

CADENCE REPORTS FIRST QUARTER 2020

CADENCE DESIGN SYSTEMS, INC.

CFO COMMENTARY

Key Takeaways

- Q1 results met or exceeded our expectations for key financial metrics.
- Repurchased \$100 million of Cadence stock in Q1.

FY 2020 Outlook

- Revenue: \$2.545 - \$2.585 billion.
- GAAP operating margin: 21% - 22%.
- Non-GAAP operating margin: 32% - 33%.
- GAAP EPS: \$1.58 - \$1.68
- Non-GAAP EPS \$2.40 - \$2.50
- Operating cash flow: \$775 - \$825 million.
- Expect to use approximately 50% of free cash flow to repurchase Cadence shares for the year.

Q2 2020 Outlook

- Revenue : \$580 - \$600 million.
- GAAP operating margin: ~18%.
- Non-GAAP operating margin: ~30%.
- GAAP EPS: \$0.28 - \$0.32
- Non-GAAP EPS: \$0.50 - \$0.54

Financial Results Webcast

Our Q1 2020 financial results webcast will begin April 20, 2020 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 20, 2020 until 5:00 p.m. (Pacific) on June 12, 2020.

Q1 2020 KEY METRICS

- Revenue \$618 million
- GAAP operating margin 23%
- Non-GAAP operating margin 32%
- GAAP EPS \$0.44
- Non-GAAP EPS \$0.60
- Operating cash flow \$218 million

Financial Metrics

(In Millions, except per share data)	2016*	2017*	2018	2019	2020E
Revenue	\$1,816	\$1,943	\$2,138	\$2,336	\$2,545 - \$2,585
Revenue growth		7%	10%	9%	9% - 11%
GAAP operating expenses	1,571	1,619	1,742	1,845	~2,002
Non-GAAP operating expenses	1,348	1,409	1,491	1,587	~1,728
Non-GAAP operating expense growth		5%	6%	6%	~9%
GAAP operating margin	13%	17%	19%	21%	
Implied GAAP operating margin**					21.5%
Non-GAAP operating margin	26%	28%	30%	32%	
Implied Non-GAAP operating margin**					32.5%
GAAP earnings per share	\$0.70	\$0.73	\$1.23	\$3.53	\$1.58 - \$1.68
Non-GAAP earning per share	\$1.21	\$1.40	\$1.87	\$2.20	\$2.40 - \$2.50
Weighted average shares diluted outstanding	291.3	280.2	281.1	280.5	278 - 281
Cash flow from operations	445	471	605	730	\$775 - \$825
Capital expenditures	54	58	62	75	~\$80

* Fiscal years 2016 and 2017 accounted for under ASC Topic 605, prior to adoption of ASC Topic 606 in 2018.

** At midpoint of guidance.

Second Quarter 2020 Financial Outlook

	Q2 2019A	Q1 2020A	Q2 2020E
Total Revenue (\$ Million)	\$580.4	\$618.0	\$580 - \$600
Q/Q Growth		3%	(6)% - (3)%
Y/Y Growth		7%	(0)% - 3%
GAAP Operating Margin	23%	23%	~18%
Non-GAAP Operating Margin	34%	32%	~30%
GAAP EPS	\$0.38	\$0.44	\$0.28 - \$0.32
Non-GAAP EPS	\$0.57	\$0.60	\$0.50 - \$0.54
Q/Q Growth		11%	(17)% - (10)%
Y/Y Growth		11%	(12)% - (5)%

Fiscal Year 2020 Financial Outlook

	FY 2019A	Previous FY 2020E	Current FY 2020E
Recurring Revenue	85% - 90%	85% - 90%	85% - 90%
Total Revenue (\$ Billion)	\$2.336	\$2.545 - \$2.585	\$2.545 - \$2.585
Y/Y Growth	9%	9% - 11%	9% - 11%
Revenue from Beginning Remaining Performance Obligations	~75%	~75%	~75%
GAAP Operating Margin	21.1%	21% - 22%	21% - 22%
Non-GAAP Operating Margin	32.1%	32% - 33%	32% - 33%
GAAP Other Income & Expense (\$ Million)	\$(12.8)	\$(16) - \$(25)	\$(29) - \$(33)
Non-GAAP Other Income & Expense (\$ Million)	\$(14.1)	\$(12) - \$(21)	\$(19) - \$(23)
GAAP Tax Rate	-106%	~20%	~14%
Non-GAAP Tax Rate	16%	16%	16%
Weighted Average Diluted Shares Outstanding (Million)	280.5	279 - 282	278 - 281
GAAP EPS	\$3.53	\$1.46 - \$1.56	\$1.58 - \$1.68
Non-GAAP EPS	\$2.20	\$2.40 - \$2.50	\$2.40 - \$2.50
Y/Y Growth	18%	9% - 14%	9% - 14%
Cash Flow from Operations (\$ Million)	\$730	\$775 - \$825	\$775 - \$825
DSO	47	~45	~45
Capital Expenditures (\$ Million)	\$75	~\$90	~\$80

First Quarter Financial Results

Backlog

(In Billions)	2018	2019	Q1 2020
Backlog*	\$3.0	\$3.6	\$3.7

*Backlog = Remaining Performance Obligations + IP Access Agreements

Revenue

(In Thousands)	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Product and Maintenance	\$543,518	\$548,028	\$548,105	\$564,964	\$581,699
Services	33,224	32,391	31,498	34,591	36,258
Total Revenue	<u>\$576,742</u>	<u>\$580,419</u>	<u>\$579,603</u>	<u>\$599,555</u>	<u>\$617,957</u>

Revenue Mix by Geography

(% of Total Revenue)	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Americas	44%	42%	44%	46%	43%
China	10%	12%	10%	9%	13%
Other Asia	19%	19%	21%	20%	18%
Europe, Middle East and Africa	18%	20%	18%	18%	19%
Japan	9%	7%	7%	7%	7%
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Revenue Mix by Product Group

(% of Total Revenue)	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Functional Verification	24%	22%	20%	24%	23%
Digital IC Design and Signoff	30%	31%	30%	29%	29%
Custom IC Design and Simulation	25%	26%	26%	25%	25%
System Interconnect and Analysis	9%	10%	9%	9%	9%
IP	12%	11%	15%	13%	14%
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Gross Margin

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
GAAP Gross Margin	87.8%	89.4%	89.5%	87.8%	88.0%
Non-GAAP Gross Margin	89.7%	91.6%	91.5%	89.7%	89.9%

Total Costs and Expenses

(In Thousands)	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Total GAAP Costs and Expenses	\$448,346	\$446,744	\$458,777	\$490,656	\$478,606
Total Non-GAAP Costs and Expenses	\$390,166	\$385,591	\$395,995	\$415,140	\$418,827

Operating Margin

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
GAAP Operating Margin	22.3%	23.0%	20.8%	18.2%	22.6%
Non-GAAP Operating Margin	32.3%	33.6%	31.7%	30.8%	32.2%

Earnings Per Share

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
GAAP Net Income Per Share	\$0.43	\$0.38	\$0.36	\$2.36	\$0.44
Non-GAAP Net Income Per Share	\$0.54	\$0.57	\$0.54	\$0.54	\$0.60

Total DSO

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
DSO	42	38	43	47	42

Balance Sheet and Cash Review

Cash Flow from Operating Activities

<i>(In Thousands)</i>	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Net Cash from Operating Activities	\$185,414	\$246,360	\$138,530	\$159,296	\$217,719

Capital Expenditures

<i>(In Thousands)</i>	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Capital Expenditures	\$15,275	\$15,287	\$16,965	\$27,078	\$22,179

Cash and Cash Equivalents

<i>(In Thousands)</i>	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Cash and Cash Equivalents	\$538,898	\$633,415	\$655,216	\$705,210	\$946,285

- Approximately 53 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 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Share Repurchase	\$81,114	\$75,006	\$75,011	\$75,017	\$100,022
Number of Shares	1,529	1,125	1,065	1,122	1,488
Average Share Price	\$53.05	\$66.67	\$70.43	\$66.86	\$67.22

Employees

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Headcount	7,570	7,743	8,016	8,078	8,205

Forward Looking Statements

The statements in this CFO Commentary contain forward-looking statements based on current expectations and preliminary assumptions 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, including strategic, customer and supplier relationships; (iii) the mix of products and services sold, the timing of orders and the ability to develop, install or deliver Cadence's products or services; (iv) change in customer demands that could result in delays in purchases, development, installations or deliveries of Cadence's products or services, including those resulting from consolidation, restructurings and other operational efficiency improvements of Cadence's customers, economic conditions, government regulations, trade restrictions or the COVID-19 pandemic; (v) economic and industry conditions, government regulations, trade restrictions and the duration and severity of the COVID-19 pandemic and containment measures 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 maintain and improve operational efficiency in its business, including its ability to retain key employees and to have the vast majority of its employees work remotely during the COVID-19 pandemic; (x) events that affect cash flow, liquidity, or reserves, or settlement assumptions Cadence may take from time to time with respect to accounts receivable, taxes and tax examinations, litigation or other matters; (xi) the effects of any litigation or other proceedings to which Cadence is or may become a party; and (xii) the effects of the COVID-19 pandemic and containment measures. 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 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
GAAP total costs and expenses	\$448,346	\$446,744	\$458,777	\$490,656	\$478,606
Reconciling items to non-GAAP total costs and expenses					
Amortization of acquired intangibles	(13,162)	(14,458)	(12,799)	(12,660)	(15,066)
Stock-based compensation expense	(42,253)	(44,257)	(48,279)	(46,758)	(46,482)
Non-qualified deferred compensation (expenses) credits	(2,540)	(862)	(52)	(1,948)	4,796
Restructuring and other (charges) credits	689	313	186	(9,809)	1,067
Acquisition and integration-related costs	(914)	(1,889)	(1,838)	(3,466)	(3,970)
Special charges	—	—	—	(875)	(124)
Non-GAAP total costs and expenses†	<u>\$390,166</u>	<u>\$385,591</u>	<u>\$395,995</u>	<u>\$415,140</u>	<u>\$418,827</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 Total Expenses to Non-GAAP Total Expenses

<i>(In Millions)</i>	2016	2017	2018	2019	2020E
GAAP total costs and expenses	\$1,571	\$1,619	\$1,742	\$1,845	~\$2,002
Reconciling items to non-GAAP total costs and expenses					
Amortization of acquired intangibles	(60)	(57)	(53)	(53)	~(64)
Stock-based compensation expense	(109)	(130)	(168)	(182)	~(200)
Non-qualified deferred compensation (expenses) credits	(2)	(6)	1	(5)	~5
Restructuring and other (charges) credits	(41)	(9)	(11)	(9)	~1
Acquisition and integration-related costs	(11)	(8)	(20)	(8)	~(16)
Special charges	—	—	—	(1)	—
Non-GAAP total costs and expenses†	<u>\$1,348</u>	<u>\$1,409</u>	<u>\$1,491</u>	<u>\$1,587</u>	<u>~\$1,728</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 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
GAAP gross margin as percent of total revenue	87.8%	89.4%	89.5%	87.8%	88.0%
Reconciling items to non-GAAP gross margin as a percent of total revenue					
Amortization of acquired intangibles	1.7%	1.9%	1.7%	1.6%	1.7%
Stock-based compensation expense	0.2%	0.3%	0.3%	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>89.7%</u>	<u>91.6%</u>	<u>91.5%</u>	<u>89.7%</u>	<u>89.9%</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 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020E
GAAP operating margin as percent of total revenue	22%	23%	21%	18%	23%	~18%
Reconciling items to non-GAAP operating margin as a percent of total revenue						
Amortization of acquired intangibles	2%	3%	2%	2%	2%	3%
Stock-based compensation expense	7%	8%	9%	8%	7%	8%
Non-qualified deferred compensation expenses (credits)	1%	0%	0%	0%	(1)%	0%
Restructuring and other charges (credits)	0%	0%	0%	2%	0%	0%
Acquisition and integration-related costs	0%	0%	0%	1%	1%	1%
Special charges	0%	0%	0%	0%	0%	0%
Non-GAAP operating margin as percent of total revenue†	<u>32%</u>	<u>34%</u>	<u>32%</u>	<u>31%</u>	<u>32%</u>	<u>~30%</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.

	2016	2017	2018	2019	2020E
GAAP operating margin as percent of total revenue	13%	17%	19%	21%	21% - 22%
Reconciling items to non-GAAP operating margin as a percent of total revenue					
Amortization of acquired intangibles	4%	3%	2%	2%	2%
Stock-based compensation expense	6%	7%	8%	8%	8%
Non-qualified deferred compensation expenses (credits)	0%	0%	0%	0%	0%
Restructuring and other charges (credits)	2%	1%	0%	1%	0%
Acquisition and integration-related costs	1%	0%	1%	0%	1%
Special charges	0%	0%	0%	0%	0%
Non-GAAP operating margin as percent of total revenue†	<u>26%</u>	<u>28%</u>	<u>30%</u>	<u>32%</u>	<u>32% - 33%</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 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020E
Diluted net income per share on a GAAP basis	\$0.43	\$0.38	\$0.36	\$2.36	\$0.44	\$0.28 - \$0.32
Amortization of acquired intangibles	0.05	0.05	0.04	0.05	0.05	0.06
Stock-based compensation expense	0.15	0.16	0.17	0.17	0.17	0.17
Non-qualified deferred compensation expenses (credits)	0.01	—	—	0.01	(0.02)	—
Restructuring and other charges (credits)	—	—	—	0.03	—	—
Acquisition and integration-related costs	—	—	0.01	0.01	0.02	0.02
Special charges	—	—	—	—	—	—
Other income or expense related to investments and non-qualified deferred compensation plan assets *	(0.02)	0.01	0.01	—	0.03	—
Income tax benefit related to intercompany transfers of certain intellectual property rights	—	—	—	(2.06)	—	—
Income tax effect of non-GAAP adjustments	(0.08)	(0.03)	(0.05)	(0.03)	(0.09)	(0.03)
Diluted net income per share on a non-GAAP basis †	<u>\$0.54</u>	<u>\$0.57</u>	<u>\$0.54</u>	<u>\$0.54</u>	<u>\$0.60</u>	<u>\$0.50 - \$0.54</u>
Shares used in calculation of diluted net income per share - GAAP **	280,615	281,054	280,666	279,557	279,265	
Shares used in calculation of diluted net income per share - non-GAAP **	280,615	281,054	280,666	279,557	279,265	

† 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>	2016	2017	2018	2019	2020E
Diluted net income per share on a GAAP basis	\$0.70	\$0.73	\$1.23	\$3.53	\$1.58 - \$1.68
Amortization of acquired intangibles	0.21	0.20	0.19	0.19	0.23
Stock-based compensation expense	0.37	0.46	0.60	0.65	0.71
Non-qualified deferred compensation expenses (credits)	0.01	0.02	(0.01)	0.02	(0.02)
Restructuring and other charges (credits)	0.14	0.03	0.04	0.03	—
Acquisition and integration-related costs	0.04	0.03	0.07	0.03	0.06
Special charges	—	—	—	—	—
Other income or expense related to investments and non-qualified deferred compensation plan assets *	(0.02)	(0.05)	—	(0.01)	0.03
Income tax benefit related to intercompany transfers of certain intellectual property rights	—	—	—	(2.05)	—
Income tax related to transition tax	—	0.24	—	—	—
Income tax related to tax rate change	—	0.09	—	—	—
Income tax effect of non-GAAP adjustments	(0.24)	(0.35)	(0.25)	(0.19)	(0.19)
Diluted net income per share on a non-GAAP basis †	<u>\$1.21</u>	<u>\$1.40</u>	<u>\$1.87</u>	<u>\$2.20</u>	<u>\$2.40 - \$2.50</u>
Shares used in calculation of diluted net income per share - GAAP **	291,256	280,221	281,144	280,515	278 - 281M
Shares used in calculation of diluted net income per share - non-GAAP **	291,256	280,221	281,144	280,515	278 - 281M

† 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 2018	FY 2019	FY 2020E
GAAP total other income and expense	\$(19.8)	\$(12.8)	\$(29) - \$(33)
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)	(1.3)	10
Non-GAAP total other income and expense†	<u>\$(21.1)</u>	<u>\$(14.1)</u>	<u>\$(19) - \$(23)</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.