	
Risk-free interest rate	1.56%	0.80%	0.18%	0.19%	
Expected dividend	_	_	_	_	
Weighted average fair value per share of options granted during the period	\$ 7.75	\$ 7.54	_	_	
Weighted average fair value per share of employee stock purchase plan rights granted during the period	_	_	\$ 7.18 \$	5.28	

On March 31, 2014, 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, which was amended and restated at the 2013 annual meeting of stockholders on May 28, 2013, when the Company's stockholders approved the First Amended and Restated 2011 Stock Incentive Plan (as amended, 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 4,800,000 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 April 15, 2014, the Company's Board of Directors amended the 2011 Plan, subject to the approval of the stockholders, to increase the number of shares reserved for awards under such plan by an additional 1,750,000 shares for a total of 6,550,000 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 March 31, 2014, 5.2 million shares of common stock were reserved to cover stock-based awards under the 2011 Plan, of which 2.8 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 March 31, 2014. As of March 31, 2014, 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 three months ended March 31, 2014, was as follows:

	Number of Options (in thousands)	 Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (years)	aggregate Intrinsic Value (in 10usands)
Outstanding, January 1, 2014	2,880	\$ 7.35		
Granted (weighted average fair value of \$7.75 per share)	5	\$ 20.39		
Exercised	(117)	\$ 6.68		
Canceled	(11)	\$ 8.74		
Expired	(7)	\$ 5.91		
Outstanding, March 31, 2014	2,750	\$ 7.40	6.35	\$ 29,694
Vested and expected to vest, March 31, 2014	2,692	\$ 7.36	6.31	\$ 29,155
Exercisable, March 31, 2014	1,858	\$ 6.87	5.61	\$ 21,003

The aggregate intrinsic value in the table above represents the total intrinsic value based on the Company's closing stock price of \$18.17 per share as of March 31, 2014. The total intrinsic value of options exercised during the three months ended March 31, 2014, was \$1.7 million.

As of March 31, 2014, there was \$3.5 million of total unrecognized compensation cost related to unvested stock options. That cost is expected to be recognized over a weighted average period of 1.9 years. The total fair value of shares vested during the three months ended March 31, 2014, was \$0.5 million.

Nonvested restricted stock units activity during the three months ended March 31, 2014, was as follows:

	Shares (in thousands)	Weighted Average Grant Date Fair Value Per Share
Nonvested, January 1, 2014	759	\$ 14.44
Granted	5	\$ 20.39
Vested	(3)	\$ 6.90
Forfeited	(3)	\$ 16.50
Nonvested, March 31, 2014	758	\$ 14.51

As of March 31, 2014, there was \$8.6 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 2.6 years.

*Employee Stock Purchase Plan* — In July 2001, the Company adopted a ten-year Employee Stock Purchase Plan (as amended, "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 ended March 31, 2014 and 2013, a total of 52,000 and 104,000 shares, respectively, were issued at a weighted-average purchase price of \$12.10 and \$5.24 per share, respectively, under the Purchase Plan. For both the three-month periods ended March 31, 2014 and 2013, the Purchase Plan compensation expense was \$0.2 million. As of March 31, 2014, 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 1.2 years. As of March 31, 2014, 1.2 million shares were available for future issuance under the Purchase Plan.

*Stock Repurchase Program* — On November 8, 2012, the Board of Directors adopted a 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 March 31, 2014, 206,200 shares had been repurchased at the average price of \$17.50 per share under this new program, at a total purchase of \$3.6 million, and \$16.4 million remained available for future repurchases.

# 5. RESTRUCTURING

The Company implemented restructuring plans during fiscal years 2012 and 2008, and recorded total restructuring charges of \$57,000 and credits of \$52,000 for the three months ended on March 31, 2014 and 2013, respectively. As of March 31, 2014, the remaining restructuring accrual was \$62,000, which represents employee severance charges, which the Company expects to pay out by the end of 2014. 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 \$2.2 million, which primarily consisted of employee severance costs of \$2.1 million. The following table summarizes the activities of these restructuring liabilities (in thousands) for the periods covered below:

#### Three Months

	Ε	Ended March 31,			
	2014		2013		
Beginning balance	\$	13 \$	896		
Restructuring charges		57	50		
Cash payments		(8)	(736)		
Ending balance	<u>\$</u>	62 \$	210		

#### October 2008 Plan

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. All remaining accrual balance under this plan had been paid out as of December 31, 2013. The following table summarizes the activities of these restructuring liabilities (in thousands) for the periods covered below:

	Three Months			
	Ended March 31,			
	 2014	2013		
Beginning balance	\$ _	\$	448	
Restructuring credits	_		(102)	
Cash payments	 		(122)	
Ending balance	\$ 	\$	224	
-		-		

# 6. INCOME TAXES

Income tax provision increased \$1.2 million for the three months ended March 31, 2014, to \$3.0 million as compared to an income tax provision of \$1.8 million for the three months ended March 31, 2013. The Company's effective tax rate was 32.70% and 28.09% for the three months ended March 31, 2014, and March 31, 2013, respectively. The income tax provision for the three months ended March 31, 2014, was less than the provision at the statutory rate primarily due to changes in unrecognized tax benefits. The income tax provision 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, which amounted to \$0.4 million. The expiration of the U.S Federal research tax credit resulted in zero tax credit for the three months ended March 31, 2014.

The Company's total amount of unrecognized tax benefits, excluding interest and penalties, as of March 31, 2014, was \$10 million, of which \$6.1 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, 2013, was \$10.2 million, of which \$6.3 million, if recognized, would affect the Company's effective tax rate. As of March 31, 2014, the Company has recorded unrecognized tax benefits of \$2.7 million, including interest and penalties, as long-term taxes payable in its condensed consolidated balance sheet. The remaining \$7.8 million has been recorded net of our deferred tax assets, of which \$3.9 million is subject to a full valuation allowance.

As of March 31, 2014, 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 March 31, 2014, 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**

**Three Months** 

	Ende	l March 31,
	2014	2013
Numerator:		
Net income	\$ 6,25	\$ 4,731
Denominator:		
Basic weighted-average shares outstanding	30,47	29,353
Effect of dilutive options and restricted stock	1,48	1,462
Diluted weighted average shares outstanding	31,96	30,815
Net income per share - Basic	<u>\$</u> 0.2	\$ 0.16
Net income per share - Diluted	\$ 0.2	<u> </u>

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):

	Ended Ma	rch 31,
	2014	2013
Outstanding options	19	132
Employee Stock Purchase Plan	48	—
Total	67	132

# 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:

# **Three Months**

	Ended Marcl	h 31,
Customer	2014	2013
A	45%	33%
В	19%	16%
С	13%	25%

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

Customer	March 31, 2014	December 31, 2013
A	37%	33%
В	23%	12%
C	14%	26%

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

	Three Months Ended March 31,								
	 201	4	201	3					
		Percentage of		Percentage of					
	Revenues	Revenues	Revenues	Revenues					
North America	\$ 11,399	42% \$	9,866	41%					
Germany	9,100	34	4,625	19					
South Korea	2,260	8	4,912	21					
Japan	1,713	6	2,261	9					
Rest of Asia	1,495	6	1,544	6					
Rest of Europe	1,119	4	902	4					
Total revenue	\$ 27,086	100% \$	24,110	100%					

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

		rch 31, 014	December 31, 2013		
North America	\$	7,102	\$	6,578	
Asia		354		364	
Europe		126		122	
Total long-lived assets, net	<u>\$</u>	7,582	\$	7,064	

## 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 1Inputs are quoted prices in active markets for identical assets or liabilities.

Level 2Inputs 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 3Inputs 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 March 31, 2014, and the basis for that measurement (in thousands):

		Quoted		
		Prices		
		in		
		Active		
		Markets	Significant	
		for	Other	Significant
		Identical	Observable	Unobservable
		Assets	Inputs	Inputs
Assets	Total	(Level 1)	(Level 2)	(Level 3)
Money market mutual funds	\$ 26,354	\$ 26,354	<u> </u>	<u>\$                                    </u>

The following table represents the Company's assets measured at fair value on a recurring basis as of December 31, 2013, and the basis for that measurement (in thousands):

		Quoted		
		Prices		
		in		
		Active		
		Markets	Significant	
		for	Other	Significant
		Identical	Observable	Unobservable
		Assets	Inputs	Inputs
Assets	Total	(Level 1)	(Level 2)	(Level 3)
Money market mutual funds	\$ 26,353	\$ 26,353	\$	\$

The Company enters into foreign currency forward contracts to reduce the exposure to foreign currency exchange rate fluctuations on certain foreign currency denominated monetary assets and liabilities, primarily on third-party accounts payables and intercompany balances. The primary objective of the Company's hedging program is to reduce volatility of earnings related to foreign currency exchange rate fluctuations. The counterparty to these foreign currency forward contracts is a large global financial institution that the Company believes is creditworthy, and therefore, the Company believes the credit risk of counterparty nonperformance is not significant. These foreign currency forward contracts are not designated for hedge accounting treatment. Therefore, the change in fair value of these contracts is recorded into earnings as a component of other income (expense), net, and offsets the change in fair value of the foreign currency denominated assets and liabilities, which is also recorded in other income (expense), net. For the three months ended March 31, 2014, the Company recognized an unrealized loss of \$24,000 on the contracts, which is recorded in other income (expense), net in the Company's Statement of Operations and Comprehensive Income.

The Company carries these derivatives financial instruments on its Consolidated Balance Sheets at their fair values. The Company's foreign currency forward contracts are classified as Level 2 because it is not actively traded and the valuation inputs are based on quoted prices and market observable data of similar instruments. As of March 31, 2014, the Company had one outstanding forward contract with a notional amount of \$7.5 million and recorded \$24,000 other current liabilities associated with this outstanding forward contract.

# 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 2019. Rent expense was \$0.5 million for both the three months ended March 31, 2014 and 2013, respectively.

Future minimum lease payments under noncancelable operating leases at March 31, 2014, are as follows (in thousands):

Year Ending December 31,	Amount
2014 (remaining nine months)	\$ 1,335
2015	1,695
2016	1,695
2017	1,410
2018	802
Thereafter	 66
Total future minimum lease payments	\$ 7,003

*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 March 31, 2014.

#### 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, 2013 filed with the Securities and Exchange Commission on March 14, 2014. All references to "we", "us", "our", "PDF", "PDF Solutions" or "the Company" refer to PDF Solutions, Inc.

## 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 customers' manufacturing process and receive preliminary results of proposed yield improvement suggestions. The variable fee, or what we call Gainshare, usually depends on our achieving certain yield targets by a deadline. Variable fees are currently typically tied to wafer volume on the node size of the 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**

Consistent with the trend since 2010, we believe that the largest logic foundries will continue to increase their investment in leading edge nodes and capacity in 2014. Leading foundries are also investing in new technologies such as multi-patterned lithography and 3-D transistor architecture, which resulted in an increase in our business, and improved results of operations in the past few years and to date in 2014.

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 processes. We believe that as volume production of deep submicron ICs continues to grow, the difficulties of integrating IC designs with their respective processes and ramping new manufacturing processes will create a greater need for products and services that address the yield loss and escalating cost issues the semiconductor industry is facing today and will face in the future.

#### **Customer Contracts**

Although a substantial portion of our total revenues are concentrated in a small number of customers, the total revenues for each of these customers in any period is the result of Design-to-silicon-yield solutions and Gainshare performance incentives revenues recognized in the period under multiple, separate contracts, with no interdependent performance obligations. These contracts were all entered into in the ordinary course of our business and contain general terms and conditions that are standard across most of our yield improvement solutions customers, including providing services typically targeted to one manufacturing process node, for example the 28 or 20 nanometer node. Fluctuations in future results may occur if any of these customers renegotiate pre-existing contractual commitments due to adverse changes in their own business or, in the case of one time and materials contract, if the customer takes advantage of contractual provisions that permit the suspension of contracted work for a period if their business experiences a financial hardship. See the additional discussion in Part I, Item 1, "Customers," on page 8 of our Annual Report on Form 10-K for the year ended December 31, 2013, and in Item 1A, "Risk Factors," on pages 11 through 17 of the Annual Report for related information on the risks associated with customer concentration and Gainshare performance incentives revenue.

#### **Financial Highlights**

Financial highlights for the three months ended March 31, 2014, were as follows:

- Total revenues for the three months ended March 31, 2014, were \$27.1 million, an increase of \$3.0 million, or 12%, compared to \$24.1 million for the three months ended March 31, 2013. Design-to-silicon-yield solutions revenue for the three months ended March 31, 2014, was \$14.9 million, slightly higher when compared to Design-to-silicon yield solutions revenue of \$14.8 million for the three months ended March 31, 2013. Gainshare performance incentives revenue for the three months ended March 31, 2014, was \$12.2 million, or 31%, compared to \$9.3 million for the three months ended March 31, 2013. The increase in revenue from Gainshare performance incentives was primarily the result of higher wafer volumes at customers' manufacturing facilities.
- Net income for the three months ended March 31, 2014, was \$6.3 million, compared to \$4.7 million for the three months ended March 31, 2013. The increase in net income was primarily attributable to an increase in gross margin of \$3.0 million and a decrease of total operating expenses of \$0.1 million, offset by an increase in income tax provision of \$1.2 million and a higher interest and other expense of \$0.3 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 \$0.21 and \$0.20, respectively, for the three months ended March 31, 2014 compared to net income per basic and diluted share of \$0.16 and \$0.15, respectively, for the three months ended March 31, 2013, an increase of \$0.05 per basic and diluted share.

Cash and cash equivalents increased \$11.6 million from \$89.4 million at December 31, 2013, to \$101.0 million at March 31, 2014, primarily due to an increase in cash from operating and financing activities during the period.

#### **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, 2013. 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-vield 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 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 recorded as services revenues.

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 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 March 31, 2014, 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 March 31, 2014, 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 E	Inded			
	March 31,	March 31,			
	2014	2013			
Revenues:					
Design-to-silicon-yield solutions	55%	62%			
Gainshare performance incentives	45	38			
Total revenues	100%	100%			
Costs of Design-to-silicon-yield solutions	36	40			
Gross margin	64	60			
Operating expenses:					
Research and development	13	14			
Selling, general and administrative	16	20			
Amortization of other acquired intangible assets	_	_			
Restructuring charges					
Total operating expenses	29	34			
Income from operations	35	26			
Interest and other income (expense), net	(1)	1			
Income before taxes	34	27			
Income tax provision	11	8			
Net income	23%	19%			

#### Comparison of the Three Months Ended March 31, 2014 and 2013

	Three Months Ended March 31,					\$	%
Revenues		2014		2013		Change	Change
(in thousands, except for percentages)							
Design-to-silicon-yield solutions	\$	14,919	\$	14,848	\$	71	%
Gainshare performance incentives		12,167		9,262		2,905	31%
Total	\$	27,086	\$	24,110	\$	2,976	<u>12</u> %

*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 was the same for the three months ended March 31, 2014, as for the three months ended March 31, 2013. 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 \$2.9 million for the three months ended March 31, 2014, compared to the three months ended March 31, 2013. The increase was primarily the result of 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.

	Three Mo	nths ]	Ended			
	March 31,			\$		%
Cost of Design-to-Silicon-Yield Solutions	2014		2013		Change	Change
(in thousands, except for percentages)						
Costs of Design-to-silicon-yield solutions	\$ 9,705	\$	9,657	\$	48	%

*Costs of Design-to-Silicon-Yield Solutions*. Costs of Design-to-silicon-yield solutions consist of costs incurred to provide and support our services and costs recognized in connection with licensing our software. 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. Costs of Design-to-silicon-yield solutions for the three months ended March 31, 2014, was relatively flat compared to the three months ended March 31, 2013. Personnel-related expense increased \$0.7 million as a result of additional headcount and annual salary increases and depreciation expense increased \$0.1 million which was due to the depreciation of test equipment, offset by the increase in deferred cost of \$0.6 million due to timing of closing the engagements and the decrease in outside services expense of \$0.2 million.

	Three Months Ended						
		March 31,			\$		%
Research and Development		2014		2013		Change	Change
(in thousands, except for percentages)							
Research and development	\$	3,596	\$	3,364	\$	232	<u> </u>

*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 March 31, 2014, compared to the three months ended March 31, 2013, primarily due to an increase of \$0.1 million in personnel-related expense, which was driven by annual salary increases, and an increase of \$0.1 million in lab supply 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.

	Three Months Ended March 31,				\$	%
Selling, General and Administrative	2014	2013			Change	Change
(in thousands, except for percentages)						
Selling, general and administrative	\$ 4,329	\$	4,794	\$	(465)	(10)%

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 \$0.5 million for the three months ended March 31, 2014, compared to the three months ended March 31, 2013, primarily due to a decrease of \$0.1 million in personnel-related expense due to a decrease in headcount, a decrease of \$0.2 million in accounting and legal expense, a decrease of \$0.1 million in outside services and a decrease of \$0.1 million in travel related expense. We anticipate our selling, general and administrative expenses will fluctuate in absolute dollars from period to period as a result of cost control initiatives and to support increased selling efforts in the future.

	Т	hree Mont				
		March 31,			\$	%
Amortization of Other Acquired Intangible Assets	20	2014			Change	Change
(in thousands, except for percentages)						
Amortization of other acquired intangible assets	\$	18	\$ 1	8 \$		%

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 March 31, 2014, remained the same as for the three months ended March 31, 2013. Our intangible balance as of March 31, 2014 was \$12,000, and we anticipate this balance to be fully amortized in the three months ending June 30, 2014.

	Three Months Ended March 31,			\$	%		
Restructuring Charges (credits)	2	2014 2013			Change	Change	
(in thousands, except for percentages)							
Restructuring charges (credits)	\$	57	\$	(52)	\$ 109	(210)%	

*Restructuring Charges (credits).* Restructuring charges recognized during the three months ended March 31, 2014, were \$57,000, which represented severance charges related to the October 2012 Plan. During the three months ended March 31, 2013, we recorded restructuring credits of \$52,000, which was due to a change in estimate.

	Three Months Ended						
	March 31,				\$	%	
Interest and Other Income (Expense), Net	2014			2013	Change		Change
(in thousands, except for percentages)							
Interest and other income (expense), net	\$	(87)	\$	250	\$	(337)	(135)%

Interest and Other Income (expense), net. Interest and other income (expense), net decreased \$0.3 million for the three months ended March 31, 2014 compared to the three months ended March 31, 2013. During the three months ended March 31, 2014, we recorded \$0.1 million losses on foreign currency exchange, primarily related to Yen to U.S Dollar exchange rate. During the three months ended March 31, 2013, we recorded \$0.2 million of gains related to the Euro and Yen to U.S. Dollar exchange rate. 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.

	March 31,					\$	%		
Income Tax Provision	2014 2013			2013	(	Change	Change		
(in thousands, except for percentages)									
Income tax provision	\$	3,039	\$	1,848	\$	1,191	64%		

Income Tax Provision. Income tax provision increased \$1.2 million for the three months ended March 31, 2014, compared to three months ended March 31, 2013, primarily due to an increase in level of income. The income tax provision for the three months ended March 31, 2013, 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.

# Liquidity and Capital Resources

#### **Operating** Activities

Cash flows provided by operating activities was \$12.1 million for the three months ended March 31, 2014. This resulted from net income of \$6.3 million, the addition of \$4.1 million from non-cash charges and cash increase of \$1.7 million reflected in the net change of operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of \$1.7 million, deferred taxes of \$1.9 million and depreciation and amortization of \$0.5 million. Cash flow increases resulting from the net change in operating assets and liabilities primarily consisted of \$2.4 million decrease in accounts receivable, primarily driven by strong collections, \$2.5 million increase in deferred revenue, \$0.2 million increase in billing in excess of recognized revenue, offset by \$0.3 million increase in prepaid expense and other assets, \$0.3 million decrease in accounts payable, \$2.4 million decrease in accounts receivable, the increase in deferred revenue and the increase 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 was \$0.4 million for the three months ended March 31, 2013. This resulted from net income of \$4.7 million, the addition of \$2.7 million from non-cash charges, offset by the cash decrease of \$7.0 million reflected in the net change of operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of \$1.3 million, deferred taxes of \$1.0 million, tax benefit related to stock-based compensation of \$0.9 million. Cash flow decreases resulting from the net change in operating assets and liabilities primarily consisted of \$4.8 million decrease in accrued and other liabilities, \$2.5 million increase in prepaid expenses and other assets, \$1.0 million decrease in accounts payable, \$1.0 million decrease in accounts receivable and \$0.7 million increase in deferred revenue. The \$2.4 million combined cash flow increase resulted from the increase in accounts receivable, the increase 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.

#### **Investing** Activities

Cash flows used in investing activities for the three months ended March 31, 2014, and 2013 of \$0.9 million and \$1.2 million, respectively, consisted of payment for capital expenditures, primarily test equipment.

#### **Financing** Activities

Cash flows provided by financing activities of \$0.5 million for the three months ended March 31, 2014, consisted primarily of \$0.8 million of proceeds from the exercise of stock options, \$0.6 million of proceeds from our Employee Stock Purchase Plan, offset by \$0.9 million of cash used to purchase treasury stock

Cash flows provided by financing activities of \$2.5 million for the three months ended March 31, 2013, consisted primarily of \$1.2 million of proceeds from the exercise of stock options, \$0.5 million of proceeds from our Employee Stock Purchase Plan and \$0.8 million of excess tax benefit from stock-based compensation.

### Liquidity

As of March 31, 2014, our working capital, defined as total current assets less total current liabilities, was \$126.8 million, compared with \$120.9 million as of December 31, 2013. Cash and cash equivalents were \$101.0 million as of March 31, 2014, compared to \$89.4 million as of December 31, 2013. As of March 31, 2014 and December 31, 2013, cash and cash equivalents held by our foreign subsidiaries were \$1.6 million and \$2.0 million, respectively. 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 continue to fund our R&D efforts, 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.

# **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) as of March 31, 2014:

	Payments Due by Period										
	2014										
Contractual	(remaini nine	ng									
Obligations (1)	month	5)	2015		2016		2017	2018	There	after	Fotal
Operating lease obligations	\$ 1,	335	\$ 1,69	5 \$	1,695	\$	1,410	\$ 802	\$	66	\$ 7,003

(1) The contractual obligation table above excludes liabilities for uncertain tax positions of \$2.7 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 March 31, 2014, we had cash and cash equivalents of \$101.0 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 March 31, 2014, 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. We enter into foreign currency forward contracts to reduce the exposure to foreign currency exchange rate fluctuations on certain foreign currency denominated monetary assets and liabilities. We do not use foreign currency forward contracts for speculative or trading purposes. We record these forward contracts at fair value. The counterparty to these foreign currency forward contracts is a large global financial institution that we believe is creditworthy, and therefore, we believe the credit risk of counterparty non-performance is not significant. The change in fair value of these contracts is recorded into earnings as a component of other income (expense), net and offsets the change in fair value of foreign currency denominated monetary assets and liabilities, which is also recorded in other income (expense), net. As of March 31, 2014, we had one outstanding forward contract with a notional amount of \$7.5 million. The foreign currency exchange rate movement of plus-or-minus \$0.8 million.

#### **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 March 31, 2014, in connection with the filing of this Quarterly Report on Form 10-Q. Based on that evaluation as of March 31, 2014, 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 March 31, 2014, 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 March 31, 2014.

# Item 1A. Risk Factors

Item 1A, "Risk Factors," on pages 11 through 17 of the Company's Annual Report on Form 10-K for the year ended December 31, 2013, 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

The table below sets forth the information with respect to purchases made by or on behalf of the Company or any "affiliated purchaser" (as the term is defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934) of our common stock during the three months March 31, 2014 (in thousands except per share amounts):

# ISSUER PURCHASES OF EQUITY SECURITIES

	Total Number of Shares Purchased		verage ce Paid	Total Number of Shares Purchased as Part of Publicly Announced Programs	T Va Sha Maj Pu	roximate Dollar Ilue of .res that y Yet Be rchased Jnder
Period	(1)	Per Share		(1)	Programs(1)	
Month #1 (January 1, 2014 through January 31, 2014)		\$	_		\$	19,522
Month #2 (February 1, 2014 through February 28, 2014)		\$	—	—	\$	19,522
Month #3 (March 1, 2014 through March 31, 2014)	170	\$	18.40	170	\$	16,392
Total	170	\$	18.40	170		

(1) On November 8, 2012, the Board of Directors adopted a 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 March 31, 2014, 206,200 shares had been repurchased at the average price of \$17.50 per share under this new program, a total purchase price of \$3.6 million and \$16.4 million remained for future repurchases.

# Item 3. Defaults Upon Senior Securities

None.

# Item 4. Mine Safety Disclosures

None.

# Item 5. Other Information

None.

# Item 6. Exhibits

Exhibit Number	Description
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: May 7, 2014	By: /s/ JOHN K. KIBARIAN John K. Kibarian President and Chief Executive Officer (principal executive officer)
Date: May 7, 2014	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

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

# 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)

# 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 March 31, 2014 as filed with the Securities and Exchange Commission on May 7, 2014 (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)

# 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 March 31, 2014 as filed with the Securities and Exchange Commission on May 7, 2014 (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)