



2018 Fourth Quarter and Full Year Management Report

February 14, 2019

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; the impact of ASC 606; development costs on our next generation products; 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, 2017, 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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The following commentary is provided by management and should be referenced in conjunction with PDF Solutions' fourth quarter for fiscal year 2018 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 are provided to give investors and analysts further insight into its performance in advance of the earnings call webcast. The Company disclaims any duty to update this information for future events.

GAAP Income Statement – Quarterly Trend Through Q4 2018

in thousands (except share amounts, percent of revenue, and EPS)

P&L (GAAP)	Q4-17	Q1-18	Q2-18	Q3-18	Q4-18
Design to Silicon Yield Solutions	\$ 19,010	\$ 18,190	\$ 15,266	\$ 13,976	\$ 12,650
Gain Share - Performance Incentive	7,766	6,547	5,853	6,237	7,075
Total Revenue	26,776	24,737	21,119	20,213	19,725
Cost of Sales	12,281	11,482	10,917	10,683	9,721
GROSS MARGIN	14,495	13,255	10,202	9,530	10,004
Gross Margin %	54%	54%	48%	47%	51%
OPERATING EXPENSES					
Research & Development	7,646	7,245	7,100	6,755	6,898
R&D % of Revenue	29%	29%	34%	33%	35%
Selling, General, & Administrative	5,909	6,375	5,919	5,507	6,133
SG&A % of Revenue	22%	26%	28%	27%	31%
Amortization of other acquired intangible assets	107	109	108	108	109
Restructuring charges	-	-	-	-	576
TOTAL OPERATING EXPENSES	13,662	13,729	13,127	12,370	13,716
OPERATING INCOME (LOSS)	833	(474)	(2,925)	(2,840)	(3,712)
Other (Income) / Expense, Net	(42)	331	(390)	(223)	(210)
PRE-TAX INCOME (LOSS)	875	(805)	(2,535)	(2,617)	(3,502)
Income Tax Provision (Benefit)	3,508	(381)	(439)	(535)	(388)
Net Income (Loss)	\$ (2,634)	\$ (424)	\$ (2,096)	\$ (2,082)	\$ (3,114)
GAAP EPS	\$ (0.08)	\$ (0.01)	\$ (0.07)	\$ (0.06)	\$ (0.10)
Diluted Weighted Avg Shares (in millions)	32.9	32.2	32.0	32.2	32.3

Q4 2018 – Revenue Commentary

- Commercial deployment of the 2nd generation of the Company's DFI™ solution with high-density electrical metrology at a major Asian foundry
- Execution of a multi-million dollar Exensio® Control contract with professional services at a leading integrated device manufacturer
- Further gains into China's ecosystem with a multi-million dollar Exensio® Yield contract and professional services at a major foundry
- The top ten customers represented 75% in the fourth quarter compared to 76% in the third quarter of 2018. One of these customers contributed revenues 10% or greater.
- ASC 606 impact to Q4 revenue was favorable by \$0.6 million. The new revenue recognition rule requires us to identify the performance obligations and allocate the purchase price to those obligations.

GAAP Income Statement – Annual Trend Through 2018

in thousands (except share amounts, percent of revenue, and EPS)

P&L (GAAP)	<u>2016</u>	<u>2017</u>	<u>2018</u>
Design to Silicon Yield Solutions	\$ 77,162	\$ 74,436	\$ 60,081
Gain Share - Performance Incentive	30,299	27,435	25,713
Total Revenue	107,461	101,871	85,794
Cost of Sales	44,448	47,521	42,803
GROSS MARGIN	63,013	54,350	42,991
Gross Margin %	59%	53%	50%
OPERATING EXPENSES			
Research & Development	27,559	30,078	27,998
R&D % of Revenue	26%	30%	33%
Selling, General, & Administrative	22,056	23,684	23,934
SG&A % of Revenue	21%	23%	28%
Amortization of other acquired intangible assets	432	398	435
Restructuring charges	-	-	576
TOTAL OPERATING EXPENSES	50,047	54,160	52,943
OPERATING INCOME (LOSS)	12,966	190	(9,952)
Other (Income) / Expense, Net	10	264	(493)
PRE-TAX INCOME (LOSS)	12,956	(74)	(9,459)
Income Tax Provision (Benefit)	3,853	1,263	(1,743)
Net Income (Loss)	\$ 9,103	\$ (1,337)	\$ (7,716)
GAAP EPS	\$ 0.28	\$ (0.04)	\$ (0.24)
Diluted Weighted Avg Shares (in millions)	32.4	32.0	32.2

Balance Sheet Trend – Quarterly Through Q4 2018

in thousands

	31-Dec-17	31-Mar-18	30-Jun-18	30-Sep-18	31-Dec-18
ASSETS					
Cash and cash equivalents	\$ 101,267	\$ 98,522	\$ 100,916	\$ 96,788	\$ 96,089
Accounts receivable	35,355	35,366	30,690	30,064	29,332
Unbilled accounts receivable	22,209	23,070	23,229	22,680	22,238
Other current assets	5,069	9,654	8,660	10,890	9,562
Total current assets	163,900	166,612	163,495	160,422	157,221
Goodwill and intangibles	7,997	7,744	7,492	7,240	6,987
Deferred tax assets	16,348	15,896	17,747	17,714	19,044
Other non-current assets	10,544	9,752	8,943	8,163	6,972
Property plant and equipment	25,386	26,536	28,095	34,120	35,681
Total assets	\$ 224,176	\$ 226,540	\$ 225,772	\$ 227,659	\$ 225,905
LIABILITIES					
Accounts payable	\$ 2,536	\$ 2,588	\$ 2,495	\$ 3,286	\$ 2,454
Accrued Liabilities	9,120	7,473	7,938	9,355	7,962
Deferred revenues and other	7,981	8,474	9,369	8,029	9,112
Total current liabilities	19,637	18,535	19,802	20,670	19,528
Deferred taxes and other	6,171	5,946	5,646	6,094	6,582
Total liabilities	25,808	24,481	25,448	26,765	26,110
EQUITY					
Common stock and additional paid-in-capital	297,955	301,872	304,953	308,103	310,665
Treasury stock	(71,793)	(76,473)	(78,422)	(78,752)	(79,142)
Accumulated other comprehensive loss	(705)	(180)	(25,256)	(1,119)	(1,276)
Accumulated deficit	(27,089)	(23,160)	(951)	(27,337)	(30,452)
Total stockholders' equity	198,368	202,059	200,324	200,895	199,795
Total liabilities and stockholders' equity	\$ 224,176	\$ 226,540	\$ 225,772	\$ 227,659	\$ 225,905

Q4 2018 – Balance Sheet Commentary

- Cash at the end of the quarter was \$96.1 million, a use of \$0.7 million from the prior quarter. The new eProbe 250 build comprised the main use of cash.
- Accounts Receivable balance at the end of the quarter was down approximately \$0.7 million and Unbilled Accounts Receivable balance (current & long-term) decreased approximately \$1.5 million, in each case compared to the previous quarter. Additionally, under ASC 606, \$2.7 million was reclassified from Unbilled AR to Contract Assets and recorded as Other Current Assets.
- Q4 DSO was 135 days, no change from prior quarter.
- Of the \$30.2 million of Unbilled Accounts Receivable at the end of the quarter, we expect approximately \$24.9 million to be billed in the next twelve months, of which more than 51% will be billed during Q1 2019.

Cash Flow – Quarterly Trend Through Q4 2018

in thousands	12/31/17	03/31/18	06/30/18	09/30/18	12/31/18
Operating activities:					
Net income (loss)	\$ (2,634)	\$ (424)	\$ (2,096)	\$ (2,082)	\$ (3,114)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:					
Depreciation and amortization	1,240	1,261	1,270	1,158	1,278
Stock-based compensation	3,074	2,856	2,701	2,268	2,470
Adjustment to contingent consideration related to acquisition	-	-	-	-	114
Amortization of acquired intangible assets	251	253	252	252	252
Losses (Gains) on disposal of assets	1	3	-	1	-
Write-down in value of long-lived assets					227
Deferred taxes	3,010	117	(1,818)	(597)	(1,873)
Provisions (reversal) on losses on accounts receivable	50	-	(42)	-	-
Unrealized loss (gain) on foreign currency forward contract	(21)	58	(11)	12	8
Changes in operating assets and liabilities:					
Accounts receivable	(4,660)	(80)	4,559	1,175	1,174
Prepaid expenses and other assets	2,288	(1,385)	1,778	(1,470)	2,522
Accounts payable	352	497	(1,489)	394	(808)
Accrued compensation and related benefits	970	(1,278)	460	(559)	(232)
Accrued and other liabilities	296	(532)	57	223	492
Deferred revenue	356	1,906	839	(2,113)	1,819
Billings in excess of recognized revenue	(288)	-	7	662	(34)
Net cash provided by (used in) operating activities	4,285	3,252	6,467	(676)	4,295
Investing activities:					
Proceeds from the sales of property and equipment	-	2	-	3	-
Purchases of property and equipment	(3,313)	(2,449)	(2,363)	(3,940)	(4,369)
Acquisition of business, net of cash acquired	-	-	-	-	-
Net cash provided by (used in) investing activities	(3,313)	(2,447)	(2,363)	(3,937)	(4,369)
Financing activities:					
Proceeds from exercise of stock options	518	39	377	53	91
Proceeds from employee stock purchase plan	-	1,007	-	824	-
Stock repurchases	-	(4,123)	(1,125)	-	-
Purchase of company stock for employee tax settlement	(1,055)	(556)	(820)	(334)	(391)
Payment to contingent consideration related to acquisition	-	-	-	-	(244)
Net cash provided by (used in) financing activities	(537)	(3,633)	(1,568)	543	(544)
Effect of exchange rate changes on cash and cash equivalents	82	83	(142)	(58)	(81)
Net increase (decrease) in cash and cash equivalents	517	(2,745)	2,394	(4,128)	(699)
Cash and cash equivalents, beginning of period	100,750	101,267	98,522	100,916	96,788
Cash and cash equivalents, end of period	\$ 101,267	\$ 98,522	\$ 100,916	\$ 96,788	\$ 96,089

Q4 2018 – Cash Flow Commentary

- Cash generated from operating activities during the quarter was approximately \$4.3 million.
- During the quarter, the Company purchased approximately \$4.4 million of fixed assets, primarily related to our DFI solution.

Non-GAAP Presentation

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 (loss) excludes the effects of non-recurring items (including severance payments, restructuring charges, write-down in value of property and equipment, and adjustment to contingent consideration related to acquisition), 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. 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.

Reconciliation of GAAP to Non-GAAP Net Income (Loss)

in thousands (except for shares and per share amounts)

	<u>Q4-17</u>	<u>Q1-18</u>	<u>Q2-18</u>	<u>Q3-18</u>	<u>Q4-18</u>
GAAP net income (loss)	\$ (2,634)	\$ (424)	\$ (2,096)	\$ (2,082)	\$ (3,114)
Adjustments to reconcile GAAP net income (loss) to non-GAAP net income (loss):					
Stock-based compensation expense	3,073	2,856	2,701	2,268	2,470
Amortization of acquired technology	144	144	143	144	144
Amortization of other acquired intangible assets	107	109	108	108	109
Restructuring charges and severance payment	30	283	-	48	576
Write-down in value of property and equipment	-	-	-	-	227
Adjustment to contingent consideration related to acquisition	-	-	-	-	90
Tax Impact of Adjustments	3,444	(747)	(96)	(281)	(868)
Non-GAAP net income (loss)	<u>\$ 4,164</u>	<u>\$ 2,220</u>	<u>\$ 760</u>	<u>\$ 205</u>	<u>\$ (366)</u>
GAAP net income (loss) per diluted share	\$ (0.08)	\$ (0.01)	\$ (0.07)	\$ (0.06)	\$ (0.10)
Non-GAAP net income (loss) per diluted share	\$ 0.13	\$ 0.07	\$ 0.02	\$ 0.01	\$ (0.01)
Shares used in diluted shares calculation (in millions)	32.9	32.6	32.3	32.4	32.5

Reconciliation of GAAP to Non-GAAP Spending by Function

in thousands	<u>Q4-17</u>	<u>Q1-18</u>	<u>Q2-18</u>	<u>Q3-18</u>	<u>Q4-18</u>
Cost of Sales - GAAP	\$ 12,281	\$ 11,482	\$ 10,917	\$ 10,683	\$ 9,721
Adjustments to reconcile GAAP Cost of Sales to non-GAAP Cost of Sales:					
Stock-based compensation expense	(1,162)	(1,013)	(968)	(787)	(786)
Amortization of acquired technology	(144)	(144)	(144)	(144)	(144)
Severance payments	-	(209)	-	(48)	-
Cost of Sales - Non-GAAP	\$ 10,976	\$ 10,116	\$ 9,805	\$ 9,705	\$ 8,791
Research & Development - GAAP	\$ 7,646	\$ 7,245	\$ 7,100	\$ 6,755	\$ 6,898
Adjustments to reconcile GAAP R&D to non-GAAP R&D:					
Stock-based compensation expense	(959)	(879)	(845)	(725)	(811)
Severance payments	(17)	(74)	-	-	-
Write-down in value of proprty and equipment	-	-	-	-	(227)
Adjustment to contingent consideration related to acquisition	-	-	-	-	(90)
Research & Development - Non-GAAP	\$ 6,670	\$ 6,292	\$ 6,255	\$ 6,030	\$ 5,770
Selling, General, & Administrative - GAAP	\$ 5,909	\$ 6,375	\$ 5,919	\$ 5,507	\$ 6,133
Adjustments to reconcile GAAP SG&A to non-GAAP SG&A:					
Stock-based compensation expense	(952)	(963)	(888)	(756)	(873)
Severance payments	(13)	-	-	-	-
Selling, General, & Administrative - Non-GAAP	\$ 4,944	\$ 5,412	\$ 5,031	\$ 4,751	\$ 5,260