



2018 First Quarter Management Report

May 8, 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; 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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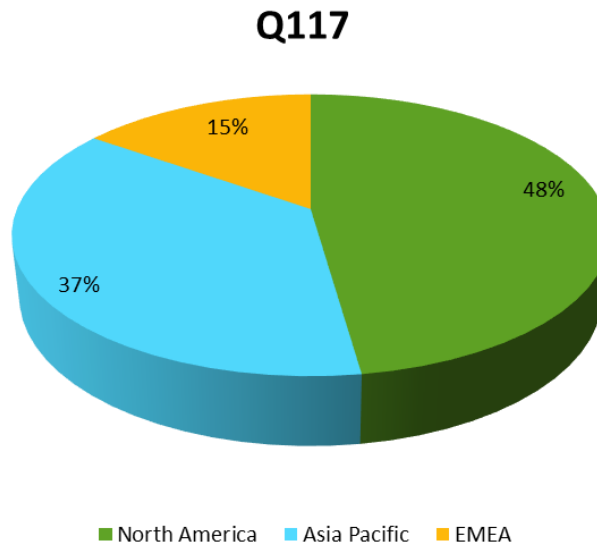
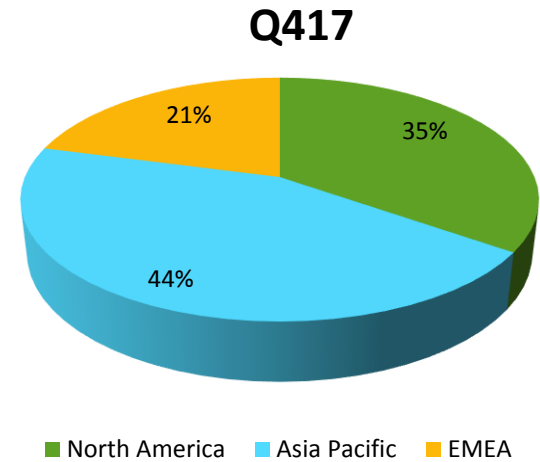
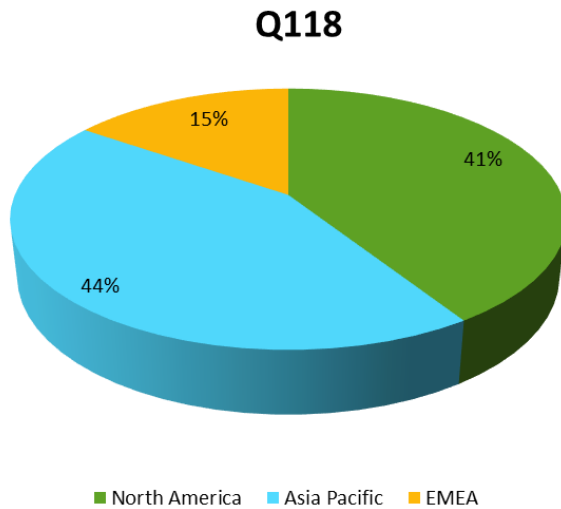
The following commentary is provided by management and should be referenced in conjunction with PDF Solutions' first quarter for fiscal year 2018 financial results press release available on its Investor Relations website at <http://www.pdf.com/financial-news>. These remarks represent management's current views of the Company's financial and operational performance and 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 Q1 2018

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

| P&L (GAAP) | Q1-16 | Q2-16 | Q3-16 | Q4-16 | Q1-17 | Q2-17 | Q3-17 | Q4-17 | Q1-18 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| Design to Silicon Yield Solutions | 18,578 | 20,574 | 18,552 | 19,458 | 19,698 | 16,500 | 19,229 | 19,010 | 18,190 |
| Gain Share - Performance Incentive | 6,503 | 6,114 | 8,707 | 8,975 | 4,591 | 7,789 | 7,288 | 7,766 | 6,547 |
| Total Revenue | 25,081 | 26,688 | 27,259 | 28,433 | 24,289 | 24,289 | 26,517 | 26,776 | 24,737 |
| Cost of Sales | 10,206 | 10,654 | 11,452 | 12,136 | 11,431 | 11,379 | 12,431 | 12,281 | 11,482 |
| GROSS MARGIN | 14,875 | 16,034 | 15,807 | 16,297 | 12,858 | 12,910 | 14,086 | 14,495 | 13,255 |
| Gross Margin % | 59% | 60% | 58% | 57% | 53% | 53% | 53% | 54% | 54% |
| OPERATING EXPENSES | | | | | | | | | |
| Research & Development | 6,311 | 7,060 | 7,017 | 7,171 | 7,282 | 7,276 | 7,875 | 7,646 | 7,245 |
| R&D % of Revenue | 25% | 26% | 26% | 25% | 30% | 30% | 30% | 29% | 29% |
| Selling, General, & Administrative | 5,124 | 5,094 | 5,548 | 6,290 | 5,899 | 6,195 | 5,680 | 5,909 | 6,375 |
| SG&A % of Revenue | 20% | 19% | 20% | 22% | 24% | 26% | 21% | 22% | 26% |
| Amortization of other acquired intangible assets | 117 | 117 | 106 | 92 | 92 | 92 | 107 | 107 | 109 |
| TOTAL OPERATING EXPENSES | 11,552 | 12,271 | 12,671 | 13,553 | 13,273 | 13,563 | 13,662 | 13,662 | 13,729 |
| OPERATING INCOME (LOSS) | 3,323 | 3,763 | 3,136 | 2,744 | (415) | (653) | 424 | 833 | (474) |
| Other (Income) / Expense, Net | 236 | 51 | 101 | (378) | 230 | (27) | 104 | (42) | 331 |
| PRE-TAX INCOME (LOSS) | 3,087 | 3,712 | 3,035 | 3,122 | (645) | (626) | 320 | 875 | (805) |
| Income Tax Provision (Benefit) | 1,026 | 1,579 | 1,051 | 198 | (1,162) | (815) | (270) | 3,508 | (381) |
| Net Income | 2,061 | 2,133 | 1,984 | 2,924 | 517 | 189 | 590 | (2,634) | (424) |
| GAAP EPS | 0.07 | 0.07 | 0.06 | 0.09 | 0.02 | 0.01 | 0.02 | (0.08) | (0.01) |
| Diluted Weighted Avg Shares (in millions) | 31.8 | 32.1 | 32.6 | 33.3 | 33.6 | 33.4 | 33.0 | 32.9 | 32.2 |

GAAP Revenue by Geography Q1 2018 & Comparable Quarters



Q1 2018 CFO Commentary – Revenue

- The top ten customers represented 81% of total revenues in the first quarter of 2018. One of these customers contributed revenues 10% or greater.
- Solutions revenue consisted of 7 project-based engagements that contributed at least \$100,000 of solutions revenue each in the first quarter of 2018.
- The total number of node-sites, defined as an individual fab and process node combination, contributing to Gainshare revenue, was 15 in the first quarter of 2018.

Q1 2018 CFO Commentary – ASC 606 Impact on Q1 2018 Revenue

- We adopted ASC 606 as of January 1st, 2018 under the modified retrospective method.
- The accounting under the new rules generally results in revenue recognized earlier than it would have been under the previous accounting guidance.
- The total effect of adoption is acceleration of \$5.2 million of future revenues into pre-2018 periods and capitalization of \$0.5 million of previously recognized costs to obtain customer contracts which, when combined, resulted in a \$5.7 million increase to opening period retained earnings. We also recorded a \$1.3 million increase in Deferred Tax Liabilities related to this increase in Retained Earnings as a result of the adoption.
- A result of the acceleration of the \$5.2 million of future revenues noted above is that these revenue amounts are no longer available to be recognized in future periods, meaning that the portion of this revenue that was originally scheduled for fiscal 2018 was removed. Somewhat offsetting this reduction is acceleration under ASC 606 of revenue from new contracts booked during 2018.
- The net effect of these offsetting reductions and accelerations of revenues in Q1 2018 was approximately zero. This was offsetting effect was most prominent with regards to term-based software license revenue and perpetual software license revenue where approximately \$300 thousand of reductions in term-based software license revenue were nearly offset in total by increases in perpetual software license revenue. All other ASC 606 adjustments to Q1 2018 revenues were immaterial.

GAAP Balance Sheet Trend – Quarterly Through Q1 2018

in thousands

| | 31-Mar-16 | 30-Jun-16 | 30-Sep-16 | 31-Dec-16 | 31-Mar-17 | 30-Jun-17 | 30-Sep-17 | 31-Dec-17 | 31-Mar-18 |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| ASSETS | | | | | | | | | |
| Cash and short-term investments | \$ 129,398 | \$ 122,222 | \$ 118,534 | \$ 116,787 | \$ 114,926 | \$ 109,007 | \$ 100,750 | \$ 101,267 | \$ 98,522 |
| Accounts receivable -trade | 19,948 | 19,369 | 25,550 | 27,348 | 27,366 | 33,005 | 32,226 | 35,355 | 35,366 |
| Unbilled accounts receivable | 9,376 | 15,417 | 18,474 | 20,809 | 22,722 | 21,024 | 20,728 | 22,209 | 23,070 |
| Other current assets | 3,479 | 4,729 | 5,163 | 5,335 | 6,741 | 8,813 | 6,579 | 5,069 | 10,254 |
| Total current assets | 162,200 | 161,737 | 167,721 | 170,279 | 171,755 | 171,849 | 160,284 | 163,900 | 167,212 |
| Goodwill and intangibles | 5,030 | 4,818 | 4,626 | 4,438 | 4,250 | 4,062 | 8,248 | 7,997 | 7,744 |
| Deferred tax assets | 14,761 | 14,201 | 14,135 | 15,640 | 16,201 | 15,815 | 18,522 | 16,348 | 15,896 |
| Other non-current assets | 7,564 | 9,496 | 9,413 | 12,631 | 14,615 | 12,262 | 11,312 | 10,544 | 9,752 |
| Property plant and equipment | 13,236 | 16,076 | 18,192 | 19,341 | 20,798 | 23,068 | 23,604 | 25,386 | 26,536 |
| Total assets | \$ 202,791 | \$ 206,328 | \$ 214,087 | \$ 222,329 | \$ 227,619 | \$ 227,057 | \$ 221,970 | \$ 224,176 | \$ 227,140 |
| LIABILITIES | | | | | | | | | |
| Accounts payable | \$ 2,016 | \$ 2,469 | \$ 947 | \$ 2,206 | \$ 2,436 | \$ 2,270 | \$ 2,608 | \$ 2,536 | \$ 3,188 |
| Accrued Liabilities | 6,141 | 8,074 | 8,268 | 8,039 | 6,902 | 7,938 | 7,886 | 9,120 | 7,473 |
| Deferred revenues - current portion | 6,471 | 6,052 | 8,472 | 8,277 | 9,977 | 9,322 | 7,912 | 7,981 | 8,474 |
| Total current liabilities | 14,629 | 16,595 | 17,687 | 18,523 | 19,314 | 19,530 | 18,407 | 19,637 | 19,135 |
| Deferred taxes and other | 2,932 | 2,922 | 3,515 | 5,003 | 5,049 | 5,427 | 5,266 | 6,171 | 5,946 |
| Total liabilities | 17,561 | 19,517 | 21,202 | 23,526 | 24,363 | 24,957 | 23,673 | 25,808 | 25,081 |
| EQUITY | | | | | | | | | |
| Common stock and additional paid-in-capital | 269,605 | 272,148 | 276,504 | 281,428 | 285,935 | 289,965 | 294,369 | 297,960 | 301,872 |
| Treasury stock | (50,396) | (53,306) | (53,731) | (54,882) | (55,726) | (61,536) | (70,744) | (71,798) | (76,473) |
| Accumulated other comprehensive loss | (1,184) | (1,370) | (1,213) | (1,991) | (1,718) | (1,283) | (873) | (705) | (180) |
| Accumulated deficit | (32,794) | (30,661) | (28,676) | (25,752) | (25,235) | (25,046) | (24,455) | (27,089) | (23,160) |
| Total stockholders' equity | 185,231 | 186,811 | 192,884 | 198,803 | 203,257 | 202,100 | 198,297 | 198,368 | 202,059 |
| Total liabilities and stockholders' equity | \$ 202,791 | \$ 206,328 | \$ 214,087 | \$ 222,329 | \$ 227,619 | \$ 227,057 | \$ 221,970 | \$ 224,176 | \$ 227,140 |

Q1 2018 – GAAP Balance Sheet Commentary

- Trade Accounts Receivable balance at the end of the quarter was \$35.4 million, approximately the same when compared to the previous quarter. The Unbilled Accounts Receivable balance (current & long-term) was \$30.8 million at the end of the quarter, approximately the same when compared to the previous quarter. Additionally, under ASC 606, \$3.7 million has been reclassified from Unbilled AR to Contract Assets and recorded as Other Current Assets.
- Of the \$30.8 million of Unbilled Accounts Receivable at the end of the quarter, we expect approximately \$23.1 million to be billed in the next twelve months of which more than 39% will be billed during Q2 2018. Included in the \$30.8 million of Unbilled AR is approximately an incremental \$1.5 million related to adoption of ASC 606 methodology for Gainshare revenue recognition.
- Of the \$35.4 million of Trade Receivables, \$12.9 million, or 36%, was aged more than 30 days. Since the end of the quarter, \$11.0 million of Trade Receivables has been collected as of the date of this report.

GAAP Cash Flow – Quarterly Trend Through Q1 2018

| in thousands | 03/31/16 | 06/30/16 | 09/30/16 | 12/31/16 | 03/31/17 | 06/30/17 | 09/30/17 | 12/31/17 | 03/31/18 |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Operating activities: | | | | | | | | | |
| Net income (loss) | 2,061 | 2,133 | 1,984 | 2,925 | 517 | 189 | 591 | (2,634) | (424) |
| 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 | 1,261 |
| Stock-based compensation | 2,666 | 2,291 | 2,978 | 3,067 | 2,882 | 2,906 | 2,948 | 3,074 | 2,856 |
| Amortization of acquired intangible assets | 213 | 212 | 192 | 189 | 188 | 188 | 242 | 251 | 253 |
| Losses on disposal of assets | 107 | - | - | - | - | 5 | - | 1 | 3 |
| Deferred taxes | 459 | 564 | 60 | (867) | (580) | 387 | (3,321) | 3,010 | 117 |
| Provisions (reversal) on losses on accounts receivable | 53 | (152) | - | - | - | 124 | - | 50 | 0 |
| Unrealized loss (gain) on foreign currency forward contract | (23) | (11) | (20) | 6 | 92 | (59) | (39) | (21) | 58 |
| Changes in operating assets and liabilities: | | | | | | | | | |
| Accounts receivable | 4,062 | (5,311) | (9,237) | (4,134) | (1,931) | (4,065) | 1,075 | (4,660) | 639 |
| Prepaid expenses and other assets | (5,739) | (3,169) | (342) | (3,428) | (3,372) | 314 | 3,247 | 2,288 | (3,836) |
| Accounts payable | 250 | 360 | (577) | 52 | 476 | 375 | 760 | 352 | 1,097 |
| Accrued compensation and related benefits | (564) | 910 | (69) | 901 | (1,040) | 817 | (498) | 970 | (1,278) |
| Accrued and other liabilities | (833) | 610 | 362 | (370) | (587) | (158) | 521 | 296 | (532) |
| Deferred revenue | 1,674 | (727) | 3,012 | 813 | 1,734 | (1,008) | (1,408) | 356 | 3,038 |
| Billings in excess of recognized revenue | (1,153) | 198 | (239) | 15 | 112 | 189 | (101) | (288) | - |
| Net cash provided by (used in) operating activities | 3,998 | (1,233) | (936) | 169 | (418) | 1,399 | 5,280 | 4,285 | 3,252 |
| Investing activities: | | | | | | | | | |
| Proceeds from the sales of property and equipment | - | - | - | - | - | - | - | - | 2 |
| Purchases of property and equipment | (1,780) | (3,271) | (3,809) | (2,422) | (2,313) | (2,651) | (1,978) | (3,313) | (2,449) |
| Acquisition of business, net of cash acquired | - | - | - | - | - | - | (3,841) | - | - |
| Net cash provided by (used in) investing activities | (1,780) | (3,271) | (3,809) | (2,422) | (2,313) | (2,651) | (5,819) | (3,313) | (2,447) |
| Financing activities: | | | | | | | | | |
| Proceeds from exercise of stock options | 182 | 270 | 680 | 1,840 | 717 | 1,091 | 496 | 518 | 39 |
| Proceeds from employee stock purchase plan | 777 | 1 | 780 | - | 909 | - | 956 | - | 1,007 |
| Stock repurchases | - | (1,843) | (339) | - | - | (4,770) | (8,648) | - | (4,123) |
| Purchase of company stock for employee tax settlement | (9) | (1,066) | (86) | (1,156) | (844) | (1,035) | (560) | (1,055) | (556) |
| Net cash provided by (used in) financing activities | 950 | (2,638) | 1,035 | 684 | 782 | (4,714) | (7,756) | (537) | (3,633) |
| Effect of exchange rate changes on cash and cash equivalents | 72 | (34) | 21 | (178) | 88 | 46 | 39 | 82 | 83 |
| Net increase (decrease) in cash and cash equivalents | 3,240 | (7,176) | (3,689) | (1,747) | (1,861) | (5,920) | (8,256) | 517 | (2,745) |
| Cash and cash equivalents, beginning of period | 126,158 | 129,398 | 122,222 | 118,533 | 116,786 | 114,925 | 109,005 | 100,749 | 101,266 |
| Cash and cash equivalents, end of period | 129,398 | 122,222 | 118,533 | 116,786 | 114,925 | 109,005 | 100,749 | 101,266 | 98,521 |

Q1 2018 – GAAP Cash Flow Commentary

- During the quarter the Company purchased approximately \$2.4 million of fixed assets, primarily related to our DFI solution.
- Cash provided by operations during the quarter was approximately \$3.3 million.
- During the quarter, the Company spent \$4.1 million on repurchasing 338 thousand shares of common stock on the open market as part of our Stock Repurchase Program. The Company also spent \$0.6 million to purchase 36 thousand shares to cover employee taxes on restricted stock grants released.

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 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 Net Income

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>Q1-17</u> | <u>Q2-17</u> | <u>Q3-17</u> | <u>Q4-17</u> | <u>Q1-18</u> |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| GAAP net income | \$ 2,061 | \$ 2,133 | \$ 1,984 | \$ 2,925 | \$ 517 | \$ 189 | \$ 590 | \$ (2,634) | \$ (424) |
| Adjustments to reconcile GAAP net income to non-GAAP net income: | | | | | | | | | |
| Stock-based compensation expense | 2,666 | 2,292 | 2,977 | 3,067 | 2,884 | 2,904 | 2,949 | 3,073 | 2,856 |
| Amortization of acquired technology | 96 | 96 | 86 | 96 | 96 | 96 | 136 | 144 | 144 |
| Amortization of other acquired intangible assets | 117 | 117 | 106 | 92 | 92 | 92 | 107 | 107 | 109 |
| Non-recurring severance payments | - | - | - | - | - | - | 370 | 30 | 283 |
| Tax Adjustments | 299 | 610 | 236 | (587) | (995) | (629) | (590) | 3,444 | (747) |
| Non-GAAP net income | <u>\$ 5,239</u> | <u>\$ 5,248</u> | <u>\$ 5,389</u> | <u>\$ 5,593</u> | <u>\$ 2,594</u> | <u>\$ 2,652</u> | <u>\$ 3,562</u> | <u>\$ 4,164</u> | <u>\$ 2,220</u> |
| GAAP net income per diluted share | \$ 0.07 | \$ 0.07 | \$ 0.06 | \$ 0.09 | \$ 0.02 | \$ 0.01 | \$ 0.02 | \$ (0.08) | \$ (0.01) |
| Non-GAAP net income per diluted share | \$ 0.16 | \$ 0.16 | \$ 0.17 | \$ 0.17 | \$ 0.08 | \$ 0.08 | \$ 0.11 | \$ 0.13 | \$ 0.07 |
| Shares used in diluted shares calculation (in millions) | 31.8 | 32.1 | 32.6 | 33.3 | 33.6 | 33.4 | 33.0 | 32.9 | 32.6 |

Reconciliation of GAAP to Non-GAAP Spending by Function

in thousands

| | <u>Q1-16</u> | <u>Q2-16</u> | <u>Q3-16</u> | <u>Q4-16</u> | <u>Q1-17</u> | <u>Q2-17</u> | <u>Q3-17</u> | <u>Q4-17</u> | <u>Q1-18</u> |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cost of Sales - GAAP | 10,206 | 10,654 | 11,452 | 12,136 | 11,431 | 11,379 | 12,431 | 12,281 | 11,482 |
| Adjustments to reconcile GAAP Cost of Sales to non-GAAP | | | | | | | | | |
| Cost of Sales: | | | | | | | | | |
| Stock-based compensation expense | (1,085) | (956) | (1,191) | (1,195) | (1,191) | (1,070) | (1,184) | (1,162) | (1,013) |
| Amortization of acquired technology | (96) | (96) | (86) | (96) | (96) | (96) | (136) | (144) | (144) |
| Non-recurring severance payments | - | - | - | - | - | - | (151) | - | (209) |
| Cost of Sales - Non-GAAP | 9,026 | 9,602 | 10,174 | 10,845 | 10,144 | 10,214 | 10,961 | 10,976 | 10,116 |
| Research & Development - GAAP | 6,311 | 7,060 | 7,017 | 7,171 | 7,282 | 7,276 | 7,875 | 7,646 | 7,245 |
| Adjustments to reconcile GAAP R&D to non-GAAP R&D: | | | | | | | | | |
| Stock-based compensation expense | (706) | (651) | (894) | (836) | (834) | (848) | (877) | (959) | (879) |
| Non-recurring severance payments | - | - | - | - | - | - | (150) | (17) | (74) |
| Research & Development - Non-GAAP | 5,605 | 6,409 | 6,123 | 6,335 | 6,448 | 6,428 | 6,848 | 6,670 | 6,292 |
| Selling, General, & Administrative - GAAP | 5,124 | 5,094 | 5,548 | 6,290 | 5,899 | 6,195 | 5,680 | 5,909 | 6,375 |
| Adjustments to reconcile GAAP SG&A to non-GAAP SG&A: | | | | | | | | | |
| Stock-based compensation expense | (876) | (684) | (892) | (1,036) | (858) | (987) | (888) | (952) | (963) |
| Non-recurring severance payments | - | - | - | - | - | - | (70) | (13) | - |
| Selling, General, & Administrative - Non-GAAP | 4,248 | 4,410 | 4,656 | 5,254 | 5,041 | 5,208 | 4,722 | 4,944 | 5,412 |

2018 – Outlook

- Excluding the impact of ASC 606, we expect total revenues to be flat when compared to 2017 with growth in DFI and Exensio revenues being offset by declines in our yield-ramp business.
- On an ASC 606 basis, we expect 2018 total revenues to be approximately \$2 to \$3 million lower than they would have been under the 2017 accounting methodology (ASC 605).
- Overall, as a result of our cost reduction initiatives, we expect total spending on a non-GAAP basis to be down by 5% or more (after increasing some strategic investments) as compared to 2017.
- We expect our GAAP and non-GAAP tax provision rate (after discrete items) to be at 18.5% for the year.