



# 2017 Fourth Quarter and Full Year Management Report

February 15, 2018

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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The following commentary is provided by management and should be referenced in conjunction with PDF Solutions' fourth 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. The Company disclaims any duty to update this information for future events.

# GAAP Income Statement – Quarterly Trend Through Q4 2017

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

<b>P&amp;L (GAAP)</b>	<b>Q1-16</b>	<b>Q2-16</b>	<b>Q3-16</b>	<b>Q4-16</b>	<b>Q1-17</b>	<b>Q2-17</b>	<b>Q3-17</b>	<b>Q4-17</b>
Design to Silicon Yield Solutions	18,578	20,574	18,552	19,458	19,698	16,500	19,229	19,010
Gain Share - Performance Incentive	6,503	6,114	8,707	8,975	4,591	7,789	7,288	7,766
<b>Total Revenue</b>	<b>25,081</b>	<b>26,688</b>	<b>27,259</b>	<b>28,433</b>	<b>24,289</b>	<b>24,289</b>	<b>26,517</b>	<b>26,776</b>
Cost of Sales	10,206	10,654	11,452	12,136	11,431	11,379	12,431	12,281
<b>GROSS MARGIN</b>	<b>14,875</b>	<b>16,034</b>	<b>15,807</b>	<b>16,297</b>	<b>12,858</b>	<b>12,910</b>	<b>14,086</b>	<b>14,495</b>
<b>Gross Margin %</b>	<b>59%</b>	<b>60%</b>	<b>58%</b>	<b>57%</b>	<b>53%</b>	<b>53%</b>	<b>53%</b>	<b>54%</b>
<b>OPERATING EXPENSES</b>								
Research & Development	6,311	7,060	7,017	7,171	7,282	7,276	7,875	7,646
	25%	26%	26%	25%	30%	30%	30%	29%
Selling, General, & Administrative	5,124	5,094	5,548	6,290	5,899	6,195	5,680	5,909
	20%	19%	20%	22%	24%	26%	21%	22%
Amortization of other acquired intangib	117	117	106	92	92	92	107	107
<b>TOTAL OPERATING EXPENSES</b>	<b>11,552</b>	<b>12,271</b>	<b>12,671</b>	<b>13,553</b>	<b>13,273</b>	<b>13,563</b>	<b>13,662</b>	<b>13,662</b>
<b>OPERATING INCOME (LOSS)</b>	<b>3,323</b>	<b>3,763</b>	<b>3,136</b>	<b>2,744</b>	<b>(415)</b>	<b>(653)</b>	<b>424</b>	<b>833</b>
Other (Income) / Expense, Net	236	51	101	(378)	230	(27)	104	(42)
<b>PRE-TAX INCOME (LOSS)</b>	<b>3,087</b>	<b>3,712</b>	<b>3,035</b>	<b>3,122</b>	<b>(645)</b>	<b>(626)</b>	<b>320</b>	<b>875</b>
Income Tax Provision (Benefit)	1,026	1,579	1,051	198	(1,162)	(815)	(270)	3,508
<b>Net Income</b>	<b>2,060</b>	<b>2,133</b>	<b>1,984</b>	<b>2,924</b>	<b>517</b>	<b>189</b>	<b>590</b>	<b>(2,634)</b>
<b>GAAP EPS</b>	<b>0.07</b>	<b>0.07</b>	<b>0.06</b>	<b>0.09</b>	<b>0.02</b>	<b>0.01</b>	<b>0.02</b>	<b>(0.08)</b>
<b>Diluted Weighted Avg Shares (M)</b>	<b>31.8</b>	<b>32.1</b>	<b>32.6</b>	<b>33.3</b>	<b>33.6</b>	<b>33.4</b>	<b>33.0</b>	<b>32.9</b>

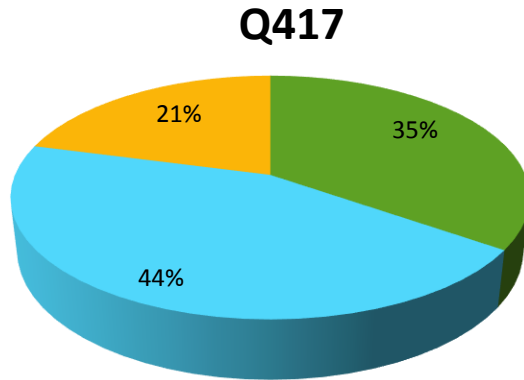
# 2017 – GAAP Income Statement – Annual Trend

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

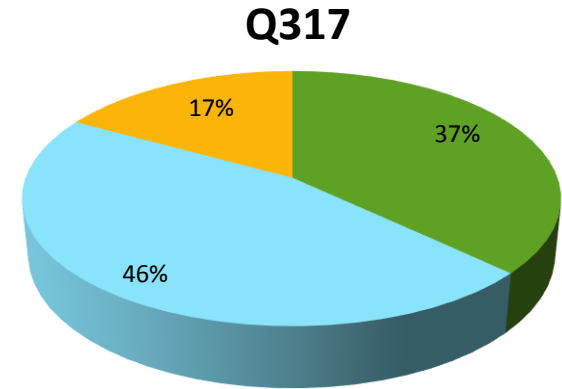
<b>P&amp;L (GAAP)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Design to Silicon Yield Solutions	61,710	52,769	63,839	77,162	74,436
Gain Share - Performance Incentive	39,743	47,394	34,138	30,299	27,435
<b>Total Revenue</b>	<b>101,453</b>	<b>100,163</b>	<b>97,977</b>	<b>107,461</b>	<b>101,871</b>
Cost of Sales	39,470	39,714	39,023	44,448	47,521
<b>GROSS MARGIN</b>	<b>61,983</b>	<b>60,449</b>	<b>58,954</b>	<b>63,013</b>	<b>54,350</b>
<b>Gross Margin %</b>	<b>61%</b>	<b>60%</b>	<b>60%</b>	<b>59%</b>	<b>53%</b>
<b>OPERATING EXPENSES</b>					
Research & Development	13,314	14,064	19,096	27,559	30,078
	13%	14%	19%	26%	30%
Selling, General, & Administrative	17,222	18,514	20,421	22,056	23,684
	17%	18%	21%	21%	23%
Amortization of other acquired intangib	74	31	196	432	398
<b>TOTAL OPERATING EXPENSES</b>	<b>30,610</b>	<b>32,609</b>	<b>39,713</b>	<b>50,047</b>	<b>54,160</b>
<b>OPERATING INCOME (LOSS)</b>	<b>31,373</b>	<b>27,840</b>	<b>19,241</b>	<b>12,966</b>	<b>190</b>
Other (Income) / Expense, Net	64	(119)	(181)	10	264
<b>PRE-TAX INCOME (LOSS)</b>	<b>31,309</b>	<b>27,959</b>	<b>19,422</b>	<b>12,956</b>	<b>(74)</b>
Income Tax Provision (Benefit)	10,380	9,497	7,015	3,853	1,263
<b>Net Income</b>	<b>20,929</b>	<b>18,462</b>	<b>12,407</b>	<b>9,103</b>	<b>(1,337)</b>
<b>GAAP EPS</b>	<b>0.67</b>	<b>0.58</b>	<b>0.39</b>	<b>0.28</b>	<b>(0.04)</b>
<b>Diluted Weighted Avg Shares (M)</b>	<b>31.4</b>	<b>31.9</b>	<b>32.2</b>	<b>32.4</b>	<b>33.2</b>

# GAAP Revenue by Geography Q4 2017 & Comparable Quarters

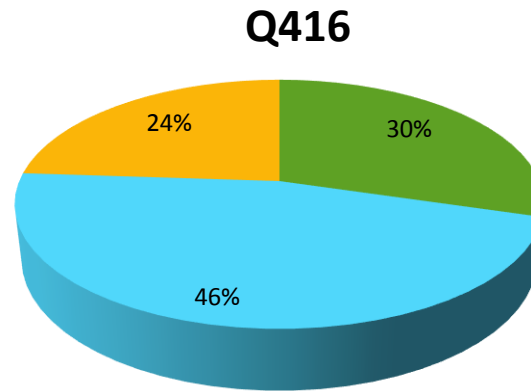
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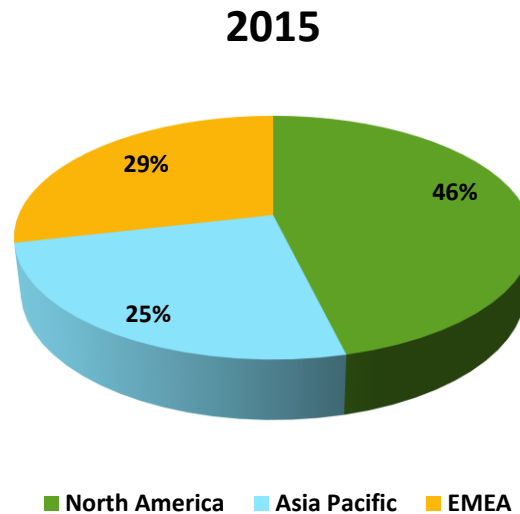
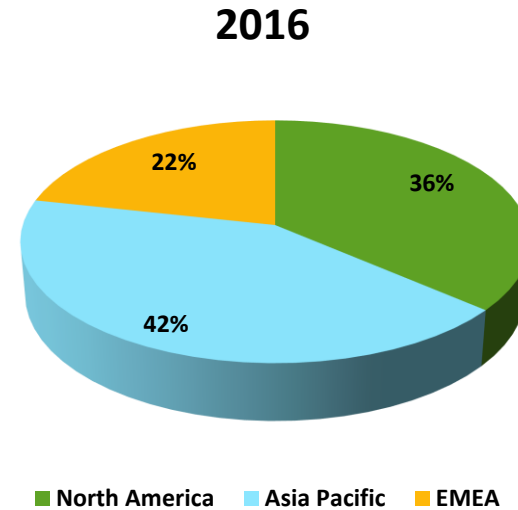
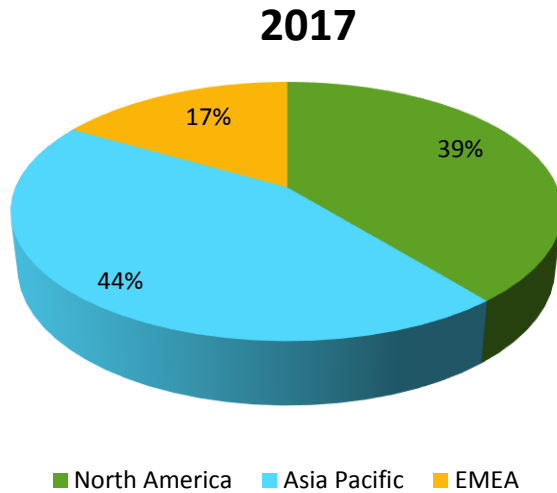
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# 2017 – Annual GAAP Revenue by Geography

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## 2017 CFO Commentary – Revenue

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- The top ten customers represented 78% of total revenues in the fourth quarter of 2017. One of these customers contributed revenues 10% or greater.
- Solutions revenue consisted of 11 project-based engagements that contributed at least \$100,000 of solutions revenue each in the fourth quarter of 2017.
- The total number of node-sites, defined as an individual fab and process node combination, contributing to Gainshare revenue, was 15 in the fourth quarter of 2017.

# GAAP Balance Sheet Trend – Quarterly Through Q4 2017

in thousands

	31-Mar-16	30-Sep-16	31-Dec-16	31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17
<b>ASSETS</b>							
Cash and cash equivalents	\$ 129,398	\$ 118,534	\$ 116,787	\$ 114,926	\$ 109,007	\$ 100,750	\$ 101,267
Accounts receivable, net of allowance	29,323	44,023	48,157	50,088	54,029	52,954	57,564
Prepaid expenses and other current assets	3,479	5,163	5,335	6,741	8,813	6,580	5,069
Total current assets	162,200	167,720	170,279	171,755	171,849	160,284	163,900
Property and equipment, net	13,236	18,192	19,341	20,798	23,068	23,604	25,386
Goodwill	215	215	215	215	215	1,923	1,923
Intangible assets, net	4,815	4,411	4,223	4,035	3,847	6,325	6,074
Deferred tax assets	14,761	14,135	15,640	16,201	15,815	18,522	16,348
Other non-current assets	7,564	9,413	12,631	14,615	12,263	11,312	10,545
<b>Total assets</b>	<b>\$ 202,792</b>	<b>\$ 214,086</b>	<b>\$ 222,329</b>	<b>\$ 227,619</b>	<b>\$ 227,057</b>	<b>\$ 221,970</b>	<b>\$ 224,176</b>
<b>LIABILITIES</b>							
Accounts payable	\$ 2,016	\$ 947	\$ 2,206	\$ 2,436	\$ 2,270	\$ 2,608	\$ 2,536
Accrued compensation and related benefits	4,289	5,190	5,959	4,988	5,863	5,450	6,493
Accrued and other current liabilities	1,853	3,077	2,080	1,913	2,075	2,436	2,628
Deferred revenues - current portion	6,358	8,399	8,189	9,777	8,933	7,624	8,115
Billings in excess of recognized revenue	114	73	88	200	389	289	-
Total current liabilities	14,630	17,686	18,522	19,314	19,530	18,407	19,772
Long-term income taxes payable	2,468	2,859	3,354	3,247	3,174	2,914	3,902
Other non-current liabilities	464	657	1,650	1,802	2,253	2,352	2,134
<b>Total liabilities</b>	<b>17,562</b>	<b>21,202</b>	<b>23,526</b>	<b>24,363</b>	<b>24,957</b>	<b>23,673</b>	<b>25,808</b>
<b>EQUITY</b>							
Common stock	5	5	5	5	5	5	5
Additional paid-in-capital	269,595	276,495	281,423	285,930	289,956	294,359	297,950
Treasury stock at cost	(50,392)	(53,726)	(54,882)	(55,726)	(61,532)	(70,739)	(71,793)
Accumulated deficit	(32,794)	(28,677)	(25,752)	(25,235)	(25,046)	(24,455)	(27,089)
Accumulated other comprehensive loss	(1,184)	(1,213)	(1,991)	(1,718)	(1,283)	(873)	(705)
<b>Total equity</b>	<b>185,230</b>	<b>192,884</b>	<b>198,803</b>	<b>203,256</b>	<b>202,100</b>	<b>198,297</b>	<b>198,368</b>
<b>Total liabilities and equity</b>	<b>\$ 202,792</b>	<b>\$ 214,086</b>	<b>\$ 222,329</b>	<b>\$ 227,619</b>	<b>\$ 227,057</b>	<b>\$ 221,970</b>	<b>\$ 224,176</b>



# GAAP Balance Sheet Trend – Annual Through 2017

(in \$000)

## ASSETS

	31-Dec-13	31-Dec-14	31-Dec-15	31-Dec-16	31-Dec-17
Cash and cash equivalents	\$ 89,371	\$ 115,464	\$ 126,158	\$ 116,787	\$ 101,267
Accounts receivable, net of allowance	34,860	37,725	33,438	48,157	57,564
Prepaid expenses and other current assets	3,632	2,888	3,655	5,335	5,069
<b>Total current assets</b>	<b>127,863</b>	<b>156,077</b>	<b>163,251</b>	<b>170,279</b>	<b>163,900</b>
Property and equipment, net	7,064	8,832	11,325	19,341	25,386
Goodwill	-	-	215	215	1,923
Intangible assets, net	31	-	5,028	4,223	6,074
Deferred tax assets	14,519	11,368	10,299	15,640	16,348
Other non-current assets	1,687	1,161	1,651	12,631	10,545
<b>Total assets</b>	<b>\$ 151,164</b>	<b>\$ 177,438</b>	<b>\$ 191,769</b>	<b>\$ 222,329</b>	<b>\$ 224,176</b>

## LIABILITIES

Accounts payable	\$ 1,129	\$ 803	\$ 1,293	\$ 2,206	\$ 2,536
Accrued compensation and related benefits	7,707	6,112	4,812	5,959	6,493
Accrued and other current liabilities	1,593	1,733	2,382	2,080	2,628
Deferred revenues - current portion	2,096	3,740	4,702	8,189	8,115
Billings in excess of recognized revenue	343	-	1,267	88	-
<b>Total current liabilities</b>	<b>12,868</b>	<b>12,388</b>	<b>14,456</b>	<b>18,522</b>	<b>19,772</b>
Long-term income taxes payable	2,956	2,600	2,540	3,354	3,902
Other non-current liabilities	628	627	466	1,650	2,134
<b>Total liabilities</b>	<b>16,452</b>	<b>15,615</b>	<b>17,462</b>	<b>23,526</b>	<b>25,808</b>

## EQUITY

Common stock	5	5	5	5	5
Additional paid-in-capital	233,813	248,734	266,008	281,423	297,950
Treasury stock at cost	(28,905)	(34,048)	(50,383)	(54,882)	(71,793)
Accumulated deficit	(70,649)	(52,187)	(39,780)	(25,752)	(27,089)
Accumulated other comprehensive loss	448	(681)	(1,543)	(1,991)	(705)
<b>Total equity</b>	<b>134,712</b>	<b>161,823</b>	<b>174,307</b>	<b>198,803</b>	<b>198,368</b>
<b>Total liabilities and equity</b>	<b>\$ 151,164</b>	<b>\$ 177,438</b>	<b>\$ 191,769</b>	<b>\$ 222,329</b>	<b>\$ 224,176</b>

## 2017 – GAAP Balance Sheet Commentary

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- Trade Accounts Receivable balance at the end of the quarter was \$35.4 million, an increase of \$8.0 million when compared to the previous year. The Unbilled Accounts Receivable balance (current & long-term) was \$30.9 million at the end of the quarter, an increase of approximately \$0.3 million from the prior year.
- Of the \$30.9 million of Unbilled Accounts Receivable at the end of the quarter, we expect approximately \$22.2 million to be billed in the next twelve months of which more than 39% will be billed during Q1 2018.
- Of the \$66.2 million of total Receivables, \$11.0 million, or 17%, was aged more than 30 days. Since the end of the quarter, \$11.1 million of Trade Receivables has been collected as of the date of this report.
- The year-over-year increases in Accounts Receivable and DSO is primarily driven by the geographic shift in total revenues to Asia, where slow payments are common due to governmental currency controls and regulations.

# GAAP Cash Flow – Quarterly Trend Through 2017

(in \$000)	Three Months Ended							
	31-Mar-16	30-Jun-16	30-Sep-16	31-Dec-16	31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17
Operating activities:								
Net income (loss)	2,061	2,133	1,984	2,925	517	189	591	(2,634)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:								
Impairment on goodwill and intangible assets								
Depreciation and amortization	765	859	960	1,000	1,091	1,195	1,263	1,240
Stock-based compensation	2,666	2,291	2,978	3,067	2,884	2,905	2,948	3,074
Accrued contingent earn-out payments	0	0	0	0	0	0	0	0
Amortization of acquired intangible assets	213	212	192	189	188	188	242	251
Losses (Gains) on disposal of assets	107	0	0	0	0	5	0	1
Losses on sale of short-term investments	0	0	0	0	0	0	0	0
Deferred taxes	458	564	61	(867)	(580)	387	(3,321)	3,010
Provisions (reversal) on losses on accounts receivable	53	(152)	0	0	0	124	0	50
Unrealized loss (gain) on foreign currency forward contract	(23)	(11)	(20)	6	92	(59)	(39)	(21)
Tax benefit related to stock-based compensation expense	0	0	0	0	0	0	0	0
Excess tax benefit from stock-based compensation expense	0	0	0	0	0	0	0	0
Changes in operating assets and liabilities:								
Accounts receivable	4,062	(5,311)	(9,237)	(4,134)	(1,931)	(4,065)	1,075	(4,660)
Prepaid expenses and other assets	(5,739)	(3,169)	(342)	(3,426)	(3,372)	313	3,247	2,288
Accounts payable	250	360	(577)	52	476	375	760	352
Accrued compensation and related benefits	(564)	910	(69)	901	(1,040)	817	(498)	970
Accrued and other liabilities	(833)	610	362	(370)	(587)	(158)	521	1,723
Deferred revenue	1,674	(727)	3,012	813	1,734	(1,008)	(1,408)	(1,071)
Billings in excess of recognized revenue	(1,153)	198	(239)	15	112	189	(101)	(288)
<b>Net cash provided by (used in) operating activities</b>	<b>3,997</b>	<b>(1,233)</b>	<b>(935)</b>	<b>171</b>	<b>(416)</b>	<b>1,397</b>	<b>5,280</b>	<b>4,285</b>
Investing activities:								
Proceeds from the sales of property and equipment	0	0	0	0	0	0	0	0
Purchases of property and equipment	(1,780)	(3,271)	(3,810)	(2,421)	(2,313)	(2,651)	(1,978)	(3,313)
Purchases of intellectual property rights	0	0	0	0	0	0	0	0
Payments for business acquisitions, net of cash acquired	0	0	0	0	0	0	(3,841)	0
<b>Net cash provided by (used in) investing activities</b>	<b>(1,780)</b>	<b>(3,271)</b>	<b>(3,810)</b>	<b>(2,421)</b>	<b>(2,313)</b>	<b>(2,651)</b>	<b>(5,819)</b>	<b>(3,313)</b>
Financing activities:								
Proceeds from exercise of stock options	182	270	680	1,840	717	1,091	496	518
Proceeds from employee stock purchase plan	777	1	780	(1)	909	1	956	(1)
Repurchases of common shares	0	(1,843)	(339)	0	0	(4,770)	(8,648)	0
Payment for taxes related to net share settlement of equity awards	(9)	(1,066)	(86)	(1,156)	(844)	(1,035)	(560)	(1,055)
Payments on long-term obligations	0	0	0	0	0	0	0	0
Excess tax benefit from stock-based compensation	0	0	0	0	0	0	0	0
<b>Net cash provided by (used in) financing activities</b>	<b>950</b>	<b>(2,638)</b>	<b>1,035</b>	<b>683</b>	<b>782</b>	<b>(4,713)</b>	<b>(7,756)</b>	<b>(538)</b>
Effect of exchange rate changes on cash and cash equivalents	73	(34)	21	(179)	86	48	38	83
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>3,240</b>	<b>(7,176)</b>	<b>(3,689)</b>	<b>(1,746)</b>	<b>(1,861)</b>	<b>(5,919)</b>	<b>(8,257)</b>	<b>517</b>
Cash and cash equivalents, beginning of period	126,158	129,398	122,222	118,533	116,787	114,926	109,007	100,750
<b>Cash and cash equivalents, end of period</b>	<b>129,398</b>	<b>122,222</b>	<b>118,533</b>	<b>116,787</b>	<b>114,926</b>	<b>109,007</b>	<b>100,750</b>	<b>101,267</b>

# GAAP Cash Flow – Annual Trend Through 2017

(in \$000)	31-Dec-13	31-Dec-14	31-Dec-15	31-Dec-16	31-Dec-17
Operating activities:					
Net income (loss)	20,929	18,462	12,407	9,103	(1,337)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:					
Impairment on goodwill and intangible assets	0	1,892	0	0	0
Depreciation and amortization	1,385	2,010	2,646	3,584	4,789
Stock-based compensation	6,693	8,547	9,756	11,002	11,811
Accrued contingent earn-out payments	0	0	500	0	0
Amortization of acquired intangible assets	74	31	372	806	869
Losses (Gains) on disposal of assets	(7)	(242)	2	107	6
Losses on sale of short-term investments	0	0	0	0	0
Deferred taxes	5,539	2,886	1,563	216	(504)
Provisions (reversal) on losses on accounts receivable	3	27	(82)	(99)	174
Unrealized loss (gain) on foreign currency forward contract	0	50	12	(48)	(27)
Tax benefit related to stock-based compensation expense	362	1,747	1,095	0	0
Excess tax benefit from stock-based compensation expense	(353)	(1,635)	(1,034)	0	0
Changes in operating assets and liabilities:					
Accounts receivable	(636)	(2,892)	4,373	(14,620)	(9,581)
Prepaid expenses and other assets	(1,053)	(657)	(1,081)	(12,676)	2,476
Accounts payable	(566)	(1,516)	(684)	85	1,963
Accrued compensation and related benefits	(3,216)	(1,421)	(1,353)	1,178	249
Accrued and other liabilities	(913)	7	166	(231)	1,499
Deferred revenue	(1,131)	1,713	411	4,772	(1,753)
Billings in excess of recognized revenue	(464)	(343)	1,267	(1,179)	(88)
<b>Net cash provided by (used in) operating activities</b>	<b>26,646</b>	<b>28,666</b>	<b>30,336</b>	<b>2,000</b>	<b>10,546</b>
Investing activities:					
Proceeds from the sales of property and equipment	0	285	0	0	0
Purchases of property and equipment	(4,628)	(3,958)	(4,784)	(11,282)	(10,255)
Purchases of intellectual property rights	0	0	(400)	0	0
Payments for business acquisitions, net of cash acquired	0	0	(5,152)	0	(3,841)
<b>Net cash provided by (used in) investing activities</b>	<b>(4,628)</b>	<b>(3,673)</b>	<b>(10,336)</b>	<b>(11,282)</b>	<b>(14,096)</b>
Financing activities:					
Proceeds from exercise of stock options	5,339	3,225	5,038	2,972	2,822
Proceeds from employee stock purchase plan	1,317	1,437	1,379	1,557	1,865
Repurchases of common shares	0	(3,566)	(14,525)	(2,182)	(13,418)
Payment for taxes related to net share settlement of equity awards	(1,283)	(1,577)	(1,810)	(2,317)	(3,494)
Payments on long-term obligations	0	0	(347)	0	0
Excess tax benefit from stock-based compensation	353	1,635	1,035	0	0
<b>Net cash provided by (used in) financing activities</b>	<b>5,726</b>	<b>1,154</b>	<b>(9,230)</b>	<b>30</b>	<b>(12,225)</b>
Effect of exchange rate changes on cash and cash equivalents	(10)	(54)	(76)	(119)	255
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>27,734</b>	<b>26,093</b>	<b>10,694</b>	<b>(9,371)</b>	<b>(15,520)</b>
Cash and cash equivalents, beginning of period	61,637	89,371	115,464	126,158	116,787
<b>Cash and cash equivalents, end of period</b>	<b>89,371</b>	<b>115,464</b>	<b>126,158</b>	<b>116,787</b>	<b>101,267</b>

## 2017 – GAAP Cash Flow Commentary

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- During the year the Company purchased approximately \$10.3 million of fixed assets, primarily related to our DFI solution.
- Cash provided by operations during the year was approximately \$10.5 million.
- For the full year, the Company spent \$13.4 million on repurchasing 842 thousand shares of common stock on the open market as part of our Stock Repurchase Program. The Company spent \$3.5 million to purchase 196 thousand shares to cover employee taxes on restricted stock grants released.

# Non-GAAP Presentation

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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 of non-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.

# Reconciliation of GAAP to Non-GAAP for Prior Quarters

in thousands (except for shares and per share amounts)

	<u>Q1-16</u>	<u>Q2-16</u>	<u>Q3-16</u>	<u>Q4-16</u>	<u>YTD 2016</u>	<u>Q1-17</u>	<u>Q2-17</u>	<u>Q3-17</u>	<u>Q4-17</u>	<u>YTD 2017</u>
GAAP net income	\$ 2,061	\$ 2,133	\$ 1,984	\$ 2,925	\$ 9,103	\$ 517	\$ 189	\$ 590	\$ (2,634)	\$ (1,338)
Adjustments to reconcile GAAP net income to non-GAAP net income:										
Stock-based compensation expense	2,666	2,292	2,977	3,067	11,002	2,884	2,904	2,949	3,073	11,810
Amortization of acquired technology	96	96	86	96	374	96	96	136	144	472
Amortization of other acquired intangible assets	117	117	106	92	432	92	92	107	107	398
Non-recurring severance payments	-	-	-	-	0	-	-	370	30	400
Adjustment for Non-Cash items in Income Tax Expense	1,265	1,261	1,382	1,454	5,362	835	998	817	3,181	5,831
Tax Adjustment for Non-GAAP items	(966)	(651)	(1,146)	(2,041)	(4,804)	(1,830)	(1,627)	(1,407)	263	(4,600)
Non-GAAP net income	<u>\$ 5,239</u>	<u>\$ 5,248</u>	<u>\$ 5,389</u>	<u>\$ 5,593</u>	<u>\$ 21,469</u>	<u>\$ 2,594</u>	<u>\$ 2,652</u>	<u>\$ 3,562</u>	<u>\$ 4,164</u>	<u>\$ 12,973</u>
GAAP net income per diluted share	\$ 0.07	\$ 0.07	\$ 0.06	\$ 0.09	\$ 0.28	\$ 0.02	\$ 0.01	\$ 0.02	\$ (0.08)	\$ (0.04)
Non-GAAP net income per diluted share	\$ 0.16	\$ 0.16	\$ 0.17	\$ 0.17	\$ 0.66	\$ 0.08	\$ 0.08	\$ 0.11	\$ 0.13	\$ 0.39
Shares used in diluted shares calculation (in millions)	31.8	32.1	32.6	33.3	32.4	33.6	33.4	33.0	32.9	33.2

# Non-GAAP Performance Measures – Quarterly Trend Through Q4 2017

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

	<u>Q1-16</u>	<u>Q2-16</u>	<u>Q3-16</u>	<u>Q4-16</u>	<u>YTD 2016</u>	<u>Q1-17</u>	<u>Q2-17</u>	<u>Q3-17</u>	<u>Q4-17</u>	<u>YTD 2017</u>
Non-GAAP Gross Margin	16,056	17,086	17,084	17,588	67,814	14,146	14,075	15,556	15,801	59,578
Non-GAAP Gross Margin %	64%	64%	63%	62%	63%	58%	58%	59%	59%	58%
Non-GAAP Net Income	5,239	5,248	5,389	5,593	21,469	2,594	2,652	3,562	4,164	12,973
Non-GAAP EPS	0.16	0.16	0.17	0.17	0.66	0.08	0.08	0.11	0.13	0.39
Diluted Weighted Avg Shares (M)	31.8	32.1	32.6	33.3	32.4	33.6	33.4	33.0	32.9	33.2
EBITDAR	6,730	7,075	7,165	7,377	28,347	3,518	3,662	5,144	5,470	17,794
Non-GAAP Cost of Sales	9,025	9,603	10,175	10,845	39,647	10,143	10,213	10,961	10,975	42,293
<b>OPERATING EXPENSES</b>										
Non-GAAP Research & Development	5,605	6,408	6,123	6,335	24,472	6,448	6,428	6,848	6,670	26,394
Non-GAAP SG&A	4,249	4,410	4,656	5,253	18,568	5,041	5,208	4,722	4,944	19,915
<b>TOTAL OPERATING EXPENSES</b>	<b>9,854</b>	<b>10,818</b>	<b>10,779</b>	<b>11,589</b>	<b>43,040</b>	<b>11,489</b>	<b>11,636</b>	<b>11,570</b>	<b>11,613</b>	<b>46,309</b>



## 2018 – Outlook

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- Apples-to-apples, we expect total revenues to grow at a rate in the high single digits as compared to 2017, and Gainshare, DFI and Exensio revenue growth rates should be above the single digit level.
- We expect to see continued downward pressure on our Fixed Fee IYR revenues.
- Because of the accounting changes driven by adoption of ASC 606, however, it remains to be seen how 2018 results will compare to 2017 results as revised under 606.
- Overall, total spending on a non-GAAP basis is expected to be down moderately as compared to 2017.
- Given the moderate growth in revenues and reduced spending, our non-GAAP net income is expected to increase year-over-year.
- With the enactment of the new tax law, we expect our GAAP tax provision rate to be at 18% for 2018, with cash taxes expected to be at 12% of pre-tax non-GAAP net income.