



2017 First Quarter Management Report

April 27, 2017

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' first 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.

GAAP Income Statement – Quarterly Trend Through Q1 2017

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

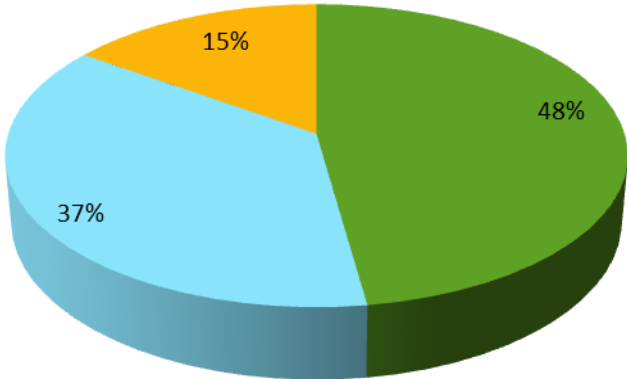
P&L (GAAP)	Q1-15	Q2-15	Q3-15	Q4-15	Q1-16	Q2-16	Q3-16	Q4-16	Q1-17
Design to Silicon Yield Solutions	18,152	14,159	17,246	14,282	18,578	20,574	18,552	19,458	19,698
Gain Share - Performance Incentive	8,665	9,051	6,632	9,790	6,503	6,114	8,707	8,975	4,591
Total Revenue	26,817	23,210	23,878	24,072	25,081	26,688	27,259	28,433	24,289
Cost of Sales	8,804	9,888	10,252	10,080	10,206	10,654	11,452	12,136	11,431
GROSS MARGIN	18,013	13,322	13,626	13,992	14,875	16,034	15,807	16,297	12,858
Gross Margin %	67%	57%	57%	58%	59%	60%	58%	57%	53%
Solutions Margin %	51%	30%	41%	29%	45%	48%	38%	38%	42%
OPERATING EXPENSES									
Research & Development	4,088	4,437	5,173	5,398	6,311	7,060	7,017	7,171	7,282
R&D % of Revenue	15%	19%	22%	22%	25%	26%	26%	25%	30%
Selling, General, & Administrative	4,456	5,216	5,665	5,085	5,124	5,094	5,548	6,290	5,899
SG&A % of Revenue	17%	22%	24%	21%	20%	19%	20%	22%	24%
Amortization of other acquired intangible assets	-	-	89	107	117	117	106	92	92
TOTAL OPERATING EXPENSES	8,544	9,653	10,927	10,590	11,552	12,271	12,671	13,553	13,273
OPERATING INCOME (LOSS)	9,469	3,669	2,699	3,402	3,323	3,763	3,136	2,744	(415)
Other (Income) / Expense, Net	(51)	(52)	(64)	(15)	236	51	101	(378)	230
PRE-TAX INCOME (LOSS)	9,520	3,721	2,763	3,417	3,087	3,712	3,035	3,122	(645)
Income Tax Provision (Benefit)	3,553	1,572	1,269	620	1,026	1,579	1,051	197	(1,162)
Net Income	5,967	2,149	1,494	2,797	2,061	2,133	1,984	2,925	517
GAAP EPS	0.18	0.07	0.05	0.09	0.07	0.07	0.06	0.09	0.02
Diluted Weighted Avg Shares (M)	32.3	32.4	32.1	31.9	31.8	32.1	32.6	33.3	33.6

Q1 2017 CFO Commentary – GAAP Income Statement

- Total GAAP revenues were \$24.3 million, resulting in GAAP net income of \$0.5 million and GAAP EPS of \$0.02 cents per fully diluted share.
- Total GAAP operating loss was \$0.4 million, resulting in a GAAP operating margin of negative 2%.
- Average fully diluted shares outstanding for the quarter were 33.6 million.
- The GAAP income tax benefit was \$1.2 million, which reflects an effective tax rate benefit of 180% compared to a 6% effective tax rate provision in the prior quarter.

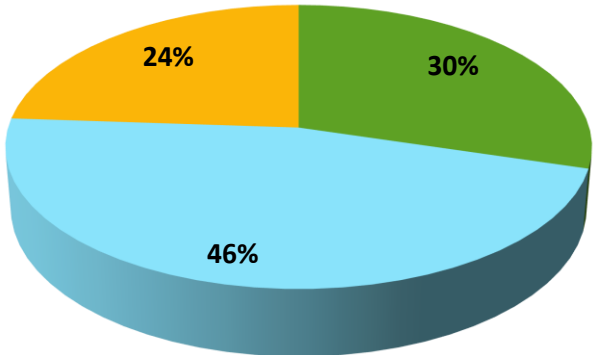
GAAP Revenue by Geography Q1 2017 & Comparable Qs

Q117



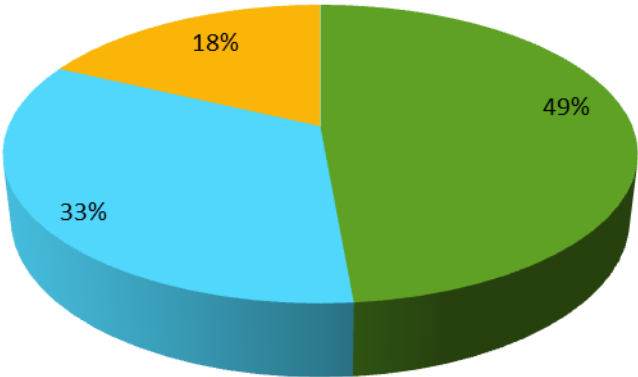
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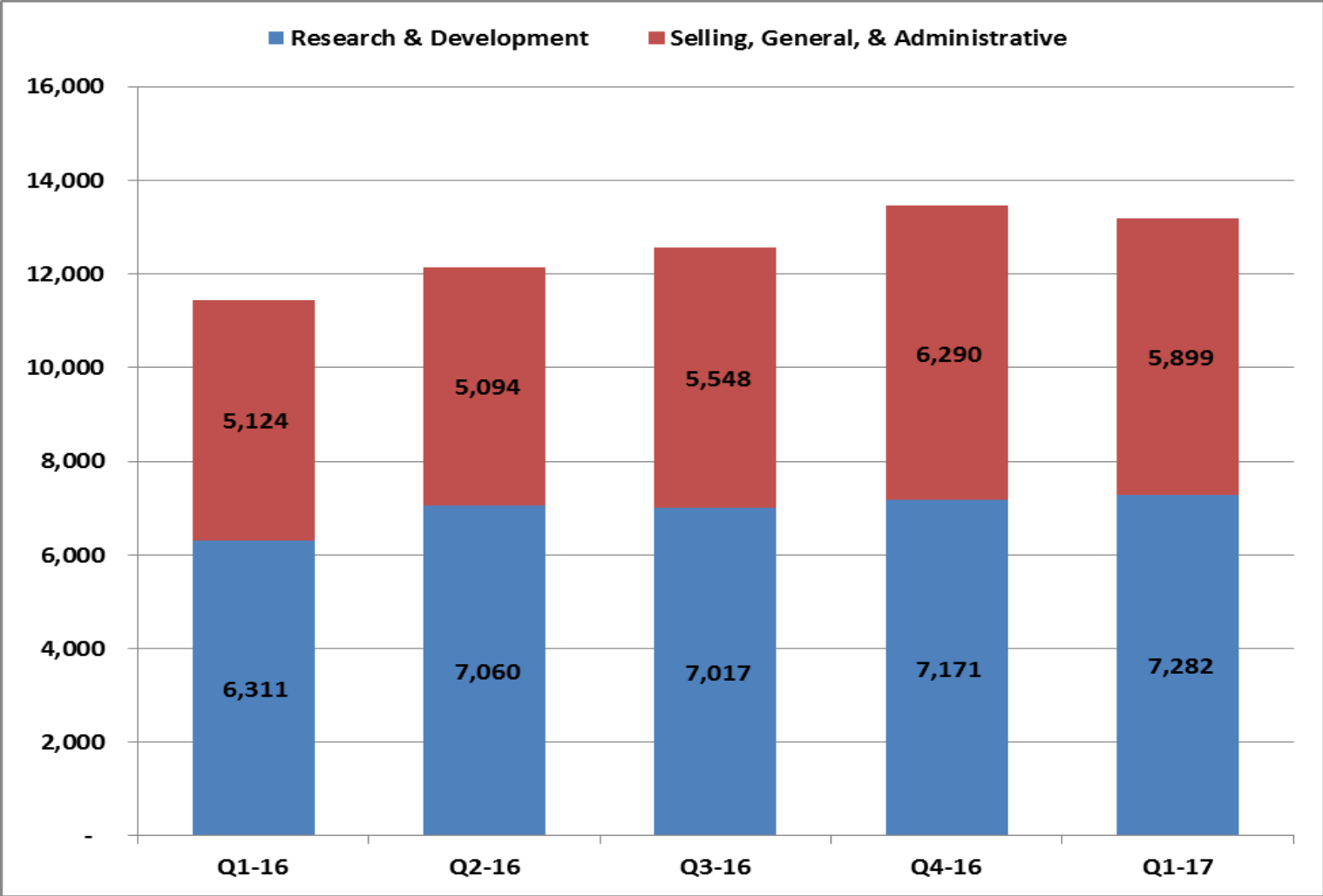


Q1 2017 CFO Commentary – GAAP Revenue & GM Detail

- Total GAAP revenues of \$24.3 million were approximately \$4.1 million lower than the prior quarter.
- The top ten customers represented 84% of total revenues. One of these customers contributed revenues of 10% or greater, pursuant to 2 or more separate, independent contracts.
- Solutions revenue consisted of 14 project-based engagements that contributed at least \$100,000 of Solutions revenue.
- The total number of node-sites, defined as an individual fab and process node combination, contributing to Gainshare revenue, was 14.
- On a GAAP basis, Cost of Sales was \$11.4 million, which was \$0.7 million lower than the prior quarter.
- GAAP gross margin was 53% as compared to 57% in the prior quarter.

GAAP Operating Expenses – Quarterly Through Q1 2017

in thousands



Q1 2017 CFO Commentary – GAAP Operating Expenses

- Total GAAP Operating Expenses, at \$13.3 million, were \$0.3 million lower than the prior quarter, and 55% of total revenues, up 7% from the prior quarter.
- GAAP R&D expenses totaled \$7.3 million, \$0.1 million higher than the prior quarter.
- GAAP R&D expenses as a percent of revenue was 30%, which was up 5% from the prior quarter.
- GAAP SG&A expenses totaled \$5.9 million, \$0.4 million lower than the prior quarter.
- GAAP SG&A expenses as a percent of revenue was 24%, which was up 2% from the prior quarter.

GAAP Balance Sheet Trend – Quarterly Through Q1 2017

in thousands	<i>ASSETS</i>	31-Mar-16	30-Jun-16	30-Sep-16	31-Dec-16	31-Mar-17
	Cash and cash equivalents	\$ 129,398	\$ 122,222	\$ 118,534	\$ 116,787	\$ 114,926
	Accounts receivable, net of allowance	29,323	34,786	44,023	48,157	50,088
	Prepaid expenses and other current assets	3,479	4,728	5,163	5,335	6,741
	Total current assets	162,200	161,736	167,720	170,279	171,755
	Property and equipment, net	13,236	16,076	18,192	19,341	20,798
	Deferred tax assets	14,761	14,201	14,135	15,640	16,201
	Goodwill	215	215	215	215	215
	Intangible assets, net	4,815	4,603	4,411	4,223	4,035
	Other non-current assets	7,564	9,497	9,413	12,631	14,615
	Total assets	\$ 202,792	\$ 206,328	\$ 214,086	\$ 222,329	\$ 227,619
	<i>LIABILITIES</i>					
	Accounts payable	\$ 2,016	\$ 2,469	\$ 947	\$ 2,206	\$ 2,436
	Accrued compensation and related benefits	4,289	5,150	5,190	5,959	4,988
	Accrued and other current liabilities	1,853	2,924	3,077	2,080	1,913
	Deferred revenues - current portion	6,358	5,740	8,399	8,189	9,777
	Billings in excess of recognized revenue	114	312	73	88	200
	Total current liabilities	14,630	16,595	17,686	18,522	19,314
	Long-term income taxes payable	2,468	2,594	2,859	3,354	3,247
	Other non-current liabilities	464	328	657	1,650	1,802
	Total liabilities	17,562	19,517	21,202	23,526	24,363
	<i>EQUITY</i>					
	Common stock	5	5	5	5	5
	Additional paid-in-capital	269,595	272,138	276,495	281,423	285,930
	Treasury stock at cost	(50,392)	(53,301)	(53,726)	(54,882)	(55,726)
	Accumulated deficit	(32,794)	(30,661)	(28,677)	(25,752)	(25,235)
	Accumulated other comprehensive loss	(1,184)	(1,370)	(1,213)	(1,991)	(1,718)
	Total equity	185,230	186,811	192,884	198,803	203,256
	Total liabilities and equity	\$ 202,792	\$ 206,328	\$ 214,086	\$ 222,329	\$ 227,619

Q1 2017 – GAAP Balance Sheet – Cash & Accounts Receivables

- Total cash at the end of the quarter was \$114.9 million, a decrease of \$1.9 million when compared to cash on December 31, 2016.
- During the quarter the Company purchased approximately \$2.3 million of fixed assets, primarily related to development of our DFI solution.
- Cash used in operations during the quarter was approximately \$0.4 million.
- For the quarter, the Company used \$0.8 million for cash payments for taxes related to 37 thousand shares to cover employee taxes on net share settlements of restricted stock grants released.
- Trade Accounts Receivable balance at the end of the quarter was \$27.4 million, relatively flat over the previous quarter. The Unbilled Accounts Receivable balance was \$34.6 million at the end of the quarter, an increase of approximately \$4.0 million over the prior quarter.
- Of the \$34.6 million of Unbilled Accounts Receivable at the end of the quarter, we expect approximately \$22.7 million to be billed in the next twelve months.
- Of the \$61.9 million of total Receivables, \$6.0 million, or 10%, was aged more than 30 days. Since the end of the quarter, \$2.5 million of Trade Receivables has been collected as of the date of this report.
- The quarter-over-quarter increase in Accounts Receivable and DSO is primarily driven by a \$4.0 million increase in Unbilled Accounts Receivable. This is related to fixed fee Solutions revenue recognized during the quarter on a major customer contract for which billings will take place on a quarterly basis going forward.



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, 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.

Q1 2017 – Reconciliation of GAAP to Non-GAAP Net Income

in thousands (except for shares and per share amounts)

	<u>Q1-17</u>
GAAP net income	\$ 517
Adjustments to reconcile GAAP net income to non-GAAP net income:	
Stock-based compensation expense	2,884
Amortization of acquired technology	96
Amortization of other acquired intangible assets	92
Non-cash portion of income tax expense	(995)
Non-GAAP net income	<u>\$ 2,594</u>
GAAP net income per diluted share	<u>\$ 0.02</u>
Non-GAAP net income per diluted share	<u>\$ 0.08</u>
Shares used in diluted shares calculation (M)	33.6

Reconciliation of GAAP to Non-GAAP for Prior Quarters

in thousands (except for shares and per share amounts)

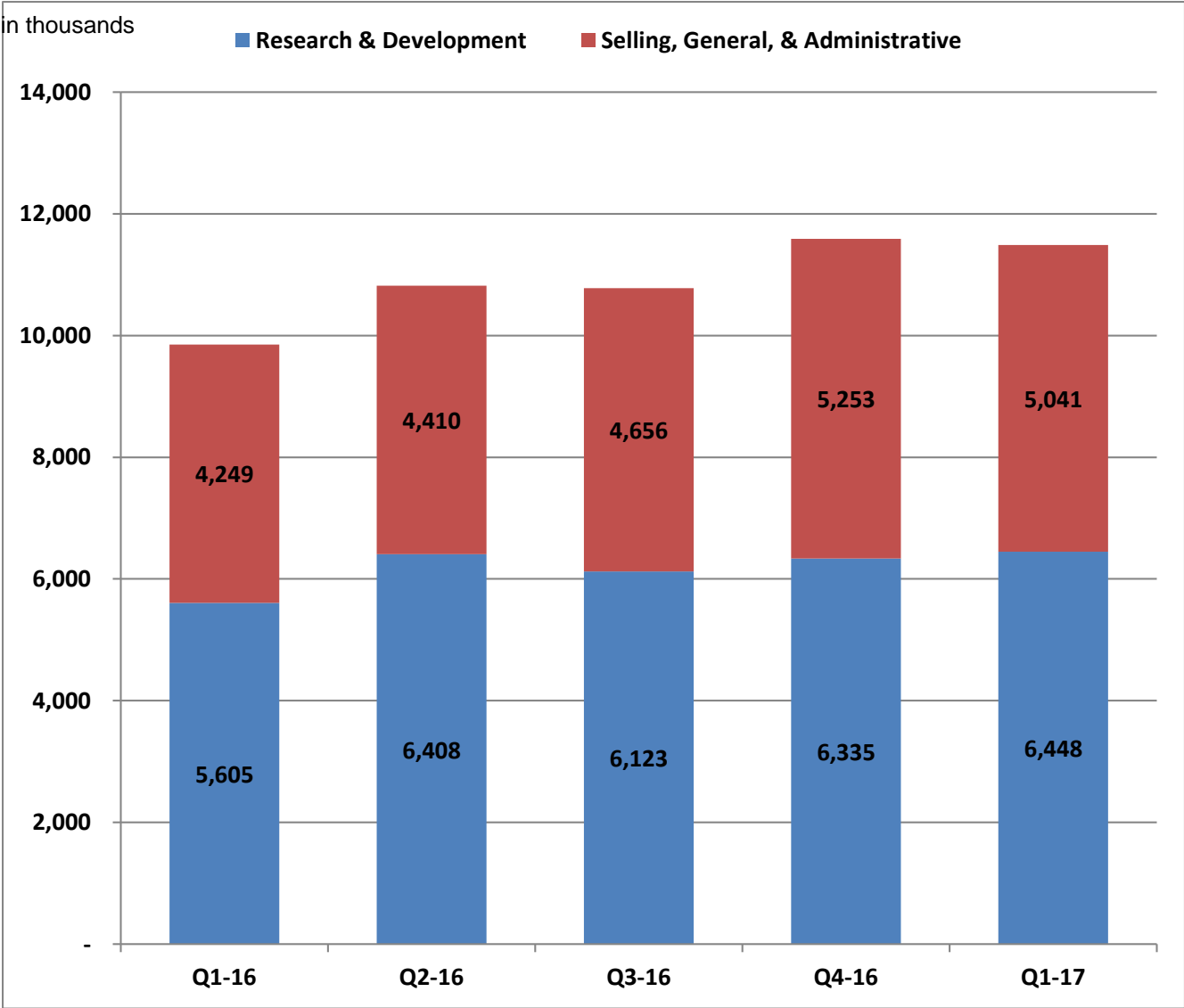
	<u>Q1-15</u>	<u>Q2-15</u>	<u>Q3-15</u>	<u>Q4-15</u>	<u>Q1-16</u>	<u>Q2-16</u>	<u>Q3-16</u>	<u>Q4-16</u>	<u>Q1-17</u>
GAAP net income	\$ 5,967	\$ 2,149	\$ 1,494	\$ 2,797	\$ 2,061	\$ 2,133	\$ 1,984	\$ 2,925	\$ 517
Adjustments to reconcile GAAP net income to non-GAAP net income:									
Stock-based compensation expense	2,199	2,355	2,564	2,639	2,666	2,291	2,977	3,067	2,884
Previously impaired deferred costs	(1,892)	-	-	-	-	-	-	-	-
Amortization of acquired technology	-	-	80	96	96	96	86	96	96
Amortization of other acquired intangible assets	-	-	89	107	117	117	106	92	92
Acquisition costs	-	482	290	62	-	-	-	-	-
Acquisition related contingent earn-out	-	-	475	25	-	-	-	-	-
Acquisition related deferred revenue adjustment	-	-	501	400	115	50	3	1	-
Non-cash portion of income tax expense	1,963	882	270	(390)	299	609	236	(587)	(995)
Non-GAAP net income	<u>\$ 8,237</u>	<u>\$ 5,868</u>	<u>\$ 5,763</u>	<u>\$ 5,736</u>	<u>\$ 5,354</u>	<u>\$ 5,296</u>	<u>\$ 5,392</u>	<u>\$ 5,594</u>	<u>\$ 2,594</u>
GAAP net income per diluted share	\$ 0.18	\$ 0.07	\$ 0.05	\$ 0.09	\$ 0.07	\$ 0.07	\$ 0.06	\$ 0.09	\$ 0.02
Non-GAAP net income per diluted share	\$ 0.26	\$ 0.18	\$ 0.18	\$ 0.18	\$ 0.17	\$ 0.17	\$ 0.17	\$ 0.17	\$ 0.08
Shares used in diluted shares calculation (M)	32.3	32.4	32.1	31.9	31.8	32.1	32.6	33.3	33.6

Non-GAAP Expenses – Quarterly Trend Through Q1 2017

in thousands

NON-GAAP EXPENSES:	<u>Q1-15</u>	<u>Q2-15</u>	<u>Q3-15</u>	<u>Q4-15</u>	<u>Q1-16</u>	<u>Q2-16</u>	<u>Q3-16</u>	<u>Q4-16</u>	<u>Q1-17</u>
COST OF SALES	9,809	8,974	9,132	8,910	9,025	9,603	10,175	10,845	10,143
OPERATING EXPENSES									
Research & Development	3,597	3,927	4,456	4,736	5,605	6,408	6,123	6,335	6,448
Selling, General, & Administrative	3,634	3,803	4,092	4,095	4,249	4,410	4,656	5,253	5,041
TOTAL OPERATING EXPENSES	7,232	7,729	8,548	8,831	9,854	10,818	10,779	11,589	11,489
Cash Tax Expense / (Benefit)	1,590	691	999	1,010	726	970	815	785	(167)

Non-GAAP Operating Expenses – Quarterly Trend Through Q1 2017



Q1 2017 CFO Commentary – Non-GAAP Expenses

- On a Non-GAAP basis, Cost of Sales was \$10.1 million, which was \$0.7 million lower than the prior quarter.
- Total Non-GAAP Operating Expenses, at \$11.5 million, were \$0.1 million lower than the prior quarter and 47% of total revenues, up 6% from the prior quarter.
- Non-GAAP R&D expenses totaled \$6.4 million, \$0.1 million higher than the prior quarter.
- Non-GAAP R&D expenses as a percent of revenue were 27%, which was up 4% from the prior quarter.
- Non-GAAP SG&A expenses totaled \$5.0 million, \$0.2 million lower than the prior quarter.
- Non-GAAP SG&A expenses as a percent of revenue were 21%, which was up 2% from the prior quarter.
- Cash tax liabilities for Non-GAAP presentation were negative \$0.2 million. This represents an effective cash tax rate provision of 26% of pre-tax GAAP income.

Non-GAAP Performance Measures – Quarterly Through Q1 2017

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

	<u>Q1-15</u>	<u>Q2-15</u>	<u>Q3-15</u>	<u>Q4-15</u>	<u>Q1-16</u>	<u>Q2-16</u>	<u>Q3-16</u>	<u>Q4-16</u>	<u>Q1-17</u>
GROSS MARGIN	17,008	14,237	15,246	15,562	16,171	17,136	17,088	17,589	14,146
Gross Margin %	63%	61%	63%	64%	64%	64%	63%	62%	58%
Pro Forma Net Income	8,237	5,868	5,762	5,736	5,354	5,296	5,392	5,594	2,594
Non-GAAP EPS	0.26	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.08
Diluted Weighted Avg Shares (M)	32.3	32.4	32.1	31.9	31.8	32.1	32.6	33.3	33.6
EBITDAR	10,432	7,192	7,443	7,473	6,845	7,125	7,168	7,378	3,518

Q1 2017 CFO Commentary – Non-GAAP Performance Measures

- Non-GAAP gross margin was 58%, compared to 62% in the prior quarter.
- Total non-GAAP net income was \$2.6 million, \$3.0 million lower than the prior quarter.
- Non-GAAP EPS was \$0.08 cents per fully diluted share, compared to \$0.17 cents in the prior quarter.
- Average fully diluted shares outstanding for the quarter were 33.6 million.
- EBITDAR was \$3.5 million, compared to \$7.4 million in the prior quarter.

2017 – GAAP & Non-GAAP Outlook – Revenue

- Overall, we still expect total revenue to grow year-over-year, however, we now expect that to be at a rate in the low- to mid- single digit range.
- We expect Solutions revenue to grow at a high single digit rate for the year, driven by increasing demand for our Exensio software solutions, DFI revenue growth, as well as our continued expansion of the Asia semiconductor market, in particular the China market.
- We expect Gainshare revenue to be flat to slightly down as compared to 2016, driven by low 28nm volumes during the first half of 2017, partially offset by the continued ramp of 14nm volumes and early 28nm ramps of newer customers through the year. As stated in February in connection with the release of our 2016 results, several older customers' 28nm nodes are ramping down during the year from a Gainshare perspective. Timing of these customer transitions creates uncertainties in our full year outlook. We do not expect a full recovery in 28nm volumes until 2018.

2017 – GAAP & Non-GAAP Outlook – Spending & Tax

- Overall, we expect total spending to grow throughout 2017, driven by continued investment in development of our DFI solution, expansion of our Exensio software business, and acceleration of our growth in China.
- With the exception of our continuing investment in DFI, spending growth elsewhere in the Company will be commensurate with revenue growth.
- Investment levels in R&D for our DFI solution will continue to increase throughout 2017 but at a moderating rate, as we continue development of the 250 series eProbe™ system.
- We expect our full year GAAP tax provision rate to be between 37% and 39%.
- Cash taxes for non-GAAP presentation for the year should be in the range of 27% to 29%.