

CADENCE REPORTS SECOND QUARTER 2017

CADENCE DESIGN SYSTEMS, INC.

CFO COMMENTARY

July 24, 2017

Q2 2017 Key Takeaways

- Strong, consistent financial results for Q2 with key metrics meeting or exceeding expectations.
- Days Sales Outstanding (DSO) for Q2 was 31 days, down from 37 for Q1 on strong collections.
- Increasing our Outlook for revenue and earnings per share for fiscal 2017.
- No share repurchase in Q2; expect to repurchase shares in Q3 under the existing authorization.

FY 2017 Outlook

- Revenue: \$1.910 - \$1.950 billion.
- GAAP operating margin: approximately 17%.
- Non-GAAP operating margin: approximately 27%.
- GAAP EPS: \$0.98 - \$1.04.
- Non-GAAP EPS \$1.36 - \$1.42.
- Operating cash flow: \$430 - \$470 million.

Q3 2017 Outlook

- Revenue : \$475 - \$485 million.
- GAAP operating margin: 16% - 17%.
- Non-GAAP operating margin: 26% - 27%.
- GAAP EPS: \$0.24 - \$0.26.
- Non-GAAP EPS: \$0.33 - \$0.35.

Financial Results Webcast

Our Q2 2017 financial results webcast will begin July 24, 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 July 24, 2017 until 5:00 p.m. (Pacific) on September 15, 2017.

Q2 2017 KEY METRICS

- Revenue \$479 million, +6% y/y.
- GAAP operating margin 17%.
- Non-GAAP operating margin 27%.
- GAAP EPS \$0.25.
- Non-GAAP EPS \$0.34, +17% y/y.
- Operating cash flow \$162 million.

Fiscal Year 2017 Financial Outlook

	FY 2016A	Previous FY 2017E	Current FY 2017E
Recurring Revenue	>90%	>90%	>90%
Total Revenue (\$ Billion)	\$1.816	\$1.900 - \$1.950	\$1.910 - \$1.950
Y/Y Growth	7%	5% - 7%	5% - 7%
Revenue from Beginning Backlog	~70%	~70%	~70%
GAAP Operating Margin	13.5%	~17%	~17%
Non-GAAP Operating Margin	25.8%	~27%	~27%
Non-GAAP Other Income & Exp (\$ Million)	\$(12.4)	(\$28) - (\$19)	(\$28) - (\$20)
Non-GAAP Tax Rate	23%	23%	23%
Weighted Average Diluted Shares Outstanding (Million)	291.3	275 - 285	276 - 284
GAAP EPS	\$0.70	\$0.93 - \$1.03	\$0.98 - \$1.04
Non-GAAP EPS	\$1.21	\$1.32 - \$1.42	\$1.36 - \$1.42
Y/Y Growth	11%	9% - 17%	12% - 17%
Cash Flow from Operations (\$ Million)	\$444.9	\$430 - \$470	\$430 - \$470
DSO	33	~35	~35
Capital Expenditures (\$ Million)	\$53.7	~\$50	~\$50

Third Quarter 2017 Financial Outlook

	Q3 2016A	Q2 2017A	Current Q3 2017E
Total Revenue (\$ Million)	\$446.2	\$479.0	\$475 - \$485
Q/Q Growth	(2)%	0%	(1)% - 1%
Y/Y Growth	3%	6%	6% - 9%
GAAP Operating Margin	15%	17%	16% - 17%
Non-GAAP Operating Margin	26%	27%	26% - 27%
GAAP EPS	\$0.23	\$0.25	\$0.24 - \$0.26
Non-GAAP EPS	\$0.30	\$0.34	\$0.33 - \$0.35
Q/Q Growth	3%	6%	(3)% - 3%
Y/Y Growth	7%	17%	10% - 17%

Second Quarter Financial Results

Revenue

(In Thousands)	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Product & Maintenance	\$419,963	\$415,370	\$436,694	\$451,407	\$443,847
Services	33,058	30,850	32,286	25,504	35,154
Total Revenue	\$453,021	\$446,220	\$468,980	\$476,911	\$479,001
Y/Y Growth	9%	3%	6%	6%	6%

Revenue Mix by Geography

(% of Total Revenue)	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Americas	47%	46%	48%	45%	45%
Asia	24%	27%	25%	26%	28%
Europe, Middle East and Africa	20%	19%	19%	20%	19%
Japan	9%	8%	8%	9%	8%
Total	100%	100%	100%	100%	100%

Revenue Mix by Product Group

(% of Total Revenue)	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Functional Verification	27%	24%	25%	23%	23%
Digital IC Design and Signoff	27%	28%	30%	29%	30%
Custom IC Design	26%	27%	25%	26%	26%
System Interconnect and Analysis	10%	10%	9%	10%	10%
IP	10%	11%	11%	12%	11%
Total	100%	100%	100%	100%	100%

Total Costs and Expenses

(In Thousands)	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Total GAAP Costs & Expenses	\$386,115	\$379,378	\$415,863	\$397,309	\$396,311
Y/Y Growth	14%	7%	16%	2%	3%
Total Non-GAAP Costs & Expenses	\$338,201	\$332,035	\$343,839	\$354,601	\$350,647
Y/Y Growth	13%	5%	9%	6%	4%

Operating Margin

	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
GAAP Operating Margin	14.8%	15.0%	11.3%	16.7%	17.3%
Non-GAAP Operating Margin	25.3%	25.6%	26.7%	25.6%	26.8%

Earnings Per Share

	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
GAAP Net Income Per Share	\$0.17	\$0.23	\$0.14	\$0.25	\$0.25
Y/Y Growth	(11)%	(8)%	(46)%	47%	47%
Non-GAAP Net Income Per Share	\$0.29	\$0.30	\$0.34	\$0.32	\$0.34
Y/Y Growth	7%	7%	10%	14%	17%

Total DSO

	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
DSO	35	34	33	37	31

Balance Sheet and Cash Review

Cash Flow from Operating Activities

<i>(In Thousands)</i>	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Net Cash from Operating Activities	\$80,366	\$84,460	\$196,862	\$92,430	\$162,140

Capital Expenditures

<i>(In Thousands)</i>	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Capital Expenditures	\$16,171	\$14,165	\$11,260	\$14,843	\$12,645

Cash and Short-Term Investments

<i>(In Thousands)</i>	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Cash and Short-Term Investments	\$704,318	\$532,836	\$468,289	\$547,607	\$659,227

- Approximately 35 percent of our cash and short-term investments were in the U.S. at quarter-end.

Stock Repurchase

<i>(In Thousands, Except Share Price)</i>	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Share Repurchase	\$240,100	\$240,096	\$240,093	—	—
Number of Shares	10,026	9,596	9,315	—	—
Average Share Price	\$23.95	\$25.02	\$25.77	—	—

Employees

	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
Headcount	6,945	7,113	7,094	7,101	7,190

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 cash flow, liquidity, reserves or settlement assumptions Cadence may take from time to time with respect to accounts receivable, taxes and tax examinations, litigation or other matters; and (xi) the effects of any litigation or other proceedings to which Cadence is or may become a party. In addition, the actual timing and amount of Cadence's repurchase of its common stock under the existing authorization will be subject to business and market conditions, corporate and regulatory requirements, acquisition opportunities and other factors.

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>	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
GAAP total costs and expenses	\$386,115	\$379,378	\$415,863	\$397,309	\$396,311
Reconciling items to non-GAAP total costs & expenses					
Amortization of acquired intangibles	(15,083)	(14,482)	(14,474)	(14,434)	(14,704)
Stock-based compensation expense	(25,356)	(29,998)	(29,231)	(27,436)	(30,482)
Non-qualified deferred compensation expenses	(359)	(921)	(544)	(1,269)	(756)
Restructuring and other (charges) credits	74	(101)	(26,342)	1,788	929
Acquisition and integration-related costs	(7,190)	(1,841)	(1,433)	(1,357)	(651)
Non-GAAP total costs and expenses†	<u>\$338,201</u>	<u>\$332,035</u>	<u>\$343,839</u>	<u>\$354,601</u>	<u>\$350,647</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.

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

	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Forecast Q3 2017
GAAP operating margin as percent of total revenue	15%	15%	11%	17%	17%	16% - 17%
Reconciling items to non-GAAP operating margin as a percent of total revenue						
Amortization of acquired intangibles	3%	3%	3%	3%	3%	3%
Stock-based compensation expense	6%	7%	6%	6%	7%	7%
Non-qualified deferred compensation expenses	0%	0%	0%	0%	0%	0%
Restructuring and other charges (credits)	0%	0%	6%	0%	0%	0%
Acquisition and integration-related costs	1%	1%	1%	0%	0%	0%
Non-GAAP operating margin as percent of total revenue†	<u>25%</u>	<u>26%</u>	<u>27%</u>	<u>26%</u>	<u>27%</u>	<u>26% - 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.

	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 (credits)	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>	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Forecast Q3 2017
Diluted net income per share on a GAAP basis	\$0.17	\$0.23	\$0.14	\$0.25	\$0.25	\$0.24 - \$0.26
Amortization of acquired intangibles	0.05	0.05	0.05	0.05	0.05	0.05
Stock-based compensation expense	0.09	0.10	0.10	0.10	0.11	0.12
Non-qualified deferred compensation expenses	—	—	—	—	—	—
Restructuring and other charges (credits)	—	—	0.09	(0.01)	—	—
Acquisition and integration-related costs	0.02	0.01	0.01	—	—	—
Other income or expense related to investments and non-qualified deferred compensation plan assets *	—	—	—	—	—	—
Income tax effect of non-GAAP adjustments	(0.04)	(0.09)	(0.05)	(0.07)	(0.07)	(0.08)
Diluted net income per share on a non-GAAP basis †	<u>\$0.29</u>	<u>\$0.30</u>	<u>\$0.34</u>	<u>\$0.32</u>	<u>\$0.34</u>	<u>\$0.33 - \$0.35</u>
Shares used in calculation of diluted net income per share - GAAP **	295,201	287,473	278,917	277,736	279,526	
Shares used in calculation of diluted net income per share - non-GAAP **	295,201	287,473	278,917	277,736	279,526	

† 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.

** 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	\$0.98 - \$1.04
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	0.46
Non-qualified deferred compensation expenses (credits)	0.01	0.01	—	0.01	0.01
Restructuring and other charges (credits)	0.06	0.03	0.01	0.14	(0.01)
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)	(0.01)
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)	(0.28)
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>\$1.36 - \$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	Previous FY 2017E	Current FY 2017E
GAAP total other income and expense	\$(7.7)	\$(27) - \$(18)	\$(26) - \$(18)
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)	(1)	(2)
Non-GAAP total other income and expense†	<u>\$12.4</u>	<u>\$(28) - \$(19)</u>	<u>\$(28) - \$(20)</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.