

CADENCE REPORTS FIRST QUARTER 2019

CADENCE DESIGN SYSTEMS, INC.

CFO COMMENTARY

April 22, 2019

Q1 2019 Key Takeaways

- Q1 results exceeded our expectations for revenue, operating margin, EPS and operating cash flow; raising outlook.
- Operating cash flow strong - raising outlook to midpoint of \$685 million for 2019, which represents 13% growth over 2018.
- Repurchased \$81 million of Cadence stock in Q1.

FY 2019 Outlook

- Revenue: \$2.305 - \$2.335 billion.
- GAAP operating margin: ~21%.
- Non-GAAP operating margin: ~31%.
- GAAP EPS: \$1.39 - \$1.47
- Non-GAAP EPS \$2.04 - \$2.12
- Operating cash flow: \$665 - \$705 million.
- Expect to repurchase approximately \$75 million of Cadence stock per quarter in 2019.

Q2 2019 Outlook

- Revenue : \$575 - \$585 million.
- GAAP operating margin: 21% - 22%.
- Non-GAAP operating margin: 31% - 32%.
- GAAP EPS: \$0.34 - \$0.36
- Non-GAAP EPS: \$0.52 - \$0.54

Financial Results Webcast

Our Q1 2019 financial results webcast will begin April 22, 2019 at 2:00 p.m. (Pacific). The webcast may be accessed at www.cadence.com/cadence/investor_relations. An archive of the webcast will be available on April 22, 2019 until 5:00 p.m. (Pacific) on June 14, 2019.

Q1 2019 KEY METRICS

- Revenue \$577 million
- GAAP operating margin 22%
- Non-GAAP operating margin 32%
- GAAP EPS \$0.43
- Non-GAAP EPS \$0.54
- Operating cash flow \$185 million

Second Quarter 2019 Financial Outlook

	Q1 2018A	Q1 2019A	Q2 2019E
Total Revenue (\$ Million)	\$517.3	\$576.7	\$575 - \$585
Q/Q Growth		1%	(0)% - 1%
Y/Y Growth		11%	11% - 13%
GAAP Operating Margin	17%	22%	21% - 22%
Non-GAAP Operating Margin	28%	32%	31% - 32%
GAAP EPS	\$0.26	\$0.43	\$0.34 - \$0.36
Non-GAAP EPS	\$0.40	\$0.54	\$0.52 - \$0.54
Q/Q Growth		4%	(4)% - 0%
Y/Y Growth		35%	16% - 20%

Fiscal Year 2019 Financial Outlook

	FY 2018A	Previous FY 2019E	Current FY 2019E
Revenue Recognized Over Time	~90%	~90%	85% - 90%
Total Revenue (\$ Billion)	\$2.138	\$2.270 - \$2.310	\$2.305 - \$2.335
Y/Y Growth		6% - 8%	8% - 9%
Revenue from Beginning Remaining Performance Obligations		~75%	~75%
GAAP Operating Margin	18.5%	20% - 21%	~21%
Non-GAAP Operating Margin	30.2%	30% - 31%	~31%
GAAP Other Income & Expense (\$ Million)	\$(19.8)	\$(23) - \$(33)	\$(15) - \$(23)
Non-GAAP Other Income & Expense (\$ Million)	\$(21.1)	\$(23) - \$(33)	\$(20) - \$(28)
GAAP Tax Rate	8%	~10%	~12%
Non-GAAP Tax Rate	16%	16%	16%
Weighted Average Diluted Shares Outstanding (Million)	281.1	278 - 281	279 - 282
GAAP EPS	\$1.23	\$1.33 - \$1.43	\$1.39 - \$1.47
Y/Y Growth		8% - 16%	13% - 20%
Non-GAAP EPS	\$1.87	\$1.97 - \$2.07	\$2.04 - \$2.12
Y/Y Growth		5% - 11%	9% - 13%
Cash Flow from Operations (\$ Million)	\$605	\$640 - \$690	\$665 - \$705
DSO	48	~45	~45
Capital Expenditures (\$ Million)	\$62	~\$90	~\$90

First Quarter Financial Results

Revenue

(In Thousands)	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Product and Maintenance	\$480,609	\$487,870	\$494,990	\$534,418	\$543,518
Services	36,704	30,521	37,478	35,432	33,224
Total Revenue	\$517,313	\$518,391	\$532,468	\$569,850	\$576,742

Revenue Mix by Geography

(% of Total Revenue)	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Americas	45%	46%	44%	44%	44%
China	9%	8%	9%	13%	10%
Other Asia	18%	18%	20%	18%	19%
Europe, Middle East and Africa	20%	20%	19%	17%	18%
Japan	8%	8%	8%	8%	9%
Total	100%	100%	100%	100%	100%

Revenue Mix by Product Group

(% of Total Revenue)	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Functional Verification	26%	23%	22%	25%	24%
Digital IC Design and Signoff	30%	30%	30%	28%	30%
Custom IC Design and Simulation	26%	26%	26%	25%	25%
System Interconnect and Analysis	9%	9%	9%	9%	9%
IP	9%	12%	13%	13%	12%
Total	100%	100%	100%	100%	100%

Gross Margin

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
GAAP Gross Margin	87.8%	88.6%	88.6%	86.6%	87.8%
Non-GAAP Gross Margin	90.0%	90.8%	90.8%	88.6%	89.7%

Total Costs and Expenses

(In Thousands)	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Total GAAP Costs and Expenses	\$431,480	\$425,335	\$428,838	\$456,160	\$448,346
Total Non-GAAP Costs and Expenses	\$373,753	\$364,084	\$361,981	\$391,471	\$390,166

Operating Margin

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
GAAP Operating Margin	16.6%	18.0%	19.5%	20.0%	22.3%
Non-GAAP Operating Margin	27.8%	29.8%	32.0%	31.3%	32.3%

Earnings Per Share

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
GAAP Net Income Per Share	\$0.26	\$0.27	\$0.35	\$0.35	\$0.43
Non-GAAP Net Income Per Share	\$0.40	\$0.45	\$0.49	\$0.52	\$0.54

Total DSO

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
DSO	41	39	42	48	42

Balance Sheet and Cash Review

Cash Flow from Operating Activities

<i>(In Thousands)</i>	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Net Cash from Operating Activities	\$157,647	\$205,266	\$109,954	\$131,884	\$185,414

Capital Expenditures

<i>(In Thousands)</i>	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Capital Expenditures	\$13,128	\$17,977	\$10,656	\$19,742	\$15,275

Cash and Cash Equivalents

<i>(In Thousands)</i>	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Cash and Cash Equivalents	\$746,968	\$819,540	\$544,585	\$533,298	\$538,898

- Approximately 16 percent of our cash and cash equivalents were in the U.S. at quarter-end.

Stock Repurchase

<i>(In Thousands, Except Share Price)</i>	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Share Repurchase	\$50,013	\$50,012	\$50,011	\$100,023	\$81,114
Number of Shares	1,289	1,224	1,098	2,323	1,529
Average Share Price	\$38.80	\$40.86	\$45.55	\$43.06	\$53.05

Employees

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Headcount	7,229	7,288	7,417	7,499	7,570

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, changes in tax laws, 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 timing and amount of Cadence's repurchase of its common stock under the authorizations will be subject to business and market conditions, corporate and regulatory requirements, stock price, 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 I

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

Reconciliation of GAAP Total Expenses to Non-GAAP Total Expenses

<i>(In Thousands)</i>	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2018
GAAP total costs and expenses	\$431,480	\$425,335	\$428,838	\$456,160	\$448,346
Reconciling items to non-GAAP total costs and expenses					
Amortization of acquired intangibles	(13,907)	(13,509)	(12,975)	(12,942)	(13,162)
Stock-based compensation expense	(37,901)	(40,956)	(46,264)	(42,594)	(42,253)
Non-qualified deferred compensation (expenses) credits	(127)	(468)	(1,120)	3,186	(2,540)
Restructuring and other (charges) credits	1,991	447	172	(13,699)	689
Acquisition and integration-related (costs) credits	(7,783)	(6,765)	(6,670)	1,360	(914)
Non-GAAP total costs and expenses†	<u>\$373,753</u>	<u>\$364,084</u>	<u>\$361,981</u>	<u>\$391,471</u>	<u>\$390,166</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 Gross Margin as Percent of Total Revenue to Non-GAAP Gross Margin as Percent of Total Revenue

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
GAAP gross margin as percent of total revenue	87.8%	88.6%	88.6%	86.6%	87.8%
Reconciling items to non-GAAP gross margin as a percent of total revenue					
Amortization of acquired intangibles	2.0%	1.9%	1.8%	1.7%	1.7%
Stock-based compensation expense	0.2%	0.3%	0.4%	0.3%	0.2%
Non-qualified deferred compensation expenses (credits)	0.0%	0.0%	0.0%	0.0%	0.0%
Non-GAAP gross margin as percent of total revenue†	<u>90.0%</u>	<u>90.8%</u>	<u>90.8%</u>	<u>88.6%</u>	<u>89.7%</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

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019E
GAAP operating margin as percent of total revenue	17%	18%	19%	20%	22%	21% - 22%
Reconciling items to non-GAAP operating margin as a percent of total revenue						
Amortization of acquired intangibles	3%	3%	3%	2%	2%	2%
Stock-based compensation expense	7%	8%	9%	7%	7%	8%
Non-qualified deferred compensation expenses (credits)	0%	0%	0%	0%	1%	0%
Restructuring and other charges (credits)	0%	0%	0%	2%	0%	0%
Acquisition and integration-related costs (credits)	1%	1%	1%	0%	0%	0%
Non-GAAP operating margin as percent of total revenue†	<u>28%</u>	<u>30%</u>	<u>32%</u>	<u>31%</u>	<u>32%</u>	<u>31% - 32%</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.

	2018	2019E
GAAP operating margin as percent of total revenue	19%	~21%
Reconciling items to non-GAAP operating margin as a percent of total revenue		
Amortization of acquired intangibles	2%	2%
Stock-based compensation expense	8%	8%
Non-qualified deferred compensation expenses (credits)	0%	0%
Restructuring and other charges	0%	0%
Acquisition and integration-related costs	1%	0%
Non-GAAP operating margin as percent of total revenue†	<u>30%</u>	<u>~31%</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 Diluted Net Income Per Share to Non-GAAP Diluted Net Income Per Share

<i>(In Thousands, Except Per Share Data)</i>	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019E
Diluted net income per share on a GAAP basis	\$0.26	\$0.27	\$0.35	\$0.35	\$0.43	\$0.34 - \$0.36
Amortization of acquired intangibles	0.05	0.05	0.05	0.05	0.05	0.05
Stock-based compensation expense	0.13	0.14	0.16	0.15	0.15	0.16
Non-qualified deferred compensation expenses (credits)	—	—	—	(0.01)	0.01	—
Restructuring and other charges (credits)	(0.01)	—	—	0.05	—	—
Acquisition and integration-related costs (credits)	0.03	0.02	0.02	(0.01)	—	0.01
Other income or expense related to investments and non-qualified deferred compensation plan assets *	—	—	—	—	(0.02)	—
Income tax effect of non-GAAP adjustments	(0.06)	(0.03)	(0.09)	(0.06)	(0.08)	(0.04)
Diluted net income per share on a non-GAAP basis †	<u>\$0.40</u>	<u>\$0.45</u>	<u>\$0.49</u>	<u>\$0.52</u>	<u>\$0.54</u>	<u>\$0.52 - \$0.54</u>
Shares used in calculation of diluted net income per share - GAAP **	281,651	280,774	281,646	280,321	280,615	
Shares used in calculation of diluted net income per share - non-GAAP **	281,651	280,774	281,646	280,321	280,615	

† 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 investments and 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>	2018	2019E
Diluted net income per share on a GAAP basis	\$1.23	\$1.39 - \$1.47
Amortization of acquired intangibles	0.19	0.19
Stock-based compensation expense	0.60	0.65
Non-qualified deferred compensation expenses (credits)	(0.01)	0.01
Restructuring and other charges (credits)	0.04	—
Acquisition and integration-related costs	0.07	0.02
Other income or expense related to investments and non-qualified deferred compensation plan assets *	—	(0.02)
Income tax effect of non-GAAP adjustments	(0.25)	(0.20)
Diluted net income per share on a non-GAAP basis †	<u>\$1.87</u>	<u>\$2.04 - \$2.12</u>
Shares used in calculation of diluted net income per share - GAAP **	281,144	279 - 282M
Shares used in calculation of diluted net income per share - non-GAAP **	281,144	279 - 282M

† **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 investments and 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 2018A	Previous FY 2019E	Current FY 2019E
GAAP total other income and expense	\$(19.8)	\$(23) - \$(33)	\$(15) - \$(23)
Reconciling items to non-GAAP total income and expense			
Other income or expense related to investments and non-qualified deferred compensation plan assets*	(1.3)	—	(5)
Non-GAAP total other income and expense†	<u>\$(21.1)</u>	<u>\$(23) - \$(33)</u>	<u>\$(20) - \$(28)</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 investments and gains or losses on non-qualified deferred compensation plan assets recorded in other income or expense.