

CADENCE REPORTS SECOND QUARTER 2019

CADENCE DESIGN SYSTEMS, INC.

CFO COMMENTARY

Q2 2019 Key Takeaways

- Operating cash flow now expected to be ~\$700 million at the midpoint of guidance for 2019.
- Raising non-GAAP operating margin guidance to midpoint of 31.5%.
- Repurchased \$75 million of Cadence stock in Q2.

FY 2019 Outlook

- Revenue: \$2.315 - \$2.335 billion.
- GAAP operating margin: 21% - 22%.
- Non-GAAP operating margin: 31% - 32%.
- GAAP EPS: \$1.44 - \$1.50
- Non-GAAP EPS \$2.11 - \$2.17
- Operating cash flow: \$680 - \$720 million.
- Expect to repurchase approximately \$75 million of Cadence stock per quarter in 2019.

Q3 2019 Outlook

- Revenue : \$570 - \$580 million.
- GAAP operating margin: ~19%.
- Non-GAAP operating margin: ~30%.
- GAAP EPS: \$0.32 - \$0.34
- Non-GAAP EPS: \$0.50 - \$0.52

Financial Results Webcast

Our Q2 2019 financial results webcast will begin July 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 July 22, 2019 until 5:00 p.m. (Pacific) on September 13, 2019.

Q2 2019 KEY METRICS

- Revenue \$580 million
- GAAP operating margin 23%
- Non-GAAP operating margin 33.6%
- GAAP EPS \$0.38
- Non-GAAP EPS \$0.57
- Operating cash flow \$246 million

Third Quarter 2019 Financial Outlook

	Q3 2018A	Q2 2019A	Q3 2019E
Total Revenue (\$ Million)	\$532.5	\$580.4	\$570 - \$580
Q/Q Growth		1%	(2)% - (0)%
Y/Y Growth		12%	7% - 9%
GAAP Operating Margin	19%	23%	~19%
Non-GAAP Operating Margin	32%	34%	~30%
GAAP EPS	\$0.35	\$0.38	\$0.32 - \$0.34
Non-GAAP EPS	\$0.49	\$0.57	\$0.50 - \$0.52
Q/Q Growth		6%	(12)% - (9)%
Y/Y Growth		27%	2% - 6%

Fiscal Year 2019 Financial Outlook

	FY 2018A	Previous FY 2019E	Current FY 2019E
Revenue Recognized Over Time	~90%	85% - 90%	85% - 90%
Total Revenue (\$ Billion)	\$2.138	\$2.305 - \$2.335	\$2.315 - \$2.335
Y/Y Growth		8% - 9%	8% - 9%
Revenue from Beginning Remaining Performance Obligations		~75%	~75%
GAAP Operating Margin	18.5%	~21%	21% - 22%
Non-GAAP Operating Margin	30.2%	~31%	31% - 32%
GAAP Other Income & Expense (\$ Million)	\$(19.8)	\$(15) - \$(23)	\$(13) - \$(20)
Non-GAAP Other Income & Expense (\$ Million)	\$(21.1)	\$(20) - \$(28)	\$(13) - \$(20)
GAAP Tax Rate	8%	~12%	~12%
Non-GAAP Tax Rate	16%	16%	16%
Weighted Average Diluted Shares Outstanding (Million)	281.1	279 - 282	280 - 282
GAAP EPS	\$1.23	\$1.39 - \$1.47	\$1.44 - \$1.50
Y/Y Growth		13% - 20%	17% - 22%
Non-GAAP EPS	\$1.87	\$2.04 - \$2.12	\$2.11 - \$2.17
Y/Y Growth		9% - 13%	13% - 16%
Cash Flow from Operations (\$ Million)	\$605	\$665 - \$705	\$680 - \$720
DSO	48	~45	~45
Capital Expenditures (\$ Million)	\$62	~\$90	~\$90

Second Quarter Financial Results

Revenue

(In Thousands)	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Product and Maintenance	\$487,870	\$494,990	\$534,418	\$543,518	\$548,028
Services	30,521	37,478	35,432	33,224	32,391
Total Revenue	\$518,391	\$532,468	\$569,850	\$576,742	\$580,419

Revenue Mix by Geography

(% of Total Revenue)	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Americas	46%	44%	44%	44%	42%
China	8%	9%	13%	10%	12%
Other Asia	18%	20%	18%	19%	19%
Europe, Middle East and Africa	20%	19%	17%	18%	20%
Japan	8%	8%	8%	9%	7%
Total	100%	100%	100%	100%	100%

Revenue Mix by Product Group

(% of Total Revenue)	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Functional Verification	23%	22%	25%	24%	22%
Digital IC Design and Signoff	30%	30%	28%	30%	31%
Custom IC Design and Simulation	26%	26%	25%	25%	26%
System Interconnect and Analysis	9%	9%	9%	9%	10%
IP	12%	13%	13%	12%	11%
Total	100%	100%	100%	100%	100%

Gross Margin

	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
GAAP Gross Margin	88.6%	88.6%	86.6%	87.8%	89.4%
Non-GAAP Gross Margin	90.8%	90.8%	88.6%	89.7%	91.6%

Total Costs and Expenses

(In Thousands)	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Total GAAP Costs and Expenses	\$425,335	\$428,838	\$456,160	\$448,346	\$446,744
Total Non-GAAP Costs and Expenses	\$364,084	\$361,981	\$391,471	\$390,166	\$385,591

Operating Margin

	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
GAAP Operating Margin	18.0%	19.5%	20.0%	22.3%	23.0%
Non-GAAP Operating Margin	29.8%	32.0%	31.3%	32.3%	33.6%

Earnings Per Share

	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
GAAP Net Income Per Share	\$0.27	\$0.35	\$0.35	\$0.43	\$0.38
Non-GAAP Net Income Per Share	\$0.45	\$0.49	\$0.52	\$0.54	\$0.57

Total DSO

	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
DSO	39	42	48	42	38

Balance Sheet and Cash Review

Cash Flow from Operating Activities

<i>(In Thousands)</i>	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Net Cash from Operating Activities	\$205,266	\$109,954	\$131,884	\$185,414	\$246,360

Capital Expenditures

<i>(In Thousands)</i>	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Capital Expenditures	\$17,977	\$10,656	\$19,742	\$15,275	\$15,287

Cash and Cash Equivalents

<i>(In Thousands)</i>	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Cash and Cash Equivalents	\$819,540	\$544,585	\$533,298	\$538,898	\$633,415

- Approximately 47 percent of our cash and cash equivalents were in the U.S. at quarter-end.

Stock Repurchase

<i>(In Thousands, Except Share Price)</i>	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Share Repurchase	\$50,012	\$50,011	\$100,023	\$81,114	\$75,006
Number of Shares	1,224	1,098	2,323	1,529	1,125
Average Share Price	\$40.86	\$45.55	\$43.06	\$53.05	\$66.67

Employees

	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
Headcount	7,288	7,417	7,499	7,570	7,743

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 and delivery of Cadence's products and services; (iv) change in customer demands, including those resulting from consolidation among Cadence's customers, restructurings and other efforts to improve operational efficiency of Cadence's customers, economic conditions, government regulations or trade restrictions could result in delays in purchases or deliveries of Cadence's products and services; (v) economic and industry conditions and trade restrictions 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>	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
GAAP total costs and expenses	\$425,335	\$428,838	\$456,160	\$448,346	\$446,744
Reconciling items to non-GAAP total costs and expenses					
Amortization of acquired intangibles	(13,509)	(12,975)	(12,942)	(13,162)	(14,458)
Stock-based compensation expense	(40,956)	(46,264)	(42,594)	(42,253)	(44,257)
Non-qualified deferred compensation (expenses) credits	(468)	(1,120)	3,186	(2,540)	(862)
Restructuring and other (charges) credits	447	172	(13,699)	689	313
Acquisition and integration-related (costs) credits	(6,765)	(6,670)	1,360	(914)	(1,889)
Non-GAAP total costs and expenses†	<u>\$364,084</u>	<u>\$361,981</u>	<u>\$391,471</u>	<u>\$390,166</u>	<u>\$385,591</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

	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
GAAP gross margin as percent of total revenue	88.6%	88.6%	86.6%	87.8%	89.4%
Reconciling items to non-GAAP gross margin as a percent of total revenue					
Amortization of acquired intangibles	1.9%	1.8%	1.7%	1.7%	1.9%
Stock-based compensation expense	0.3%	0.4%	0.3%	0.2%	0.3%
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>90.8%</u>	<u>90.8%</u>	<u>88.6%</u>	<u>89.7%</u>	<u>91.6%</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 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019E
GAAP operating margin as percent of total revenue	18%	19%	20%	22%	23%	~19%
Reconciling items to non-GAAP operating margin as a percent of total revenue						
Amortization of acquired intangibles	3%	3%	2%	2%	3%	2%
Stock-based compensation expense	8%	9%	7%	7%	8%	8%
Non-qualified deferred compensation expenses (credits)	0%	0%	0%	1%	0%	0%
Restructuring and other charges (credits)	0%	0%	2%	0%	0%	0%
Acquisition and integration-related costs (credits)	1%	1%	0%	0%	0%	1%
Non-GAAP operating margin as percent of total revenue†	<u>30%</u>	<u>32%</u>	<u>31%</u>	<u>32%</u>	<u>34%</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.

	2018	2019E
GAAP operating margin as percent of total revenue	19%	21% - 22%
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 (credits)	0%	0%
Acquisition and integration-related costs	1%	0%
Non-GAAP operating margin as percent of total revenue†	<u>30%</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.

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

(In Thousands, Except Per Share Data)	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019E
Diluted net income per share on a GAAP basis	\$0.27	\$0.35	\$0.35	\$0.43	\$0.38	\$0.32 - \$0.34
Amortization of acquired intangibles	0.05	0.05	0.05	0.05	0.05	0.05
Stock-based compensation expense	0.14	0.16	0.15	0.15	0.16	0.17
Non-qualified deferred compensation expenses (credits)	—	—	(0.01)	0.01	—	—
Restructuring and other charges (credits)	—	—	0.05	—	—	—
Acquisition and integration-related costs (credits)	0.02	0.02	(0.01)	—	—	0.01
Other income or expense related to investments and non-qualified deferred compensation plan assets *	—	—	—	(0.02)	0.01	—
Income tax effect of non-GAAP adjustments	(0.03)	(0.09)	(0.06)	(0.08)	(0.03)	(0.05)
Diluted net income per share on a non-GAAP basis †	<u>\$0.45</u>	<u>\$0.49</u>	<u>\$0.52</u>	<u>\$0.54</u>	<u>\$0.57</u>	<u>\$0.50 - \$0.52</u>
Shares used in calculation of diluted net income per share - GAAP **	280,774	281,646	280,321	280,615	281,054	
Shares used in calculation of diluted net income per share - non-GAAP **	280,774	281,646	280,321	280,615	281,054	

† 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	\$1.44 - \$1.50
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 *	—	—
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>\$2.11 - \$2.17</u>
Shares used in calculation of diluted net income per share - GAAP **	281,144	280 - 282M
Shares used in calculation of diluted net income per share - non-GAAP **	281,144	280 - 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)	\$(15) - \$(23)	\$(13) - \$(20)
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>\$(20) - \$(28)</u>	<u>\$(13) - \$(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 investments and gains or losses on non-qualified deferred compensation plan assets recorded in other income or expense.