PDF SOLUTIONS INC Form 10-Q August 03, 2015

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

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 June 30, 2015

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)

Delaware25-1701361(State or Other Jurisdiction of<br/>Incorporation or Organization)(I.R.S. Employer<br/>Identification No.)

333 West San Carlos Street, Suite 1000San Jose, California95110(Address of Principal Executive Offices)(Zip Code)

(408) 280-7900

(Registrant's Telephone Number, Including Area Code)

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

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

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

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

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

The number of shares outstanding of the Registrant's Common Stock as of July 30, 2015 was 31,623,351.

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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)

	June 30,	December 31,
	2015	2014
ASSETS		
Current assets:		
Cash and cash equivalents	\$131,699	\$115,464
Accounts receivable, net of allowance of \$299 and \$381, respectively	30,946	37,725
Deferred tax assets - current portion	2,994	3,343
Prepaid expenses and other current assets	5,003	2,888
Total current assets	170,642	159,420
Property and equipment, net	10,356	8,832
Deferred tax assets - non-current portion	7,351	8,025
Other non-current assets	3,460	
Total assets	\$191,809	\$177,438
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$1,898	\$803
Accrued compensation and related benefits	4,524	6,112
Accrued and other current liabilities	2,073	1,733
Deferred revenues – current portion	5,647	3,740
Total current liabilities	14,142	12,388
Non-current liabilities	2,886	3,227
Total liabilities	17,028	15,615
Commitments and contingencies (Note 9)		
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 37,148 and 36,258, respectively; shares outstanding 31,623 and 31,116, respectively	5	5

Additional paid-in-capital	260,801	248,734
Treasury stock at cost, 5,525 and 5,142 shares, respectively	(40,671)	(34,048)
Accumulated deficit	(44,071)	(52,187)
Accumulated other comprehensive loss	(1,283)	(681)
Total stockholders' equity	174,781	161,823
Total liabilities and stockholders' equity	\$191,809	\$177,438

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

# PDF SOLUTIONS, INC.

## CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

# (unaudited)

# (in thousands, except per share amounts)

	Three Months Ended June 30, 2015 2014		Six Mon Ended Ju 2015	
Revenues: Design-to-silicon-yield solutions Gainshare performance incentives Total revenues	\$14,159 9,051 23,210	\$13,091 11,519 24,610	\$32,311 17,716 50,027	\$28,010 23,686 51,696
Costs of Design-to-silicon-yield solutions Gross profit	9,888 13,322	8,847 15,763	18,692 31,335	18,552 33,144
Operating expenses: Research and development Selling, general and administrative Amortization of other acquired intangible assets Restructuring charges Total operating expenses Income from operations Interest and other income (expense), net Income before income taxes Income tax provision Net income	4,437 5,216  9,653 3,669 52 3,721 1,572 \$2,149	3,337 4,661 12  8,010 7,753 (27) 7,726 3,030 \$4,696	8,525 9,672  18,197 13,138 103 13,241 5,125 \$8,116	6,933 8,990 30 57 16,010 17,134 (114) 17,020 6,069 \$10,951
Net income per share: Basic Diluted	\$0.07 \$0.07	\$0.15 \$0.15	\$0.26 \$0.25	\$0.36 \$0.34
Weighted average common shares: Basic Diluted	31,522 32,400	30,590 31,882	31,429 32,345	30,533 31,923
Net income Other comprehensive income: Foreign currency translation adjustments, net of tax Comprehensive income	\$2,149 146 \$2,295	\$4,696 (89) \$4,607	\$8,116 (602) \$7,514	\$10,951 (141) \$10,810

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

# PDF SOLUTIONS, INC.

# CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

# (unaudited)

# (in thousands)

## Six Months Ended

	June 30, 2015	2014
Operating activities:	¢0.116	¢ 10.051
Net income	\$8,116	\$10,951
Adjustments to reconcile net income to net cash provided by operating activities:	1 007	0.40
Depreciation and amortization	1,237	940
Stock-based compensation expense	4,554	4,034
Amortization of acquired intangible assets		30
Deferred taxes	997	2,224
Loss (gain) on disposal of property and equipment	3	(93)
Tax withholdings related to net share settlements of restricted stock awards and units	(1,052	, , ,
Reversal of allowance for doubtful accounts	(82	) (28 )
Unrealized loss (gain) on foreign currency forward contract	3	(23)
Tax benefit related to stock-based compensation expense	2,094	,
Excess tax benefit from stock-based compensation	(1,980	) (1,543 )
Changes in operating assets and liabilities:		
Accounts receivable	6,861	4,183
Prepaid expenses and other assets	(4,428	) (1,658 )
Accounts payable	(39	) (321 )
Accrued compensation and related benefits	(1,521	) (1,660 )
Accrued and other liabilities	256	(649)
Deferred revenues	1,774	1,380
Billings in excess of recognized revenues		(215)
Net cash provided by operating activities	16,793	18,354
Investing activities:		
Purchases of property and equipment	(2,388	) (1,946 )
Proceeds from the sales of property and equipment		135
Net cash used in investing activities	(2,388	) (1,811 )
Financing activities:		
Proceeds from exercise of stock options	4,764	2,398
Proceeds from employee stock purchase plan	680	632
Excess tax benefit from stock-based compensation	1,980	1,543
Purchases of treasury stock	-	) (3,566 )
Net cash provided by financing activities	1,853	1,007
Effect of exchange rate changes on cash and cash equivalents	(23	) (12 )
Net change in cash and cash equivalents	16,235	17,538
	10,200	1,000

Cash and cash equivalents, beginning of period	115,464	89,371
Cash and cash equivalents, end of period	\$131,699	\$106,909
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Taxes	\$3,920	\$2,702
Property and equipment received and accrued in accounts payable and accrued and other		
liabilities	\$582	\$788
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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 and notes thereto in the Company's Annual Report on Form 10-K for the year ended December 31, 2014.

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, 2014, 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-yield solutions revenue from fixed-price solution implementation service contracts delivered over a specific period of time. These contracts require reliable estimation of costs to perform obligations and the overall scope of each engagement. Revenue under project-based contracts for solution implementation services is recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting. Losses on fixed-price solution implementation contracts are recognized in the period when they become probable. Revisions in profit estimates are reflected in the period in which the conditions that require the revisions become known and can be estimated. Revenue under time and materials contracts for solution implementation services are recognized as the services are performed. On occasion, the Company licenses its software products as a component of its fixed-price service contracts. In such instances, the software products are licensed to customers over a specified term of the agreement with support and maintenance to be provided at each customer's option over the license term. The amount of product and service revenue recognized in a given period is affected by the Company's judgment as to whether an arrangement includes multiple deliverables and, if so, the Company's determination of the fair value of each deliverable. In general, vendor-specific objective evidence of selling price ("VSOE") does not exist for the Company's solution implementation services and software products and because the Company's services and products include our unique technology, the Company is not able to determine third-party evidence of selling price ("TPE"). Therefore, in such circumstances the Company uses best estimated selling prices ("BESP") in the allocation of arrangement consideration. In determining BESP, the Company applies significant judgment as the Company's weighs a variety of factors, based on the facts and circumstances of the arrangement. The Company typically arrives at BESP for a product or service that is not sold separately by considering company-specific factors such as geographies, internal costs, gross margin objectives, pricing practices used to establish bundled pricing, and existing portfolio pricing and discounting. After fair value is established for each deliverable, the total transaction amount is allocated to each deliverable based upon its relative fair value. Fees allocated to solution implementation services are recognized using the cost-to-cost percentage of completion method of contract accounting. Fees allocated to software and related support and maintenance are recognized under software revenue recognition guidance. The Company defers certain pre-contract costs incurred for specific anticipated contracts. Deferred costs consist primarily of direct costs to provide solution implementation services in relation to the specific anticipated contracts. The Company recognizes such costs as a component of cost of revenues, the timing of which is dependent upon persuasive evidence of contract arrangement assuming all other revenue recognition criteria are met. At the end of reporting period, the Company evaluates its deferred costs for their probable recoverability. The Company recognizes impairment of deferred costs when it is determined that the costs no longer have future benefits and are no longer recoverable.

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 May 2014, the Financial Accounting Standard Board ("FASB") issued ASU No. 2014-09, "Revenue from Contracts with Customers". The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration for which the entity expects to be entitled in exchange for those goods or services. The updated standard will replace existing revenue recognition guidance under GAAP when it becomes effective. Early adoption is not permitted. The updated standard would be effective for the Company beginning January 1, 2017. In July 2015, the FASB approved a one-year deferral of the effective date of ASU No. 2014-09. We can elect to adopt the provisions of ASU No. 2014-09 for annual periods beginning after December 15, 2017, including interim periods within that reporting period. The FASB also agreed to allow entities to choose to adopt the standard as of the original effective date. We are currently assessing the adoption date and potential impact of adopting this ASU on our financial statements and related disclosures.

In August 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-15, "Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern". The new standard provides guidance around management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on our financial statements.

In April 2015, the FASB issued ASU No. 2015-05, "Intangibles - Goodwill and Other Internal-Use Software". The amendments in this update provide guidance to customers about whether a cloud computing arrangement includes a software license, and if so, how the software license element of the arrangement should be accounted for by the customer. The new standard is effective for annual period ending after December 15, 2015, and all reporting periods thereafter. The adoption of this standard is not expected to have a material impact on our 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 \$10.2 million and \$9.7 million as of June 30, 2015, and December 31, 2014, respectively.

Property and equipment consists of (in thousands):

	June 30,	December 31,
	2015	2014
Property and equipment, net:		
Computer equipment	\$8,387	\$9,817
Software	1,608	3,369
Furniture, fixtures and equipment	760	756
Leasehold improvements	1,138	1,127
Test equipment	6,923	6,401
Construction-in-progress	3,856	2,405
	22,672	23,875
Less: accumulated depreciation	(12,316)	(15,043)
Total	\$10,356	\$ 8,832

Depreciation and amortization expense was \$0.6 million and \$0.5 million for the three months ended June 30, 2015 and 2014, respectively. Depreciation and amortization expense was \$1.2 million and \$0.9 million for the six months ended June 30, 2015 and 2014, respectively.

## 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):

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	Three Months		Six Months	
	Ended June 30,		Ended June 30,	
	2015	2014	2015	2014
Cost of design-to-silicon yield-solutions	\$914	\$797	\$1,801	\$1,520
Research and development	510	434	1,001	805
Selling, general and administrative	931	1,143	1,752	1,709
Stock-based compensation expenses	\$2,355	\$2,374	\$4,554	\$4,034

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On June 30, 2015, the Company had 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 first 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 and then subsequently amended at the 2014 annual meeting of stockholders on May 27, 2014, when the Company's stockholders approved the Second Amended and Restated 2011 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 6,550,000 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.

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.

The Company estimated the fair value of share-based awards granted under the Stock Plan 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:

	Three Months		Six Months	
	Ended June 30,		June Ended June 30,	
	2015	2014	2015	2014
Expected life (in years)	4.51	4.58	4.51	4.58
Volatility	46.8%	42.3%	46.7%	42.7%
Risk-free interest rate	1.41%	1.47%	1.34%	1.50%
Expected dividend				
Weighted average fair value per share of options granted during the period	\$6.61	\$7.15	\$6.50	\$7.39

As of June 30, 2015, 7.0 million shares of common stock were reserved to cover stock-based awards under the 2011 Plan, of which 3.2 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 June 30, 2015. As of June 30, 2015, 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 six months ended June 30, 2015, was as follows:

Number of	Weighted	Weighted	Aggregate
Options	Average	Average	Intrinsic
(in	Exercise	Remaining	Value

	thousands)	Price	Contractual	(in
		per Share	Term	thousands)
			(years)	
Outstanding, January 1, 2015	2,352	\$ 7.65		
Granted (weighted average fair value of \$6.50 per share)	26	\$ 16.32		
Exercised	(614	) \$ 7.76		
Canceled	(14	) \$ 11.85		
Expired	(2	) \$ 8.70		
Outstanding, June 30, 2015	1,748	\$ 7.71	5.49	\$ 14,665
Vested and expected to vest, June 30, 2015	1,736	\$ 7.67	5.47	\$ 14,614
Exercisable, June 30, 2015	1,462	\$ 7.11	5.13	\$ 13,036

The aggregate intrinsic value in the table above represents the total intrinsic value based on the Company's closing stock price of \$16 per share as of June 30, 2015. The total intrinsic value of options exercised during the six months ended June 30, 2015, was \$6.0 million.

As of June 30, 2015, there was \$1.3 million of total unrecognized compensation cost related to unvested stock options. That cost is expected to be recognized over a weighted average period of 1.3 years. The total fair value of shares vested during the six months ended June 30, 2015, was \$0.9 million.

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Nonvested restricted stock units activity during the six months ended June 30, 2015, was as follows:

#### Weighted

		Average
	Shares	Grant
	(in	Date
	thousands)	Fair Value
		Per
		Share
Nonvested, January 1, 2015	941	\$ 17.38
Granted	653	\$ 16.47
Vested	(225)	\$ 15.56
Forfeited	(29)	\$ 17.73
Nonvested, June 30, 2015	1,340	\$ 17.24

As of June 30, 2015, there was \$19.9 million of total unrecognized compensation cost related to nonvested restricted stock units. That cost is expected to be recognized over a weighted average period of 3.0 years.

*Employee Stock Purchase Plan* — In July 2001, the Company adopted a ten-year Employee Stock Purchase Plan (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, 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.

The Company estimated the fair value of purchase rights granted under the Purchase Plan 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:

	Ended Ju	ıne 30,
	2015	2014
Expected life (in years)	1.25	1.25
Volatility	54.21%	34.6%
Risk-free interest rate	0.26 %	0.18%
Expected dividend		
Weighted average fair value of purchase rights granted under the Purchase Plan	\$6.19	\$7.18

During the three months ended June 30, 2015 and 2014, the Company did not issue any shares under the Purchase Plan. During the six months ended June 30, 2015 and 2014, a total of 51,000 and 52,000 shares, respectively, were issued at a weighted-average purchase price of \$13.32 and \$12.10 per share, respectively, under the Purchase Plan. For the three-month periods ended June 30, 2015 and 2014, the Purchase Plan compensation expense was both \$0.1 million. For the six-month periods ended June 30, 2015 and 2014, the Purchase Plan compensation expense was \$0.3 million and \$0.3 million, respectively. As of June 30, 2015, there was \$1.1 million of unrecognized compensation cost related to the Purchase Plan. That cost is expected to be recognized over a weighted average period of 1.6 years. As of June 30, 2015, 2.8 million shares were available for future issuance under the Purchase Plan.

*Stock Repurchase Program* —On October 21, 2014, the Board of Directors adopted a program, effective immediately, to repurchase up to \$25.0 million of the Company's common stock both on the open market and in privately negotiated transactions over the next two years. During the six months ended June 30, 2015, the Company repurchased 319,712 shares under this program. As of June 30, 2015, 319,712 shares had been repurchased at an average price of \$17.43 per share under this program for a total purchase of \$5.6 million, and \$19.4 million remained available for future repurchases.

# **5. INCOME TAXES**

Income tax provision decreased \$1.0 million for the six months ended June 30, 2015, to \$5.1 million as compared to an income tax provision of \$6.1 million for the six months ended June 30, 2014. The Company's effective tax rate was 38.7% and 35.7% for the six months ended June 30, 2015, and June 30, 2014, respectively. The Company's effective tax rate increased in the six months ended June 30, 2015, as compared to the same period in 2014, primarily due to the lower reversals of certain unrecognized tax benefits upon statute of limitation lapses and unfavorable changes to New York State Tax apportionment rules. The income tax provision for the six months ended June 30, 2015 was higher than the provision at the statutory rate primarily due to foreign and state taxes and changes in unrecognized tax benefits.

The Company's total amount of unrecognized tax benefits, excluding interest and penalties, as of June 30, 2015, was \$10.4 million, of which \$6.2 million, if recognized, would decrease the Company's effective tax rate. The Company's total amount of unrecognized tax benefits, excluding interest and penalties, as of December 31, 2014, was \$10.4 million, of which \$6.3 million, if recognized, would affect the Company's effective tax rate. As of June 30, 2015, the Company has recorded unrecognized tax benefits of \$2.4 million, including interest and penalties, as long-term taxes payable in its condensed consolidated balance sheet. The remaining \$8.4 million has been recorded net of our deferred tax assets, of which \$4.3 million is subject to a full valuation allowance.

As of June 30, 2015, the Company believes that 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 June 30, 2015, 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.

## 6. 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		Six Months	
	Ended June 30, 2015 2014		Ended June 30, 2015 2014	
Numerator:				
Net income	\$2,149	\$4,696	\$8,116	\$10,951
Denominator:				
Basic weighted average common shares outstanding	31,522	30,590	31,429	30,533
Dilutive effect of equity incentive plans	878	1,292	916	1,390
Diluted weighted average common shares outstanding	32,400	31,882	32,345	31,923
Net income per share:				
Basic	\$0.07	\$0.15	\$0.26	\$0.36
Diluted	\$0.07	\$0.15	\$0.25	\$0.34

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

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2015	2014	2015	2014
Outstanding options	58	52	52	22
Nonvested restricted stock units	62	173	64	2
Employee Stock Purchase Plan	215	43	239	46
Total	335	268	355	70

# 7. 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 Six Months Months Ended June 30,

	Endeo June 3					
Customer	2015	2014		2015	2014	
А	54%	50	%	49%	48	%
В	16%	14	%	13%	16	%
С	*	11	%	17%	12	%

\* represents less than 10%

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

Customer	20	e Decem 31,		nber
	2015	5	2014	
А	43	%	51	%
В	25	%	21	%

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

<b>Three Months</b>	Ended June 30,	
2015	2014	
Perce	entage	Percentage

	Revenuesof			Revenue	sof	
		Revenues			Revenues	
United States	\$11,436	49	%	\$10,153	41	%
Germany	6,345	27		9,034	37	
South Korea	627	3		1,242	5	
Rest of the world	4,802	21		4,181	17	
Total revenue	\$23,210	100	%	\$24,610	100	%

Six Months E	nded June 30,	
2015	2014	
Perc	centage	Percentage

		Revenues		Revenues	
United States	\$21,750	43	% \$21,551	42	%
Germany	12,609	25	18,134	35	
South Korea	7,545	15	3,502	7	
Rest of the world	8,123	17	8,509	16	
Total revenue	\$50,027	100	% \$51,696	100	%

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

	June	December	
	30,	31,	
	2015	2014	
United States	\$9,750	\$ 8,240	
Rest of the world	606	592	
Total long-lived assets, net	\$10,356	\$ 8,832	

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

Level Inputs are quoted prices for similar assets or liabilities in an active market, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable and market-corroborated inputs which are derived principally from or corroborated by observable market data.

Level Inputs are derived from valuation techniques in which one or more significant inputs or value drivers are 3 - unobservable.

The following table represents the Company's assets measured at fair value on a recurring basis as of June 30, 2015, and the basis for that measurement (in thousands):

Assets	Total	Quoted	Significant	Significant
		Prices	Other	Unobservable

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in
Observable

Inputs

Active

Inputs

(Level 3)

Markets

(Level 2)

for

Identical

Assets

Money market mutual funds

\$26,361

\$ — \$ — \$ —

The following table represents the Company's assets measured at fair value on a recurring basis as of December 31, 2014, and the basis for that measurement (in thousands):

		Quoted			
		Prices			
		in	Significant	Significant	
		Active	Other	Unobservable	
Assets	Total	Markets	Observable	Inputs	
		for	Inputs	(Level 3)	
		Identical	(Level 2)		
		Assets			
Money market mutual funds	\$26,356	( <b>Level 1</b> ) \$26,356	\$ —	- \$	

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 June 30, 2015 and 2014, the Company recognized a realized gain of \$0.1 million on the contracts, respectively, which was recorded in other income (expense), net in the Company's Statement of Operations and Comprehensive Income. For the six months ended June 30, 2015 and 2014, 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 June 30, 2015, the Company had one outstanding forward contract with a notional amount of \$6.9 million and recorded \$53,000 other current liabilities and an unrealized loss of \$53,000 associated with this outstanding forward contract. As of December 31, 2014, the Company had one outstanding forward contract with a notional amount of \$6.7 million and had recorded \$50,000 other current liabilities and an unrealized loss of \$50,000 associated with the outstanding forward contract.

## 9. 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 both \$0.5 million for the three months ended June 30, 2015 and 2014. Rent expense was both \$1.0 million for the six months ended June 30, 2015 and 2014.

Future minimum lease payments under noncancelable operating leases at June 30, 2015, are as follows (in thousands):

Year Ending December 31,	Amount
2015 (remaining six months)	\$ 924
2016	1,780
2017	1,426
2018	808
2019	73
Thereafter	81
Total future minimum lease payments	\$ 5,092

*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 June 30, 2015.

# **10. SUBSEQUENT EVENT – ACQUISITON OF SYNTRICITY**

On July 17, 2015, the Company completed its acquisition of Syntricity, Inc. ("Syntricity"), a provider of a hosted solution for characterization and yield management, pursuant to an Agreement and Plan of Merger dated July 9, 2015 between the Company and Syntricity. The Company believes that the acquisition should further enhance its ability to deliver its software products across a broader customer base. The aggregate consideration for the acquisition consisted of (i) \$5.0 million in cash, \$750,000 of which will be held in escrow and subject to certain working capital and indemnity adjustments and (ii) up to an additional \$2.5 million in post-closing earnout payments.

The Company will account for the acquisition of Syntricity using the acquisition method as required in ASC 805, Business Combinations. Based on the acquisition method of accounting, the consideration will be allocated to the assets and liabilities acquired based on their fair values as of the acquisition date. Any remaining amount of the purchase price allocation will be recorded as goodwill. The goodwill is expected to represent business benefits the Company anticipates realizing from optimizing resources and cross-sale opportunities and is not expected to be deductible for tax purposes. The Company is reviewing information surrounding the determination of the fair values of assets acquired and liabilities assumed.

#### 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 similar expressions. Any statement concerning future financial performance (including future revenues, earnings or growth rates), ongoing business strategies or prospects, and possible actions taken by us or our subsidiaries, which may be provided by us are also forward-looking statements. These forward-looking statements are only predictions. Forward-looking statements are based on current expectations and projections about future events and are inherently subject to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those anticipated or projected. All forward-looking statements included in this document are based on information available to us on the date of filing and we further caution investors that our business and financial performance are subject to substantial risks and uncertainties. We assume no obligation to update any such forward-looking statements. In evaluating these statements, you should specifically consider various factors, including the risk factors set forth in Item 1A of this Quarterly Report on Form 10-Q. 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 customer's 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.

#### **Recent Development**

On July 17, 2015, we completed our acquisition of Syntricity, Inc. ("Syntricity"), a provider of a hosted solution for characterization and yield management, pursuant to an Agreement and Plan of Merger dated July 9, 2015 between us and Syntricity. We believe that the acquisition should further enhance our ability to deliver our software products across a broader customer base. The aggregate consideration for the acquisition consisted of (i) \$5.0 million in cash, \$750,000 of which will be held in escrow and subject to certain working capital and indemnity adjustments and (ii) up to an additional \$2.5 million in post-closing earnout payments.

## **Industry Trend**

Consistent with the trend since 2010, we believe that the largest logic foundries will continue significant investments in leading edge nodes and capacity in 2015. Leading foundries continue to invest in new technologies such as multi-patterned lithography and 3-D transistor architecture, which provide opportunities to increase our business.

The capacity utilization on 28nm, however, has declined during the first half of 2015 according to the foundry volume leader. We believe that it could remain low through the second half of 2015 as well, which would have a negative impact on our revenues.

Generally, the demand for consumer electronics and communications devices continues to drive technological innovation in the semiconductor industry as the need for products with greater performance, lower power consumption, reduced costs and smaller size continues to grow with each new product generation. In addition, advances in computing systems and mobile devices have fueled demand for higher capacity memory chips. To meet these demands, IC manufacturers and designers are constantly challenged to improve the overall performance of their ICs by designing and manufacturing ICs with more embedded applications to create greater functionality while lowering cost per transistor. As a result, both logic and memory manufacturers have migrated to more and more advanced manufacturing nodes, capable of integrating more devices with higher performance, higher density, and lower power. As this trend continues, companies will continually be challenged to improve process capabilities to optimally produce ICs with minimal random and systematic yield loss, which is driven by the lack of compatibility between the design and its respective manufacturing process. We believe that as volume production of 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 9 of our Annual Report on Form 10-K for the year ended December 31, 2014, and in Item 1A, "Risk Factors," on pages 24 through 30 of our Quarterly Report on Form 10-Q for the three months ended March 31, 2105, for related information on the risks associated with customer concentration and Gainshare performance incentives revenue.

## **Financial Highlights**

Financial highlights for the three months ended June 30, 2015, were as follows:

Total revenues for the three months ended June 30, 2015, were \$23.2 million, a decrease of \$1.4 million, or 6%, compared to \$24.6 million for the three months ended June 30, 2014. Design-to-silicon-yield solutions revenue for the three months ended June 30, 2015, was \$14.2 million, an increase of \$1.1 million, or 8%, when compared to Design-to-silicon yield solutions revenue of \$13.1 million for the three months ended June 30, 2014. Gainshare performance incentives revenue for the three months ended June 30, 2015, was \$9.1 million, a decrease of \$2.4 million, or 21%, compared to \$11.5 million for the three months ended June 30, 2014. The decrease in revenue from Gainshare performance incentives was primarily the result of lower net volumes reported at older nodes, primarily related to 32nm and 28nm engagements.

Net income for the three months ended June 30, 2015, was \$2.1 million, compared to \$4.7 million for the three months ended June 30, 2014. The decrease in net income was primarily attributable to a decrease in gross margin of \$2.4 million and an increase in operating expense of \$1.6 million, offset by a decrease in income tax provision of \$1.5 million. The decrease in gross margin is primarily due to lower total revenues and higher cost of design-to-silicon yield solutions during the period. The decrease in income tax provision of \$1.5 million was primarily due to a decrease in level of operating income.

•Net income per basic and diluted share was \$0.07 for the three months ended June 30, 2015, compared to net income per basic and diluted share of \$0.15, for the three months ended June 30, 2014.

Cash and cash equivalents increased \$16.2 million from \$115.5 million at December 31, 2014, to \$131.7 million at •June 30, 2015, primarily due to an increase in cash from operating and financing activities during the period, offset by a decrease in cash from investing activities.

Financial highlights for the six months ended June 30, 2015, were as follows:

•Total revenues for the six months ended June 30, 2015, were \$50.0 million, a decrease of \$1.7 million, or 3%, compared to \$51.7 million for the six months ended June 30, 2014. Design-to-silicon-yield solutions revenue for the six months ended June 30, 2015, was \$32.3 million, an increase of \$4.3 million, or 15%, when compared to Design-to-silicon yield solutions revenue of \$28.0 million for the six months ended June 30, 2014. The increase in Design-to-silicon yield solutions revenue was primarily the result of recognizing \$6.0 million in revenue upon signing of two contracts with one customer, offset by the wind down of several older engagements across multiple nodes not being fully offset yet by the ramp up of newer 20nm and 14nm engagements. Gainshare performance incentives revenue for the six months ended June 30, 2015, was \$17.7 million, a decrease of \$6.0 million, or 25%, compared to \$23.7 million for the six months ended June 30, 2014. The decrease in revenue from Gainshare

performance incentives was primarily the result of lower net volumes reported at older nodes, primarily related to 32nm and 28nm engagements.

Net income for the six months ended June 30, 2015, was \$8.1 million, compared to \$11.0 million for the six months ended June 30, 2014. The decrease in net income was primarily attributable to a decrease in gross margin of \$1.8 million and an increase in operating expense of \$2.2 million, offset by a decrease in income tax provision of \$0.9 million. The decrease in gross margin was primarily due to a decrease in revenues from Gainshare performance incentives not fully offset by a corresponding decrease in direct cost of design-to-silicon yield solutions. The decrease in income tax provision of \$0.9 million was primarily due to a decrease in level of operating income.

Net income per basic and diluted share was \$0.26 and \$0.25, respectively, for the six months ended June 30, 2015 • compared to net income per basic and diluted share of \$0.36 and \$0.34, respectively, for the six months ended June 30, 2014, a decrease of \$0.10 and \$0.09 per basic and diluted share, respectively.

# **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, 2014. The following is a brief discussion of the more significant accounting policies and methods that we use.

## General

Our discussion and analysis of our financial conditions, results of operations and cash flows are based on our consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Our preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We based our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. The most significant estimates and assumptions relate to revenue recognition, stock-based compensation and the realization of deferred tax assets. Actual amounts may differ from such estimates under different assumptions or conditions.

#### **Revenue Recognition**

We derive revenue from two sources: Design-to-silicon-yield solutions, which include services and software licenses, and Gainshare performance incentives.

Design-to-Silicon-Yield Solutions — Revenue that is derived from Design-to-silicon-yield solutions comes from services and software licenses. We recognize revenue for Design-to-silicon-yield solutions as follows:

We generate a significant portion of our Design-to-silicon-yield solutions revenue from fixed-price solution implementation service contracts delivered over a specific period of time. These contracts require reliable estimation of costs to perform obligations and the overall scope of each engagement. Revenue under project-based contracts for solution implementation services is recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting. Losses on solution implementation contracts are recognized in the period when they become probable. Revisions in profit estimates are reflected in the period in which the conditions that require the revisions become known and can be estimated. If we do not accurately estimate the resources required or the scope of work to be performed, or do not manage the projects properly within the planned period of time or satisfy our obligations under contracts, resulting contract margins could be materially different than those anticipated when the contracts were executed. Any such reductions in contract margin could have a material negative impact on our operating results. Revenue under certain time and materials contracts for solution implementation services is recognized as the services are performed.

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

We also license our software products separately from our solution implementation services. For software license arrangements that do not require significant modification or customization of the underlying software, software license revenue is recognized under the residual method when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred, (3) the fee is fixed or determinable, (4) collectability is probable, and (5) the arrangement does not require services that are essential to the functionality of the software. When arrangements include multiple elements such as support and maintenance, consulting (other than for our fixed price solution implementations), installation, and training, revenue is allocated to each element of a transaction based upon its fair value as determined by our VSOE and such services are recorded as services revenues. VSOE for maintenance is generally established based upon negotiated renewal rates while VSOE for consulting, installation, and training services is established based upon our customary pricing for such services when sold separately. Revenues for software licenses with extended payment terms are not recognized in excess of amounts due. For software license arrangements that require significant modification or customization of the underlying software, the software license revenues are recognized as services are performed using the cost-to-cost percentage of completion method of contract accounting, and such revenues are recorded as services revenue. We defer certain pre-contract costs incurred for specific anticipated contracts. Deferred costs consist primarily of direct costs to provide solution implementation services in relation to the specific anticipated contracts. We recognize such costs as a component of cost of revenues, the timing of which is dependent upon the revenue recognition policy by contract. At the end of reporting period, we evaluate our deferred costs for their probable recoverability. We recognize impairment of deferred costs when it is determined that the costs no longer have future benefits and are no longer recoverable.

Gainshare Performance Incentives — When we enter into a contract to provide yield improvement services, the contract usually includes two components: (1) a fixed fee for performance by us of services delivered over a specific period of time; and (2) a Gainshare performance incentives component where the customer may pay a contingent variable fee, usually after the fixed fee period has ended. Revenues derived from Gainshare performance incentives represent profit sharing and performance incentives earned contingent upon our customers reaching certain defined operational levels established in related solution implementation service contracts. Gainshare performance incentives periods are usually subsequent to the delivery of all contractual services and therefore have no cost to us. Due to the uncertainties surrounding attainment of such operational levels, we recognize Gainshare performance incentives revenues (to the extent of completion of the related solution implementation services) upon receipt of performance reports or other related information from our customers supporting the determination of amounts and probability of collection. Gainshare performance incentives revenue is dependent on many factors which are outside our control, which can include among others, continued production of the related ICs by our customers, sustained yield improvements by our customers, and our ability to enter into new Design-to-silicon-yield solutions contracts containing provisions for Gainshare performance incentives.

## **Stock-Based Compensation**

Stock-based compensation is estimated at the grant date based on the award's fair value and is recognized on a straight-line basis over the vesting periods, generally four years. As stock-based compensation expense recognized is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

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

## Income Taxes

We are required to assess the likelihood that our deferred tax assets will be recovered from future taxable income and if we believe that they are not likely to be realizable before the expiration dates applicable to such assets then, to the extent we believe that recovery is not likely, establish a valuation allowance. Changes in the net deferred tax assets, less offsetting valuation allowance, in a period are recorded through the income tax provision in the condensed consolidated statements of operations. As of June 30, 2015, 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 June 30, 2015, the excess California R&D tax credits continue to be subject to a full valuation allowance. See Note 5 to the condensed consolidated financial statements for further disclosures regarding our income taxes. If 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 Month Ended		Six Months Ended		
	June 3	0.	June 30,		
	2015	2014	2015	2014	
Revenues:					
Design-to-silicon-yield solutions	61 %	53 %	65 %	54 %	
Gainshare performance incentives	39	47	35	46	
Total revenues	100%	100 %	100%	100 %	
Costs of design-to-silicon-yield solutions	43	36	37	36	
Gross profit	57	64	63	64	
Operating expenses:					
Research and development	19	14	17	13	
Selling, general and administrative	22	19	20	18	
Amoritization of other acquired intangible assets					
Restructuring changes					
Total operating expenses	41	33	37	31	
Income from operations	16	31	26	33	
Interest and other income (expense), net			—		
Income before taxes	16	31	26	33	
Income tax provision	7	12	10	12	
Net income	9 %	19 %	16 %	21 %	

## Comparison of the Three Months Ended June 30, 2015 and 2014

Three Mo Ended	onths	\$	%
June 30,			
2015	2014	Change	Change

Revenues

(in thousands, except for percentages)					
Design-to-silicon-yield solutions	\$14,159	\$13,091	\$1,068	8	%
Gainshare performance incentives	9,051	11,519	(2,468)	(21	)%
Total revenues	\$23,210	\$24,610	(1,400)	(6	)%

*Design-to-silicon-yield solutions.* Design-to-silicon-yield solutions revenue is derived from services (including solution implementations, software support and maintenance, consulting, and training) and software licenses, provided during our customer yield improvement engagements as well as during solution product sales. Design-to-silicon-yield solutions revenue increased \$1.1 million for the three months ended June 30, 2015, compared to the three months ended June 30, 2014, primarily due to an increase in fixed fee integrated solutions, the result of more billable hours to revenue-generating projects in the period due to increased business activity. Our Design-to-silicon-yield solutions revenue may fluctuate in the future and is dependent on a number of factors, including the semiconductor industry's continued acceptance of our solutions, the timing of purchases by existing customers, and our ability to attract new customers and penetrate new markets including photovoltaic and LED, and further penetration of our current customer base. Fluctuations in future results may also occur if any of our significant customers renegotiate pre-existing contractual commitments due to adverse changes in their own business or, in the case of a time and materials contract, may take advantage of contractual provisions that permit the suspension of contracted work for a period if their business experiences a financial hardship.

*Gainshare Performance Incentives*. Gainshare performance incentives revenues represent profit sharing and performance incentives earned contingent upon our customers reaching certain defined operational levels. Revenue derived from Gainshare performance incentives decreased \$2.5 million for the three months ended June 30, 2015, compared to the three months ended June 30, 2014. The decrease was primarily the result of lower net volumes reported at older nodes, primarily related to 32nm and 28nm engagement.. 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 Months				
	Ended				
	June 30	),	\$	%	
Cost of Design-to-Silicon-Yield Solutions	2015	2014	Change	Change	e
(in thousands, except for percentages)					
Costs of Design-to-silicon-yield solutions	\$9,888	\$8,847	\$1,041	12	%

*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. Direct costs of Design-to-silicon-yield solutions for the three months ended June 30, 2015 increased \$1.0 million compared to the three months ended June 30, 2014, primarily due to a \$0.7 million increase in deferred cost, a \$0.1 million increase in subcontractor expense, a \$0.1 million increase in depreciation expense, a \$0.4 million increase in equipment cost, and a \$0.2 million increase in facility expense, offset by a \$0.2 million decrease in personnel-related expense due to lower headcount, partially as a result of resource realignment to research and development activities, lower variable compensation, somewhat offset by higher stock-based compensation expense, a \$0.3 million decrease in travel cost. The direct costs of Design-to-silicon-yield solutions as a percentage of revenues during the three months ended June 30, 2015 was 43% compared to 36% in the three months ended June 30, 2014.

	Three M Ended June 30		\$	%	
<b>Research and Development</b>	2015	2014	Change	Chang	e
(in thousands, except for percentages)					
Research and development	\$4,437	\$3,337	\$1,100	33	%

*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 \$1.1 million for the three months ended June 30, 2015, compared to the three months ended June 30, 2014, primarily due to a \$0.4 million increase in subcontractor expense and a \$0.6 million increase in personnel-related expense due to higher headcount, partially as a result of resource realighment and higher stock-based compensation 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 M Ended June 30		\$	%	
Selling, General and Administrative	2015	2014	Change	Change	e
(in thousands, except for percentages) Selling, general and administrative	\$5,216	\$4,661	\$ 555	12	%

*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 increased \$0.6 million for the three months ended June 30, 2015, compared to the three months ended June 30, 2014, primarily due to a \$0.2 million increase in subcontractor expense, a \$0.5 million increase in acquisition related costs, offset by a \$0.2 million decrease in personal-related expense, which was mainly due to decreased variable compensation and a decrease in stock based compensation expense. We anticipate our selling, general and administrative expenses will fluctuate in absolute dollars from period to period as a result of cost control initiatives and to support increased selling efforts in the future.

	Three		
	Months		
	Ended		
	June 30,	\$	%
Amortization of Other Acquired Intangible Assets	20152014	Change	Change
(In thousands, except for percentages)			
Amortization of other acquired intangible assets	\$-\$12	\$ (12 )	(100)%

*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. The acquired intangible assets were fully amortized as of June 30, 2014. No amortization of other acquired intangible assets was recorded during the three months ended June 30, 2015.

	Three		
	Months		
	Ended		
	June 30,	\$	%
Interest and Other Income (Expense), Net	2015 2014	Change	Change
(in thousands, except for percentages)			
Interest and other income (expense), net	\$52 \$(27)	\$ 79	(293)%

*Interest and Other Income (expense), net.* Interest and other income (expense), net increased \$79,000 for the three months ended June 30, 2015 compared to the three months ended June 30, 2014. The change was primarily due to foreign exchange rate movements. We anticipate interest and other income (expense) will fluctuate in future periods as a result of our projected use of cash and fluctuations of foreign exchange rates.

	Three <b>N</b> Ended	<b>Jonths</b>			
	June 30,		\$	%	
Income Tax Provision	2015	2014	Change	Change	•
(in thousands, except for percentages)					
Income tax provision	\$1,572	\$3,030	\$(1,458)	(48	)%

*Income Tax Provision.* Income tax provision decreased \$1.5 million for the three months ended June 30, 2015, compared to three months ended June 30, 2014, primarily due to a decrease in level of income.

## Comparison of the Six Months Ended June 30, 2015 and 2014

	Six Mont Ended	ths			
	June 30,		\$	%	
<u>Revenues</u>	2015	2014	Change	Chang	e
(In thousands, except for percentages)					
Design-to-silicon-yield solutions	\$32,311	\$28,010	\$4,301	15	%
Gainshare performance incentives	17,716	23,686	(5,970)	(25	)%
Total	\$50,027	\$51,696	\$(1,669)	(3	)%

*Design-to-Silicon-Yield Solutions*. Design-to-silicon-yield solutions revenue increased \$4.3 million for the six months ended June 30, 2015 compared to the six months ended June 30, 2014, primarily due to the result of recognizing \$6.0 million in revenue upon signing of the two contracts with one customer during the period, offset by the wind down of several older engagements across multiple notes. Our Design-to-silicon-yield solutions revenue may fluctuate in the future and are dependent on a number of factors, including the semiconductor industry's continued acceptance of our solutions, the timing of purchases by existing customers, and our ability to attract new customers and penetrate new markets including photovoltaic and LED, and further penetration of our current customer base. Fluctuations in future results may also occur if any of our significant customers renegotiate pre-existing contractual commitments due to adverse changes in their own businesses or, in the case of a time and materials contract, may take advantage of contractual provisions that permit the suspension of contracted work for a period if their business experiences a financial hardship.

*Gainshare Performance Incentives*. Revenue derived from gainshare performance incentives decreased \$6.0 million for the six months ended June 30, 2015 compared to the six months ended June 30, 2014. The decrease was primarily the result of lower wafer volumes reported at 32nm and 28nm nodes, only slightly offset by the introduction of new gainsahre revenue from a 20nm node. 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.

	Six Months					
	Ended					
	June 30,		\$	%		
Cost of Design-to-Silicon-Yield Solutions	2015	2014	Change	Change	e	
(In thousands, except for percentages)						
Cost of Design-to-Silicon-Yield Solutions	\$18,692	\$18,552	\$ 140	1	%	

*Costs of Design-to-Silicon-Yield Solutions.* Costs of Design-to-silicon-yield solutions increased \$0.1 million for the six months ended June 30, 2015 compared to the six months ended June 30, 2014. The increase was primarily due to a \$1.4 million increase in deferred cost due to timing of completion of the contract signature process, a \$0.2 million increase in subcontractor expense, a \$0.4 million increase in equipment related cost, and a \$0.2 million increase in depreciation expense related to our test equipment, offset by a \$1.3 million decrease in personnel-related expense due to lower headcount, partially as a result of resource realignment to research and development activities, lower variable compensation, somewhat offset by higher stock-based compensation expense, a \$0.5 million decrease in travel expense, and a \$0.2 million decrease in facility expense.

	Six Mo	nths			
	Ended				
	June 30,		\$	%	
<b>Research and Development</b>	2015	2014	Change	Chang	e
(In thousands, except for percentages)					
Research and development	\$8,525	\$6,933	\$1,592	23	%

*Research and Development*. Research and development expenses increased \$1.6 million for the six months ended June 30, 2015 compared to the six months ended June 30, 2014, primarily due to a \$0.7 million increase in personnel-related expense, a \$0.7 million increase in outside service expenses, a \$0.1 million increase in facility 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 and revenue generating activity requirements.

	Six Mor Ended				
	June 30	),	\$	%	
Selling, General and Administrative	2015	2014	Change	Chang	e
(In thousands, except for percentages)					
Selling, general and administrative	\$9,672	\$8,990	\$ 682	8	%

*Selling, General and Administrative.* Selling, general and administrative expenses increased \$0.7 million for the six months ended June 30, 2015 compared to the six months ended June 30, 2014, primarily due to a \$0.2 million increase in travel expense, a \$0.1 million in subcontractor expense, a \$0.1 million increase in facility expense, a \$0.1 million increase in legal and accounting expense, and a \$0.5 million increase in acquisition related cost, offset by a \$0.3 million decrease in personnel-related expense, which was mainly due to decreased variable compensation and a \$0.1 million decrease in provision for doubtful accounts.

	Six		
	Months		
	Ended		
	June 30,	\$	%
Amortization of Other Acquired Intangible Assets	20152014	Change	Change
(In thousands, except for percentages)			
Amortization of other acquired intangible assets	\$—\$30	\$ (30 )	(100)%

Amortization of other acquired intangible assets consists of amortization of intangibles acquired as a result of certain business combinations. The acquired intangible assets were fully amortized as of June 30, 2014. No amortization of other acquired intangible assets was recorded during the six months ended June 30, 2015.

	Six Months Ended June 30,	\$	%
<b>Restructuring Charges (Credits)</b>	20152014	Change	Change
(In thousands, except for percentages) Restructuring charges (credits)	\$—\$ 57	\$ (57 )	(100)%

*Restructuring Charges (Credits).* No restructuring charges was recorded during the six months ended June 30, 2015. For the six months ended June 30, 2014, we recorded restructuring charges of \$57,000, which represented severance charges related to the October 2012 Plan.

	Six M Endeo June 3	d	\$	%
Interest and Other Income (Expense), Net	2015	2014	Change	Change
(In thousands, except for percentages)				
Interest and other income (expense), net	\$103	\$(114)	\$ 217	(190)%

*Interest and Other Income (Expense), Net.* Interest and other income (expense) increased \$0.2 million for the six months ended June 30, 2015 compared to the six months ended June 30, 2014. The change was primarily due to foreign exchange rate movements. We anticipate interest and other income (expense), net will fluctuate in future periods as a result of our projected use of cash and fluctuations of foreign exchange rates.

	Six Mo	nths		
	Ended			
	June 30	),	\$	%
Income Tax Provision	2015	2014	Change	Change
(In thousands, except for percentages)				
Income tax provision	\$5,125	\$6,069	\$ (944 )	(16)%

*Income Tax Provision.* Income tax provision decreased \$0.9 million for the six months ended June 30, 2015 compared to six months ended June 30, 2014, primarily due to a decrease in level of income.

Liquidity and Capital Resources

#### **Operating Activities**

Cash flows provided by operating activities was \$16.8 million for the six months ended June 30, 2015. This resulted from net income of \$8.1 million, adjustment of \$5.8 million for non-cash charges and a cash increase of \$2.9 million reflected in the net change of operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of \$4.6 million, deferred taxes of \$1.0 million, tax benefit related to stock-based compensation plan of

\$2.1 million, depreciation and amortization of \$1.2 million, partially offset by excess tax benefit from stock-based compensation of \$2.0 million and tax withholdings related to net share settlements of restricted stock awards and units of \$1.0 million. Cash flow increases resulting from the net change in operating assets and liabilities primarily consisted of a \$6.9 million decrease in accounts receivable, primarily driven by strong collections, a \$1.8 million net increase in deferred revenue, offset by a \$1.5 million decrease in accrued compensation and related benefits, driven by the payment of variable compensation during the period, and a \$4.4 million decrease in prepaid expenses and other assets. The \$8.7 million combined cash flow increase resulting from the decrease in accounts receivable and the increase in deferred revenue was primarily due to the timing of billing milestones and payments received.

Cash flows provided by operating activities was \$18.4 million for the six months ended June 30, 2014. This resulted from net income of \$11.0 million, adjustment of \$6.3 million for non-cash charges and cash increase of \$1.1 million reflected in the net change of operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of \$4.0 million, deferred taxes of \$2.2 million, tax benefit related to stock-based compensation plan of \$1.7 million, depreciation and amortization of \$0.9 million, partially offset by excess tax benefit from stock-based compensation of \$1.5 million, purchases of treasury stock in connection with tax withholdings on restricted stock grants of \$0.9 million and gain on disposal of property and equipment of \$0.1 million. Cash flow increases resulting from the net change in operating assets and liabilities primarily consisted of \$4.2 million decrease in accounts receivable, primarily driven by strong collections, \$1.2 million net increase in deferred revenue and billing in excess of recognized revenue, offset by \$1.7 million increase in prepaid expense and other assets due to timing of prepayment of third party software cost, \$0.3 million decrease in accounts payable, \$1.7 million decrease in accrued compensation and related benefits, driven by the payment of variable compensation during the period, and \$0.6 million decrease in accounts receivable, the increase in deferred revenue and the decrease resulting from the decrease in accounts receivable, the increase in deferred revenue and the decrease resulting from the decrease 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 six months ended June 30, 2015 of \$2.4 million consisted of payments for capital expenditures, primarily test equipment.

Cash flows used in investing activities for the six months ended June 30, 2014 of \$1.8 million consisted of \$1.9 million payment for capital expenditures, primarily test equipment, offset by proceeds from the sales of property and equipment of \$0.1 million.

#### **Financing** Activities

Cash flows provided by financing activities of \$1.8 million for the six months ended June 30, 2015, consisted primarily of \$4.8 million of proceeds from the exercise of stock options, \$0.7 million of proceeds from our Employee Stock Purchase Plan, \$2.0 million of excess tax benefit from stock-based compensation, offset by \$5.6 million of cash used to repurchase 319,712 shares of our common stock at an average price of \$17.43 per share.

Cash flows provided by financing activities of \$1.0 million for the six months ended June 30, 2014, consisted primarily of \$2.4 million of proceeds from the exercise of stock options, \$0.6 million of proceeds from our Employee Stock Purchase Plan, \$1.5 million of excess tax benefit from stock-based compensation, offset by \$3.5 million of cash used to repurchase shares of our common stock.

## Liquidity

As of June 30, 2015, our working capital, defined as total current assets less total current liabilities, was \$156.5 million, compared with \$147.0 million as of December 31, 2014. Cash and cash equivalents were \$131.7 million as of June 30, 2015, compared to \$115.5 million as of December 31, 2014. As of June 30, 2015 and December 31, 2014, cash and cash equivalents held by our foreign subsidiaries were \$2.5 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 June 30, 2015:

	Payments Due by Period 2015							
Contractual	(rema	ining 2016	2017	2018	2019	Th	ereafter	Total
<b>Obligations</b> (1)	six							
Operating lease obligations	<b>montl</b> \$924	,	\$1,426	\$808	\$ 73	\$	81	\$5,092

The contractual obligation table above excludes liabilities for uncertain tax positions of \$2.4 million, which are (1)not practicable to assign to any particular years, due to the inherent uncertainty of the tax positions. See Note 5 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 June 30, 2015, we had cash and cash equivalents of \$131.7 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 June 30, 2015, 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 June 30, 2015, we had one outstanding forward contract with a notional amount of \$6.9 million. The foreign currency exchange rate movement of plus-or-minus 10% will result in the change in fair value of this contract of plus-or-minus \$0.7 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 June 30, 2015, in connection with the filing of this Quarterly Report on Form 10-Q. Based on that evaluation as of June 30, 2015, 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 June 30, 2015, 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 a party to any material legal proceedings, thus no loss was probable and no amount was accrued at June 30, 2015.

## Item 1A. Risk Factors

Item 1A, "Risk Factors," on pages 24 through 30 of the Company's Quarterly Report on Form 10-Q for the three months ended March 31, 2015, provides information on the significant risks associated with our business. There has 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 ended June 30, 2015 (in thousands except per share amounts):

## **ISSUER PURCHASES OF EQUITY SECURITIES**

			Total	
			Number of	Approximate
	Total		Shares	Dollar
	Number	Average	Purchased	Value of
Period	of	Price Paid	as	Shares that
I erioù	Shares		Part of	May Yet Be
	Purchased	Per Share	Publicly	Purchased
(1)			Announced	Under
			Programs	Programs(1)
			(1)	
Month #4 (April 1, 2015 through April 30, 2015)		\$ —		\$ 21,396
Month #5 (May 1, 2015 through May 31, 2015)	83	\$ 16.42	83	\$ 20,037
Month #6 (June 1, 2015 through June 30, 2015)	37	\$ 16.40	37	\$ 19,429
Total	120	\$ 16.42	120	

On October 21, 2014, the Board of Directors adopted a program to repurchase up to \$25.0 million of the (1)Company's common stock both on the open market and in privately negotiated transactions over the next two years.

#### 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: August 3, 2015 By:/s/ JOHN K. KIBARIAN John K. Kibarian President and Chief Executive Officer (principal executive officer)

Date: August 3, 2015 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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