## UNITED STATES

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

## FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

## Date of Report (Date of Earliest Event Reported): November 10, 2017

## PDF SOLUTIONS, INC.

(Exact name of registrant as specified in its charter)
000-31311
(Commission File Number)
Delaware

(State or Other Jurisdiction of Incorporation) | $25-1701361$ |
| :---: |
| (I.R.S. Employer Identification No.) |

## 333 West San Carlos Street, Suite 1000

## San Jose, CA 95110

(Address of principal executive offices, with zip code)
(408) 280-7900
(Registrant's telephone number, including area code)
Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:
$\square \quad$ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
$\square \quad$ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
$\square \quad$ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
$\square \quad$ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

Emerging growth company $\square$
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01. Updated Q3'17 Earnings Management Report Item 9.01. Financial Statements and Exhibits
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## Item 7.01. Updated Q3'17 Earnings Management Report

On November 10, 2017, PDF Solutions (the "Company.") posted on the Investor Relations section of its website (www.pdf.com) an updated management report regarding its financial results and certain other information related to the third fiscal quarter ended September 30, 2017, which revised slide 9 (GAAP Balance Sheet Trend) due to a purchase price allocation adjustment and an adjustment between current and non-current liabilities, in both cases related to the Kinesys acquisition that were made after the original presentation, and added a new slide regarding Non-GAAP Performance Measures (slide 17).

A copy of the updated management report is attached to this report as Exhibit 99.1.
Information on the website is not, and will not be deemed, a part of this report or incorporated into any other filings the Company makes with the Securities and Exchange Commission.

The information in this Item 2.02, including Exhibit 99.1, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities under that Section, and shall not be deemed incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

## Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

## Description

## Exhibit No.

99.1 Management Report by PDF Solutions, Inc. as of November 10, 2017

## 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 hereunto duly authorized.

PDF SOLUTIONS, INC.
(Registrant)
By: /s/Gregory C. Walker
Gregory C. Walker
VP, Finance, and Chief Financial Officer (principal financial and accounting officer)

## EXHIBIT INDEX

# 2017 Third Quarter <br> Management Report 

October 26, 2017

(and updated November 10, 2017 with adjustments to Slide 9 and a new Slide 17, as described in the Company's 8-K filed on November 13, 2017)


#### Abstract

Statements herein regarding the Company's future expected business performance and financial results are forward looking and are subject to events and circumstances of the future. Actual results could differ materially from those expressed in these forward-looking statements. Risks and uncertainties that could cause results to differ materially include risks associated with: customers' production volumes at Gainshare-covered facilities; continued adoption of the Company's solutions by new and existing customers; project milestones or delays and performance criteria achieved; the provision of technology and services prior to the execution of a final contract; and other risks set forth in PDF Solutions' periodic public filings with the Securities and Exchange Commission, including, without limitation, its Annual Reports on Form 10-K, most recently filed for the year ended December 31, 2016, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K and amendments to such reports. The forward-looking statements made in the conference call are made as of the date hereof, and PDF Solutions does not assume any obligation to update such statements nor the reasons why actual results could differ materially from those projected in such statements.


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- 2017 Third Quarter GAAP Results
- Overview
- Revenue Details \& Commentary
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- Balance Sheet \& Commentary
- 2017 Third Quarter Non-GAAP Results
- Reconciliation of GAAP to Non-GAAP Net Income
- Expense Details \& Commentary
- Performance Measures \& Commentary

Q4 2017 Outlook

## Related Information

The following commentary is provided by management and should be referenced in conjunction with PDF Solutions' third quarter for fiscal year 2017 financial results press release available on its Investor Relations website at http://www.pdf.com/financial-news. These remarks represent management's current views of the Company's financial and operational performance and outlook and are provided to give investors and analysts further insight into its performance in advance of the earnings call webcast.

| PDF Solutions, Inc. | Actuals |  |  |  | Q1-17 | Q2-17 | Q3-17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P\&L (GAAP) | Q1-16 | Q2-16 | Q3-16 | Q4-16 |  |  |  |
| Design to Silicon Yield Solutions | 18,578 | 20,574 | 18,552 | 19,458 | 19,698 | 16,500 | 19,229 |
| Gain Share - Performance Incentive | 6,503 | 6,114 | 8,707 | 8,975 | 4,591 | 7,789 | 7,288 |
| Total Revenue | 25,081 | 26,688 | 27,259 | 28,433 | 24,289 | 24,289 | 26,517 |
| Cost of Sales | 10,206 | 10,654 | 11,452 | 12,136 | 11,431 | 11,379 | 12,431 |
| GROSS MARGIN | 14,875 | 16,034 | 15,807 | 16,297 | 12,858 | 12,910 | 14,086 |
| Gross Margin \% | 59\% | 60\% | 58\% | 57\% | 53\% | 53\% | 53\% |
| OPERATING EXPENSES |  |  |  |  |  |  |  |
| Research \& Development | 6,311 | 7,060 | 7,017 | 7,171 | 7,282 | 7,276 | 7,875 |
| R\&D \% of Revenue | 25\% | 26\% | 26\% | 25\% | 30\% | 30\% | 30\% |
| Selling, General, \& Administrative | 5,124 | 5,094 | 5,548 | 6,290 | 5,899 | 6,195 | 5,680 |
| SG\&A \% of Revenue | 20\% | 19\% | 20\% | 22\% | 24\% | 26\% | 21\% |
| Amortization of other acquired intangible assets | 117 | 117 | 106 | 92 | 92 | 92 | 107 |
| TOTAL OPERATING EXPENSES | 11,552 | 12,271 | 12,671 | 13,553 | 13,273 | 13,563 | 13,662 |
| OPERATING INCOME (LOSS) | 3,323 | 3,763 | 3,136 | 2,744 | (415) | (653) | 424 |
| Other (Income) / Expense, Net | 236 | 51 | 101 | (378) | 230 | (27) | 104 |
| PRE-TAX INCOME (LOSS) | 3,087 | 3,712 | 3,035 | 3,122 | (645) | (626) | 320 |
| Income Tax Provision (Benefit) | 1,026 | 1,579 | 1,051 | 197 | $(1,162)$ | (815) | (270) |
| Net Income | 2,061 | 2,133 | 1,984 | 2,925 | 517 | 189 | 590 |
| GAAP EPS | 0.07 | 0.07 | 0.06 | 0.09 | 0.02 | 0.01 | 0.02 |
| Diluted Weighted Avg Shares (in millions) | 31.8 | 32.1 | 32.6 | 33.3 | 33.6 | 33.4 | 33.0 |
| Solutions |  |  |  |  |  |  | SULUTIO |

## Q3 2017 CFO Commentary - GAAP Income Statement

- Total GAAP revenues were $\$ 26.5$ million resulting in GAAP net income of $\$ 0.6$ million and GAAP EPS of $\$ 0.02$ cents per fully diluted share.
- Total GAAP operating income was $\$ 0.4$ million, resulting in GAAP operating margin of $1.6 \%$.
- Fully diluted shares outstanding were 33.0 million for the quarter.
- The GAAP income tax benefit was $\$ 0.3$ million.


## GAAP Revenue by Geography Q3 2017 \& Comparable Quarters



Q316

$\square$ North America $\quad$ Asia Pacific EMEA

## Q3 2017 CFO Commentary - GAAP Revenue \& GM Detail

- Total GAAP revenues of $\$ 26.5$ million were $\$ 2.2$ million higher when compared to the prior quarter.
- The top ten customers represented $80 \%$ of total revenues. One of these customers contributed revenues 10\% or greater.
- Solutions revenue consisted of 12 project-based engagements that contributed at least $\$ 100,000$ of solutions revenue each in the quarter.
- The total number of node-sites, defined as an individual fab and process node combination, contributing to Gainshare revenue, was 15.
- On a GAAP basis, Cost of Sales was $\$ 12.4$ million, which was approximately \$1 million higher compared to the prior quarter.
- GAAP gross margin was $53 \%$, which was the same as the prior quarter.


## GAAP Operating Expenses - Quarterly Through Q3 2017

in thousands


## Q3 2017 CFO Commentary - GAAP Operating Expenses

- Total GAAP Operating Expenses, at $\$ 13.7$ million, were $\$ 0.1$ million higher than the prior quarter, and $52 \%$ of total revenues, down 4\% from the prior quarter.
- GAAP R\&D expenses totaled $\$ 7.9$ million, $\$ 0.6$ million higher than the prior quarter.
- GAAP R\&D expenses as a percent of revenue was $30 \%$, which was the same compared to the prior quarter.
- GAAP SG\&A expenses totaled $\$ 5.7$ million, $\$ 0.5$ million lower than the prior quarter.
- GAAP SG\&A expenses as a percent of revenue was $21 \%$, which was down $4 \%$ from the prior quarter.


## GAAP Balance Sheet Trend - Quarterly Through Q3 2017

| ASSETS | 30-Sep-16 | 31-Dec-16 | 31-Mar-17 | 30-Jun-17 | 30-Sep-17 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and cash equivalents | \$ 118,534 | \$ 116,787 | \$ 114,926 | \$ 109,007 | \$ 100,750 |
| Accounts receivable, net of allowance | 44,023 | 48,157 | 50,088 | 54,029 | 52,954 |
| Prepaid expenses and other current assets | 5,163 | 5,335 | 6,741 | 8,813 | 6,580 |
| Total current assets | 167,720 | 170,279 | 171,755 | 171,849 | 160,284 |
| Property and equipment, net | 18,192 | 19,341 | 20,798 | 23,068 | 23,604 |
| Deferred tax assets | 14,135 | 15,640 | 16,201 | 15,815 | 18,522 |
| Goodwill | 215 | 215 | 215 | 215 | 1,923 |
| Intangible assets, net | 4,411 | 4,223 | 4,035 | 3,847 | 6,325 |
| Other non-current assets | 9,413 | 12,631 | 14,615 | 12,263 | 11,312 |
| Total assets | \$214,086 | \$222,329 | \$227,619 | \$227,057 | \$221,970 |
| LLABILITIES |  |  |  |  |  |
| Accounts payable | \$ 947 | \$ 2,206 | \$ 2,436 | \$ 2,270 | \$ 2,608 |
| Accrued compensation and related benefits | 5,190 | 5,959 | 4,988 | 5,863 | 5,450 |
| Accrued and other current liabilities | 3,077 | 2,080 | 1,913 | 2,075 | 2,436 |
| Deferred revenues - current portion | 8,399 | 8,189 | 9,777 | 8,933 | 7,624 |
| Billings in excess of recognized revenue | 73 | 88 | 200 | 389 | 289 |
| Total current liabilities | 17,686 | 18,522 | 19,314 | 19,530 | 18,407 |
| Long-term income taxes payable | 2,859 | 3,354 | 3,247 | 3,174 | 2,914 |
| Other non-current liabilities | 657 | 1,650 | 1,802 | 2,253 | 2,352 |
| Total liabilities | 21,202 | 23,526 | 24,363 | 24,957 | 23,673 |
| EQUITY |  |  |  |  |  |
| Common stock | 5 | 5 | 5 | 5 | 5 |
| Additional paid-in-capital | 276,495 | 281,423 | 285,930 | 289,956 | 294,359 |
| Treasury stock at cost | $(53,726)$ | $(54,882)$ | $(55,726)$ | $(61,532)$ | $(70,739)$ |
| Accumulated deficit | $(28,677)$ | $(25,752)$ | $(25,235)$ | $(25,046)$ | $(24,455)$ |
| Accumulated other comprehensive loss | $(1,213)$ | $(1,991)$ | $(1,718)$ | $(1,283)$ | (873) |
| Total equity | 192,884 | 198,803 | 203,256 | 202,100 | 198,297 |
| Total liabilities and equity | \$214,086 | \$222,329 | \$227,619 | \$227,057 | \$221,970 |

## Q3 2017 - GAAP Balance Sheet - Cash \& Accounts Receivables

- Total cash at the end of the quarter was $\$ 100.8$ million, a decrease of $\$ 8.3$ million when compared to cash on June 30, 2017.
- During the quarter the Company purchased approximately $\$ 2.0$ million of fixed assets, primarily related to our DFI solution.
- Cash provided by operations during the quarter was approximately $\$ 5.3$ million.
- For the quarter, the Company spent $\$ 8.6$ million on 566 thousand shares to repurchase common stock on the open market as part of our Stock Repurchase Program. Additionally, the Company spent $\$ 0.6$ million to purchase 34 thousand shares to cover employee taxes on restricted stock grants released.
- Trade Accounts Receivable balance at the end of the quarter was $\$ 32.2$ million, a decrease of $\$ 0.8$ million when compared to the previous quarter. The Unbilled Accounts Receivable balance (current \& long-term) was $\$ 29.8$ million at the end of the quarter, a decrease of approximately $\$ 0.9$ million from the prior quarter.
- Of the $\$ 29.8$ million of Unbilled Accounts Receivable at the end of the quarter, we expect approximately $\$ 20.7$ million to be billed in the next twelve months of which more than $36 \%$ will be billed during Q4.
- Of the $\$ 62.0$ million of total Receivables, $\$ 7.9$ million, or $13 \%$, was aged more than 30 days. Since the end of the quarter, $\$ 2.8$ million of Trade Receivables has been collected as of the date of this report.
- The quarter-over-quarter decrease in Accounts Receivable and DSO is primarily driven by improved collections, particularly on business in China.


#### Abstract

In addition to providing results that are determined in accordance with Generally Accepted Accounting Principles in the United States of America (GAAP), the Company also provides certain non-GAAP financial measures. Non-GAAP net income excludes the effects of non-recurring items (including severance payments), stock-based compensation expenses, amortization of acquired technology and other acquired intangible assets, and their related income tax effects, as applicable, as well as adjusts for the non-cash portion of income taxes. EBITDAR is calculated by taking GAAP net income, adding back the effects ofnon-recurring items, stock-based compensation expenses, amortization of acquired technology and other acquired intangibles, depreciation expense and income tax provision (benefit). These non-GAAP financial measures are used by management internally to measure the Company's profitability and performance. PDF Solutions' management believes that these non-GAAP measures provide useful supplemental measures to investors regarding the Company's ongoing operations in light of the fact that none of these categories of expense has a current effect on the future uses of cash (with the exception of certain non-recurring items) nor do they impact the generation of current or future revenues. These non-GAAP results should not be considered an alternative to, or a substitute for, GAAP financial information, and may be different from similarly titled non-GAAP measures used by other companies. In particular, these non-GAAP financial measures are not a substitute for GAAP measures of income or loss as a measure of performance, or to cash flows from operating, investing and financing activities as a measure of liquidity. Management uses these non-GAAP financial measures internally to measure profitability and performance; these non-GAAP measures are presented here to give investors an opportunity to see the Company's financial results as viewed by management. A detailed reconciliation of the adjustments made to comparable GAAP measures is included herein.


in thousands (except for shares and per share amounts)
Q3-17
GAAP net income\$ 590
Adjustments to reconcile GAAP net income to non-GAAP net income: Stock-based compensation expense ..... 2,949
Amortization of acquired technology ..... 136
Amortization of other acquired intangible assets ..... 107
Non-recurring severance payments ..... 370
Adjustment for Non-Cash items in Income Tax Expense ..... 817
Tax Adjustment for Non-GAAP items ..... $(1,407)$
Non-GAAP net income ..... \$ 3,562
GAAP net income per diluted share ..... \$ 0.02
Non-GAAP net income per diluted share ..... \$ 0.11
Shares used in diluted shares calculation (in millions) ..... 33.0

## Reconciliation of GAAP to Non-GAAP for Prior Quarters

in thousands (except for shares and per share amounts)

|  | 9-Month Period |  |  |  |  |  | 9-Month Period |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1-16 |  | Q2-16 |  | Q3-16 |  | Q1-17 |  | Q2-17 |  | Q3-17 |  |
| GAAP net income | \$ | 2,061 | \$ | 2,133 | \$ | 1,984 | \$ | 517 | \$ | 189 | \$ | 590 |
| Adjustments to reconcile GAAP net income to non-GAAP net income: |  |  |  |  |  |  |  |  |  |  |  |  |
| Stock-based compensation expense |  | 2,666 |  | 2,292 |  | 2,971 |  | 2,884 |  | 2,904 |  | 2,949 |
| Amortization of acquired technology |  | 96 |  | 96 |  | 86 |  | 96 |  | 96 |  | 136 |
| Amortization of other acquired intangible assets |  | 117 |  | 117 |  | 106 |  | 92 |  | 92 |  | 107 |
| Non-recuring severance payments |  | - |  | - |  | - |  |  |  |  |  | 370 |
| Adjustment for Non-Cash items in Income Tax Expense |  | 1,265 |  | 1,261 |  | 1,382 |  | 835 |  | 998 |  | 817 |
| Tax Adjustment for Non-GAAP items |  | (966) |  | (651) |  | $(1,146)$ |  | 1,830) |  | 1,627) |  | 1,407) |
| Non-GAAP net income | \$ |  | \$ |  | \$ |  | \$ | 2,594 | \$ |  | \$ | 3,562 |
| GAAP net income per diluted share | \$ | 0.07 | \$ | 0.07 | \$ | 0.06 | \$ | 0.02 | \$ | 0.01 | \$ | 0.02 |
| Non-GAAP net income per diluted share | \$ | 0.16 | \$ | 0.16 | \$ | 0.17 | \$ | 0.08 | \$ | 0.08 | \$ | 0.11 |
| Shares used in diluted shares calculation (in millions) |  | 31.8 |  | 32.1 |  | 32.6 |  | 33.6 |  | 33.4 |  | 33.0 |

## Non-GAAP Expenses - Quarterly Trend Through Q3 2017

| in thousands NON-GAAP EXPENSES: | Q1-16 | Q2-16 | Q3-16 | Q4-16 | Q1-17 | Q2-17 | Q3-17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COST OF SALES | 9,025 | 9,603 | 10,175 | 10,845 | 10,143 | 10,213 | 10,961 |
| OPERATING EXPENSES |  |  |  |  |  |  |  |
| Research \& Development | 5,605 | 6,408 | 6,123 | 6,335 | 6,448 | 6,428 | 6,848 |
| Selling, General, \& Administrative | 4,249 | 4,410 | 4,656 | 5,253 | 5,041 | 5,208 | 4,722 |
| TOTAL OPERATING EXPENSES | 9,854 | 10,818 | 10,779 | 11,589 | 11,489 | 11,636 | 11,570 |

Non-GAAP Operating Expenses - Quarterly Trend Through Q3 2017


## Q3 2017 CFO Commentary - Non-GAAP Expenses

- On a Non-GAAP basis, Cost of Sales was $\$ 11$ million, which was approximately $\$ 0.7$ million higher than the prior quarter.
- Total Non-GAAP Operating Expenses, at $\$ 11.6$ million, were approximately the same as the prior quarter, and $44 \%$ of total revenues, down $4 \%$ from the prior quarter.
- Non-GAAP R\&D expenses totaled $\$ 6.8$ million, $\$ 0.4$ million higher than the prior quarter.
- Non-GAAP R\&D expenses as a percent of revenue were $26 \%$, approximately flat compared to the prior quarter.
- Non-GAAP SG\&A expenses totaled $\$ 4.7$ million, $\$ 0.5$ million lower than the prior quarter.
- Non-GAAP SG\&A expenses as a percent of revenue were $18 \%$, down $3 \%$ from the prior quarter.
- Cash tax liabilities for Non-GAAP presentation were $\$ 0.3$ million. This represents an effective cash tax rate of $100 \%$ of pre-tax GAAP income,


## Non-GAAP Performance Measures - Quarterly Trend Through Q3 2017

in thousands (except for shares, percent of revenue, and EPS)

|  | Q3-15 | Q4-15 | Q1-16 | Q2-16 | Q3-16 | Q4-16 | Q1-17 Act | Q2-17 Act | Q3-17 Act |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GROSS MARGIN (Non-GAAP) | 14,745 | 15,162 | 16,056 | 17,086 | 17,084 | 17,588 | 14,146 | 14,075 | 15,556 |
| Gross Margin \% (Non-GAAP) | 62\% | 63\% | 64\% | 64\% | 63\% | 62\% | 58\% | 58\% | 59\% |
| Pro Forma Net Income | 5,261 | 5,335 | 5,239 | 5,246 | 5,390 | 5,593 | 2,594 | 2,652 | 3,562 |
| EPS (Non-GAAP) | 0.16 | 0.17 | 0.16 | 0.16 | 0.17 | 0.17 | 0.08 | 0.08 | 0.11 |
| Diluted Weighted Avg Shares (M) | 32.1 | 31.9 | 31.8 | 32.1 | 32.6 | 33.3 | 33.6 | 33.4 | 33.0 |
| EbItDAR | 6,942 | 7,073 | 6,730 | 7,075 | 7,165 | 7,377 | 3,518 | 3,662 | 5,145 |

- Non-GAAP gross margin was $59 \%$, up $1 \%$ over the prior quarter.
- Total non-GAAP net income was $\$ 3.6$ million, approximately $\$ 0.9$ million higher compared to the prior quarter.
- Non-GAAP EPS was $\$ 0.11$ cents per fully diluted share as compared to $\$ 0.08$ cents in the prior quarter.
- Fully diluted shares outstanding were 33.0 million for the quarter.
- EBITDAR was $\$ 5.1$ million compared to $\$ 3.7$ million in the prior quarter.
- We expect total Q4 revenues to be approximately in-line with Q3.
- We expect Q4 Gainshare revenues to be approximately flat quarter to quarter.
- Continued growth in our Exensio solution should offset the nonrecurrence of previously deferred project revenues recognized in Q3.
- Total spending should also be approximately in-line with Q3.

