

CADENCE REPORTS FOURTH QUARTER AND FISCAL YEAR 2016

CADENCE DESIGN SYSTEMS, INC.

CFO COMMENTARY

February 1, 2017

Q4 2016 Key Takeaways

- Strong, consistent financial results for Q4 and 2016 with revenue and cash flow meeting or exceeding expectations.
- Operating cash flow for 2016 up 18% over 2015.
- Restructuring charge of \$26 million in Q4.
- Inventory reserves primarily for Palladium® XP were \$13 million in Q4 and \$18 million for the year.
- Completed \$1.2 billion stock repurchase program.

FY 2017 Outlook

- Revenue: \$1.900 - \$1.950 billion.
- GAAP operating margin: approximately 17%.
- Non-GAAP operating margin: approximately 27%.
- GAAP EPS: \$0.89 - \$0.99.
- Non-GAAP EPS \$1.32 - \$1.42.
- Operating cash flow: \$430 - \$470 million.

Q1 2017 Outlook

- Revenue : \$470 - \$480 million.
- GAAP operating margin: approximately 15%.
- Non-GAAP operating margin: approximately 25%.
- GAAP EPS: \$0.19 - \$0.21.
- Non-GAAP EPS: \$0.30 - \$0.32.

Financial Results Webcast

Our Q4 2016 financial results webcast will begin February 1, 2017 at 2:00 p.m. (Pacific). The webcast may be accessed at cadence.com/cadence/investor_relations.

An archive of the webcast will be available on February 1, 2017 until 5:00 p.m. (Pacific) on March 17, 2017.

Q4 2016 KEY METRICS

- Revenue \$469 million, +6% y/y.
- GAAP operating margin 11%.
- Non-GAAP operating margin 27%.
- GAAP EPS \$0.14.
- Non-GAAP EPS \$0.34, cents, +10% y/y.
- Operating cash flow \$197 million.

FY 2016 KEY METRICS

- Bookings \$2.057 billion, +8%.
- Revenue \$1.816 billion, +7%.
- GAAP operating margin 13%.
- Non-GAAP operating margin 26%.
- GAAP EPS \$0.70.
- Non-GAAP EPS \$1.21, +11% y/y.
- Operating cash flow \$445 million.
- Cash and short-term investments \$468 million.

Fiscal Year 2017 Financial Outlook

	FY 2016A	Current FY 2017E
Recurring Revenue	>90%	>90%
Total Revenue (\$ Billion)	\$1.816	\$1.900 - \$1.950
Y/Y Growth	7%	5% - 7%
Revenue from Beginning Backlog	~70%	~70%
GAAP Operating Margin	13.5%	~17%
Non-GAAP Operating Margin	25.8%	~27%
Non-GAAP Other Income & Exp (\$ Million)	\$(12.4)	(\$28) - (\$19)
Non-GAAP Tax Rate	23%	23%
Weighted Average Diluted Shares Outstanding (Million)	291.3	275 - 285
GAAP EPS	\$0.70	\$0.89 - \$0.99
Non-GAAP EPS	\$1.21	\$1.32 - \$1.42
Y/Y Growth	11%	9% - 17%
Cash Flow from Operations (\$ Million)	\$444.9	\$430 - \$470
DSO	33	30 - 35
Capital Expenditures (\$ Million)	\$53.7	~\$50

First Quarter 2017 Financial Outlook

	Q1 2016A	Q4 2016A	Current Q1 2017E
Total Revenue (\$ Million)	\$447.9	\$469.0	\$470 - \$480
Q/Q Growth	2%	5%	0% - 2%
Y/Y Growth	9%	6%	5% - 7%
GAAP Operating Margin	13%	11%	~15%
Non-GAAP Operating Margin	26%	27%	~25%
GAAP EPS	\$0.17	\$0.14	\$0.19 - \$0.21
Non-GAAP EPS	\$0.28	\$0.34	\$0.30 - \$0.32
Q/Q Growth	(10)%	13%	(12)% - (6)%
Y/Y Growth	22%	10%	7% - 14%

Fourth Quarter and Fiscal Year Financial Results

Bookings

<i>(In Billions, Except Book to Bill)</i>	2013	2014	2015	2016
Total Bookings	\$1.585	\$1.778	\$1.902	\$2.057
Y/Y Growth	19%	12%	7%	8%
Book to Bill	1.09	1.12	1.12	1.13
Backlog	\$1.9	\$2.1	\$2.3	\$2.5
Y/Y Growth	9%	12%	10%	11%

Revenue

<i>(In Thousands)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Product & Maintenance	\$413,489	\$411,744	\$419,963	\$415,370	\$436,694
Services	27,590	36,118	33,058	30,850	32,286
Total Revenue	\$441,079	\$447,862	\$453,021	\$446,220	\$468,980
Y/Y Growth	4%	9%	9%	3%	6%

<i>(In Thousands)</i>	2013	2014	2015	2016
Product & Maintenance	\$1,357,934	\$1,479,151	\$1,578,944	\$1,683,771
Services	102,182	101,781	123,147	132,312
Total Revenue	\$1,460,116	\$1,580,932	\$1,702,091	\$1,816,083
Y/Y Growth	10%	8%	8%	7%

Revenue Mix by Geography

<i>(% of Total Revenue)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Americas	48%	49%	47%	46%	48%
Asia	25%	22%	24%	27%	25%
Europe, Middle East and Africa	17%	19%	20%	19%	19%
Japan	10%	10%	9%	8%	8%
Total	100%	100%	100%	100%	100%

<i>(% of Total Revenue)</i>	2013	2014	2015	2016
Americas	46%	45%	47%	48%
Asia	20%	23%	24%	24%
Europe, Middle East and Africa	21%	21%	19%	19%
Japan	13%	11%	10%	9%
Total	100%	100%	100%	100%

Revenue Mix by Product Group

(% of Total Revenue)	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Functional Verification	25%	26%	27%	24%	25%
Digital IC Design and Signoff	28%	30%	27%	28%	30%
Custom IC Design	25%	25%	26%	27%	25%
System Interconnect and Analysis	10%	9%	10%	10%	9%
IP	12%	10%	10%	11%	11%
Total	100%	100%	100%	100%	100%

(% of Total Revenue)	2013	2014	2015	2016
Functional Verification	23%	22%	23%	25%
Digital IC Design and Signoff	30%	29%	28%	29%
Custom IC Design	27%	27%	26%	25%
System Interconnect and Analysis	11%	11%	11%	10%
IP	9%	11%	12%	11%
Total	100%	100%	100%	100%

Contract Duration

(Years)	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Weighted Average Contract Life	2.8	2.7	2.7	2.5	2.6

(Years)	2013	2014	2015	2016
Weighted Average Contract Life	2.5	2.4	2.6	2.6

Total Costs and Expenses

(In Thousands)	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Total GAAP Costs & Expenses	\$359,239	\$389,826	\$386,115	\$379,378	\$415,863
Y/Y Growth	3%	8%	14%	7%	16%
Total Non-GAAP Costs & Expenses	\$315,319	\$333,444	\$338,201	\$332,035	\$343,839
Y/Y Growth	4%	6%	13%	5%	9%

(In Thousands)	2013	2014	2015	2016
Total GAAP Costs & Expenses	\$1,271,109	\$1,374,288	\$1,416,661	\$1,571,182
Y/Y Growth	14%	8%	3%	11%
Total Non-GAAP Costs & Expenses	\$1,106,465	\$1,180,469	\$1,247,039	\$1,347,519
Y/Y Growth	8%	7%	6%	8%

Operating Margin

	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
GAAP Operating Margin	18.6%	13.0%	14.8%	15.0%	11.3%
Non-GAAP Operating Margin	28.5%	25.5%	25.3%	25.6%	26.7%

	2013	2014	2015	2016
GAAP Operating Margin	12.9%	13.1%	16.8%	13.5%
Non-GAAP Operating Margin	24.2%	25.3%	26.7%	25.8%

Earnings Per Share

	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
GAAP Net Income Per Share	\$0.26	\$0.17	\$0.17	\$0.23	\$0.14
Y/Y Growth	24%	42%	(11)%	(8)%	(46)%
Non-GAAP Net Income Per Share	\$0.31	\$0.28	\$0.29	\$0.30	\$0.34
Y/Y Growth	15%	22%	7%	7%	10%

	2013	2014	2015	2016
GAAP Net Income Per Share	\$0.56	\$0.52	\$0.81	\$0.70
Y/Y Growth	(64)%	(7)%	56%	(14)%
Non-GAAP Net Income Per Share	\$0.86	\$0.94	\$1.09	\$1.21
Y/Y Growth	12%	9%	16%	11%

Total DSO

	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
DSO	35	32	35	34	33

Balance Sheet and Cash Review

Cash Flow from Operating Activities

<i>(In Thousands)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Net Cash from Operating Activities	\$122,851	\$83,191	\$80,366	\$84,460	\$196,862

<i>(In Thousands)</i>	2013	2014	2015	2016
Net Cash from Operating Activities	\$367,605	\$316,722	\$378,200	\$444,879

Capital Expenditures

<i>(In Thousands)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Capital Expenditures	\$10,715	\$12,116	\$16,171	\$14,165	\$11,260

<i>(In Thousands)</i>	2013	2014	2015	2016
Capital Expenditures	\$44,929	\$39,810	\$44,808	\$53,712

Cash and Short-Term Investments

<i>(In Thousands)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Cash and Short-Term Investments	\$711,184	\$906,717	\$704,318	\$532,836	\$468,289

- Approximately 37 percent of our cash and short-term investments were in the U.S. at quarter-end.

<i>(In Thousands)</i>	2013	2014	2015	2016
Cash and Short-Term Investments	\$633,048	\$1,022,606	\$711,184	\$468,289

Stock Repurchase

<i>(In Thousands, Except Share Price)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Share Repurchase	\$120,054	\$240,000	\$240,100	\$240,096	\$240,093
Number of Shares	5,510	11,556	10,026	9,596	9,315
Average Share Price	\$21.79	\$20.77	\$23.95	\$25.02	\$25.77

<i>(In Thousands, Except Share Price)</i>	2013	2014	2015	2016
Share Repurchase	\$0	\$100,117	\$333,189	\$960,289
Number of Shares	0	5,856	16,255	40,493
Average Share Price	n/a	\$17.10	\$20.50	\$23.71

- Cadence repurchased 52 million shares for \$1.2 billion from Q3 2015 through Q4 2016, representing approximately 18% of shares outstanding on July 4, 2015.

Employees

	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
Headcount	6,664	6,786	6,945	7,113	7,094

	2013	2014	2015	2016
Headcount	5,734	6,106	6,664	7,094

- Headcount increased by 430 positions from 2015 to 2016 primarily due to hiring in R&D.

Forward Looking Statements

The statements in this CFO Commentary contain forward-looking statements based on current expectations or beliefs and preliminary assumptions about future events that are subject to factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties and other factors, many of which are outside Cadence's control, including, among others: (i) Cadence's ability to compete successfully in the electronic design automation product and the commercial electronic design and methodology services industries; (ii) the success of Cadence's efforts to improve operational efficiency and growth; (iii) the mix of products and services sold and the timing of significant orders for Cadence's products; (iv) change in customer demands, including those resulting from consolidation among Cadence's customers and the possibility that the restructurings and other efforts to improve operational efficiency of Cadence's customers could result in delays in purchases of Cadence's products and services; (v) economic and industry conditions in regions in which Cadence does business; (vi) fluctuations in rates of exchange between the U.S. dollar and the currencies of other countries in which Cadence does business; (vii) capital expenditure requirements, legislative or regulatory requirements, interest rates and Cadence's ability to access capital and debt markets; (viii) the acquisition of other companies or technologies or the failure to successfully integrate and operate these companies or technologies Cadence acquires, including the potential inability to retain customers, key employees or vendors; (ix) the effects of Cadence's efforts to improve operational efficiency in its business, including strategic, customer and supplier relationships, and its ability to retain key employees; (x) events that affect the reserves or settlement assumptions Cadence may take from time to time with respect to accounts receivable, taxes, litigation or other matters; and (xi) the effects of any litigation or other proceedings to which Cadence is or may become a party.

For a detailed discussion of these and other cautionary statements related to Cadence's business, please refer to Cadence's filings with the U.S. Securities and Exchange Commission, which include Cadence's most recent reports on Form 10-K and Form 10-Q, including Cadence's future filings.

GAAP to Non-GAAP Reconciliation

Non-GAAP financial measures should not be considered as a substitute for or superior to measures of financial performance prepared in accordance with GAAP. Investors are encouraged to review the reconciliation of non-GAAP financial measures contained within this CFO Commentary with their most directly comparable GAAP financial results. Investors are also encouraged to look at the GAAP results as the best measure of financial performance. See our earnings press release issued today for further discussion of our non-GAAP financial measures, as well as the reconciliation provided in the Appendix to this CFO Commentary.

Cadence's management uses non-GAAP net income because it excludes items that are generally not directly related to the performance of the company's core business operations and therefore provides supplemental information to Cadence's management and investors regarding the performance of the business operations, facilitates comparisons to the historical operating results and allows the review of Cadence's business from the same perspective as Cadence's management, including forecasting and budgeting.

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APPENDIX

Reconciliation of GAAP to Non-GAAP Financial Measures (Unaudited)

Reconciliation of GAAP Total Expenses to Non-GAAP Total Expenses

<i>(In Thousands)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
GAAP total costs and expenses	\$359,239	\$389,826	\$386,115	\$379,378	\$415,863
Reconciling items to non-GAAP total costs & expenses					
Amortization of acquired intangibles	(15,826)	(16,443)	(15,083)	(14,482)	(14,474)
Stock-based compensation expense	(24,660)	(24,632)	(25,356)	(29,998)	(29,231)
Non-qualified deferred compensation (expenses) credits	(575)	83	(359)	(921)	(544)
Restructuring and other (charges) credits	(347)	(14,586)	74	(101)	(26,342)
Acquisition and integration-related costs	(1,596)	(804)	(7,190)	(1,841)	(1,433)
Special charges *	(916)	—	—	—	—
Non-GAAP total costs and expenses†	<u>\$315,319</u>	<u>\$333,444</u>	<u>\$338,201</u>	<u>\$332,035</u>	<u>\$343,839</u>

† The non-GAAP measures presented in the table above should not be considered a substitute for financial results and measures determined or calculated in accordance with GAAP.

* Comprised of executive severance costs.

Reconciliation of GAAP Total Expenses to Non-GAAP Total Expenses

<i>(In Thousands)</i>	2013	2014	2015	2016
GAAP total costs and expenses	\$1,271,109	\$1,374,288	\$1,416,661	\$1,571,182
Reconciling items to non-GAAP total costs & expenses				
Amortization of acquired intangibles	(44,134)	(60,924)	(64,248)	(60,482)
Stock-based compensation expense	(66,285)	(83,792)	(92,341)	(109,217)
Non-qualified deferred compensation (expenses) credits	(3,293)	(3,415)	369	(1,741)
Restructuring and other charges	(17,999)	(10,252)	(4,511)	(40,955)
Acquisition and integration-related costs	(31,972)	(24,620)	(7,975)	(11,268)
Special charges *	(961)	(10,816)	(916)	—
Non-GAAP total costs and expenses†	<u>\$1,106,465</u>	<u>\$1,180,469</u>	<u>\$1,247,039</u>	<u>\$1,347,519</u>

† The non-GAAP measures presented in the table above should not be considered a substitute for financial results and measures determined or calculated in accordance with GAAP.

* Comprised of costs related to a voluntary retirement program and executive severance costs.

Reconciliation of GAAP Operating Margin as Percent of Total Revenue to Non-GAAP Operating Margin as Percent of Total Revenue

	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Forecast Q1 2017
GAAP operating margin as percent of total revenue	19%	13%	15%	15%	11%	~15%
Reconciling items to non-GAAP operating margin as a percent of total revenue						
Amortization of acquired intangibles	4%	4%	3%	3%	3%	3%
Stock-based compensation expense	6%	6%	6%	7%	6%	7%
Non-qualified deferred compensation expenses (credits)	0%	0%	0%	0%	0%	0%
Restructuring and other charges (credits)	0%	3%	0%	0%	6%	0%
Acquisition and integration-related costs	0%	0%	1%	1%	1%	0%
Special charges *	0%	0%	0%	0%	0%	0%
Non-GAAP operating margin as percent of total revenue†	<u>29%</u>	<u>26%</u>	<u>25%</u>	<u>26%</u>	<u>27%</u>	<u>~25%</u>

† The non-GAAP measures presented in the table above should not be considered a substitute for financial results and measures determined or calculated in accordance with GAAP.

* Comprised of executive severance costs.

	2015	2016	Forecast 2017
GAAP operating margin as percent of total revenue	17%	13%	~17%
Reconciling items to non-GAAP operating margin as a percent of total revenue			
Amortization of acquired intangibles	4%	4%	3%
Stock-based compensation expense	5%	6%	7%
Non-qualified deferred compensation expenses (credits)	0%	0%	0%
Restructuring and other charges	0%	2%	0%
Acquisition and integration-related costs	1%	1%	0%
Special charges *	0%	0%	0%
Non-GAAP operating margin as percent of total revenue†	<u>27%</u>	<u>26%</u>	<u>~27%</u>

† The non-GAAP measures presented in the table above should not be considered a substitute for financial results and measures determined or calculated in accordance with GAAP.

* Comprised of executive severance costs.

Reconciliation of GAAP Diluted Net Income Per Share to Non-GAAP Diluted Net Income Per Share

<i>(In Thousands, Except Per Share Data)</i>	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Forecast Q1 2017
Diluted net income per share on a GAAP basis	\$0.26	\$0.17	\$0.17	\$0.23	\$0.14	\$0.19 - \$0.21
Amortization of acquired intangibles	0.05	0.05	0.05	0.05	0.05	0.05
Stock-based compensation expense	0.08	0.08	0.09	0.10	0.10	0.11
Non-qualified deferred compensation expenses (credits)	—	—	—	—	—	—
Restructuring and other charges (credits)	—	0.05	—	—	0.09	—
Acquisition and integration-related costs	0.01	—	0.02	0.01	0.01	0.01
Special charges *	—	—	—	—	—	—
Other income or expense related to investments and non-qualified deferred compensation plan assets **	—	(0.01)	—	—	—	—
Income tax effect of non-GAAP adjustments	(0.09)	(0.06)	(0.04)	(0.09)	(0.05)	(0.06)
Diluted net income per share on a non-GAAP basis †	<u>\$0.31</u>	<u>\$0.28</u>	<u>\$0.29</u>	<u>\$0.30</u>	<u>\$0.34</u>	<u>\$0.30 - \$0.32</u>
Shares used in calculation of diluted net income per share - GAAP ***	310,512	303,434	295,201	287,473	278,917	
Shares used in calculation of diluted net income per share - non-GAAP ***	310,512	303,434	295,201	287,473	278,917	

† The non-GAAP measures presented in the table above should not be considered a substitute for financial results and measures determined or calculated in accordance with GAAP.

* Comprised of executive severance costs.

** Includes, as applicable, equity in losses or income from investments, write-down of investments, gains or losses on non-qualified deferred compensation plan assets recorded in other income or expense.

*** Shares used in the calculation of GAAP net income per share are expected to be the same as shares used in the calculation of non-GAAP net income per share, except when the company reports a GAAP net loss and non-GAAP net income, or GAAP net income and a non-GAAP net loss.

Reconciliation of GAAP Diluted Net Income Per Share to Non-GAAP Diluted Net Income Per Share

<i>(In Thousands, Except Per Share Data)</i>	2013	2014	2015	2016	Forecast 2017
Diluted net income per share on a GAAP basis	\$0.56	\$0.52	\$0.81	\$0.70	\$0.89 - \$0.99
Amortization of acquired intangibles	0.15	0.20	0.21	0.21	0.20
Stock-based compensation expense	0.23	0.27	0.30	0.37	0.47
Non-qualified deferred compensation expenses (credits)	0.01	0.01	—	0.01	—
Restructuring and other charges	0.06	0.03	0.01	0.14	—
Acquisition and integration-related costs	0.11	0.08	0.03	0.04	0.01
Special charges *	—	0.04	—	—	—
Amortization of debt discount on convertible notes	0.08	0.06	0.02	—	—
Other income or expense related to investments and non-qualified deferred compensation plan assets **	(0.02)	(0.01)	(0.01)	(0.02)	—
Income tax benefit due to a release of an uncertain tax position	(0.11)	—	—	—	—
Income tax effect of non-GAAP adjustments	(0.21)	(0.26)	(0.28)	(0.24)	(0.25)
Diluted net income per share on a non-GAAP basis †	<u>\$0.86</u>	<u>\$0.94</u>	<u>\$1.09</u>	<u>\$1.21</u>	<u>\$1.32 - \$1.42</u>
Shares used in calculation of diluted net income per share - GAAP ***	294,564	306,775	312,302	291,256	
Shares used in calculation of diluted net income per share - non-GAAP ***	294,564	306,775	312,302	291,256	

† The non-GAAP measures presented in the table above should not be considered a substitute for financial results and measures determined or calculated in accordance with GAAP.

* Comprised of costs related to a voluntary retirement program and executive severance costs.

** Includes, as applicable, equity in losses or income from investments, write-down of investments, gains or losses on non-qualified deferred compensation plan assets recorded in other income or expense.

*** Shares used in the calculation of GAAP net income per share are expected to be the same as shares used in the calculation of non-GAAP net income per share, except when the company reports a GAAP net loss and non-GAAP net income, or GAAP net income and a non-GAAP net loss.

Reconciliation of GAAP Total Other Income and Expense to Non-GAAP Total Other Income and Expense

(In Millions)	FY 2016A	Current FY 2017E
GAAP total other income and expense	\$(7.7)	\$(28) - \$(19)
Reconciling items to non-GAAP total income and expense		
Other income or expense related to investments and non-qualified deferred compensation plan assets*	(4.7)	—
Non-GAAP total other income and expense†	<u>\$(12.4)</u>	<u>\$(28) - \$(19)</u>

† The non-GAAP measures presented in the table above should not be considered a substitute for financial results and measures determined or calculated in accordance with GAAP.

* Includes, as applicable, equity in losses or income from investments, write-down of investments, gains or losses on non-qualified deferred compensation plan assets recorded in other income or expense.