

**CADENCE DESIGN SYSTEMS, INC.
Fourth Quarter and Fiscal Year 2019 Financial Results Conference Call**

**Prepared Remarks of Lip-Bu Tan, Chief Executive Officer and
John Wall, Senior Vice President and Chief Financial Officer**

**February 12, 2020
2:00 PM Pacific**

Safe Harbor Statement

Please note that today's discussion will contain forward-looking statements and that our actual results may differ materially from those expectations. For information on the factors that could cause a difference in our results, please refer to our filings with the Securities and Exchange Commission. These include Cadence's most recent reports on Form 10-K and Form 10-Q, including the company's future filings, and the cautionary comments regarding forward-looking statements in the earnings press release issued today.

In addition to the financial results prepared in accordance with Generally Accepted Accounting Principles, or GAAP, we will also present certain non-GAAP financial measures today. Cadence management believes that in addition to using GAAP results in evaluating our business, it can also be useful to review results using certain non-GAAP financial measures. Investors and potential investors are encouraged to review the reconciliation of non-GAAP financial measures with their most direct comparable GAAP financial results, which can be found in the quarterly earnings section of the investor relations portion of our website.

A copy of today's press release dated February 12, 2020 for the quarter ended December 28, 2019, and related financial tables, and our CFO Commentary which was included in our 8-K filing today, can also be found in the investor relations portion of our website.

Prepared Remarks of Lip-Bu Tan, Chief Executive Officer

I am pleased to report that Cadence delivered a strong Q4 and achieved excellent operating results for the year. For 2019, amid environmental headwinds, we delivered 9 percent year-over year revenue growth and 32 percent non-GAAP operating margin, with strength across our product lines. John will provide more details shortly.

- Macro uncertainty and geopolitical headwinds persist into 2020, but strong design activity continues at both advanced nodes, as well as on the “More-than-Moore” front.
- This is being driven by generational technology drivers – **5G, AI and machine learning, hyperscale computing, Industrial IoT and autonomous vehicles**, which all have semiconductors at their foundation, and are propelling the need for next generation computing, connectivity, and storage.
- I believe these trends, in addition to systems companies developing custom silicon, domain specific computing, silicon start-ups, and digital transformation of vertical segments like industrial and aerospace & defense, will continue to fuel a silicon renaissance over the next several years.

In 2019, we unveiled our **Intelligent System Design** strategy which enables us to maximize these opportunities while tripling our TAM, through proliferation in our foundational **Design Excellence** segment, and expanding beyond EDA into **System Innovation** and **Pervasive Intelligence**.

We achieved strong growth in **Design Excellence**, which is comprised of core EDA and IP, fueled by the launch of several new innovative products, as well as a wide-ranging expansion of our solutions, particularly at market-shaping customers.

Our **Digital and Signoff** business achieved double-digit revenue growth for the year, as strong proliferation continued, driven by customer demand for solutions offering best-in-class power, performance, area and time to market capabilities.

- A market-shaping global mobile company expanded their partnership with us through a large and comprehensive EDA software booking, which included a significant expansion of our digital footprint.
- Building upon successful 7-nanometer designs, Cadence and **Broadcom** expanded their collaboration to include the creation of 5-nanometer designs using Cadence digital implementation solutions.
- We had about 50 new full-flow wins in 2019, including a recent full flow competitive win for new advanced node designs with a leading maker of FPGA chips.
- During the year we announced successes in our digital business with customers such as **MediaTek, Samsung, Socionext, Innovium, Mellanox, and Uhnder**.

Verification is one of the top challenges for our customers and our **Verification Suite** had several wins across multiple vertical segments in 2019.

- Our **Xcelium** parallel simulator, with its innovative Rocketick technology, continues to proliferate, and recently had a noteworthy win at a leading U.S. computing company.
- Our hardware family, comprised of the **Palladium Z1** emulator and the recently introduced **Protium X1** FPGA based prototyping platform, provide a comprehensive solution across IP and SoC verification, hardware/software regressions, and early software development.
- Due to a common front-end compiler, these complementary platforms, when working in tandem, deliver even more compelling value to customers, and we are getting strong traction with Protium X1 being deployed at Palladium accounts.
- Hardware had a record year, with significant expansions at several customers, while adding 19 new Z1 and 11 new X1 customers during the year, including a global marquee customer that placed one of the largest hardware orders ever for Cadence.

2019 was an outstanding year for our **IP business**, with 16 percent year-over-year revenue growth, as our focused strategy and strong portfolio leveraged the continuing IP outsourcing trend, while enabling customers to accelerate their innovation and time to market.

- It was an especially strong quarter and year for our Tensilica products, with wins in audio, imaging, computer vision, and machine learning.
- Royalty growth was strong, particularly in the audio market, where Tensilica HiFi DSP processors are increasingly proliferating in True Wireless Stereo based earbuds, and in the next generation of smart speakers.
- **Design IP** had a great year as well, with strength in DDR, PCIe and our 112G SerDes products, as we proliferated with customers in AI, 5G and cloud computing.
- Earlier in the year, we augmented our partnership with a marquee U.S. semiconductor company through our largest IP arrangement ever, which included Tensilica processor IP, 112G SerDes IP, as well as additional memory and interface IP products.

Now let me move on to the **System Innovation** segment of our **Intelligent System Design** strategy.

In 2019 we entered the **System Analysis** market, an estimated \$5 billion TAM opportunity, by introducing two exciting new products:

- The **Clarity 3D Solver**, a next generation solution for electromagnetic field simulation, and
- The **Celsius Thermal Solver**, the industry's first complete electro-thermal co-simulation solution.
- Increasing system complexity and time to market pressures are driving the need for far more engineering simulation, while underscoring the significant performance and capacity limitations of existing industry solutions.
- Both **Clarity** and **Celsius** are based on a proven, massively parallel architecture that delivers up to 10-times faster performance, while maintaining gold standard accuracy.
- We are extremely pleased with the ramp of these innovative products, with well over 90 evaluations underway and more than 20 customers to date, including **Micron**, **STMicro**, **Kioxia**, **Realtek**, and **Ambarella**.

Generational industry trends that are driving the need for increased heterogeneous integration, coupled with the slowing down of Moore's law, drove strong demand for our **advanced packaging solutions**, leading to double-digit year-over-year growth.

There are growing challenges in designing products for complex, high frequency RF applications, especially in the 5G wireless, aerospace & defense and automotive segments.

- To that end, we acquired **AWR**, a leader in high frequency RF solutions. We also acquired **Integrand Software**, which provides a leading RF solution for analysis and extraction.
- Integrating these technologies with our **Virtuoso** and **Allegro** platforms will enable us to offer a comprehensive platform for RF millimeter wave products, from initial design to simulation, implementation, verification and manufacturing.
- We entered into a strategic alliance agreement with **National Instruments**, which is focused on the design to test flow enabling customers to improve quality and reduce time to market.

And lastly, we extended our cloud leadership in EDA, providing customers with compelling productivity, flexibility and scalability benefits. Adoption of our **Cloud portfolio** accelerated, and we passed the 100-customer mark.

- **TSMC** partnered with Cadence and **Microsoft** on the first TSMC IC Layout Contest. Cadence delivered a CloudBurst-based Azure environment that allowed several hundred students to simultaneously compete using Cadence layout tools.

With that I will now turn the call over to John to review the financial results and provide our updated outlook.

Prepared Remarks of John Wall, Senior Vice President and Chief Financial Officer

Thanks Lip-Bu, and good afternoon everyone.

I am pleased with our financial performance for Q4 and 2019. Despite some macroeconomic headwinds, we grew revenue across all business groups, and our focus on delivering profitable revenue growth resulted in 9% revenue growth and 32% non-GAAP operating margin for the year.

Turning to the numbers for the fourth quarter and the year, starting with the P&L.

- Total revenue was \$600 million for the quarter and \$2.336 billion for the year.
- Non-GAAP operating margin was approximately 31% for the quarter, and 32% for the year.
- GAAP EPS was \$2.36 for the quarter and \$3.53 for the year,
 - GAAP EPS included a one-time, GAAP only, tax benefit of \$2.06 for the quarter, and \$2.05 for the year.
 - This tax benefit related to intercompany transfers of certain intellectual property rights to Cadence's Irish subsidiary.
 - Excluding the one-time, GAAP only, tax benefit, GAAP EPS was \$0.30 for the quarter, and \$1.48 for the year.
- Non-GAAP EPS was \$0.54 for the quarter, and \$2.20 for the year.

Looking at the balance sheet and cash flow.

- Our cash balance totaled \$705 million at year-end.
- Operating cash flow in the fourth quarter was \$159 million, and \$730 million for the full year.
- DSOs were 47 days, and
- We repurchased \$75 million of Cadence shares during Q4, for a total of \$306 million for the year.

During 2019, we grew revenue by \$198 million, with over \$100 million of that incremental revenue growth dropping through into non-GAAP operating income.

That means, we have now grown our annual revenue by around \$520 million since 2016, with approximately \$280 million of that incremental revenue growth dropping through into non-GAAP operating income.

Now, moving on to our guidance for Q1 2020:

- Revenue in the range of \$610 to \$620 million,
- Non-GAAP operating margin of approximately 30%,
- GAAP EPS in the range of \$0.32 to \$0.34, and
- Non-GAAP EPS in the range of \$0.53 to \$0.55.

For the full year, Fiscal 2020:

- We expect revenue in the range of \$2.545 to \$2.585 billion.
- Non-GAAP operating margin of 32 to 33 percent.
- GAAP EPS in the range of \$1.46 to \$1.56.
- Non-GAAP EPS in the range of \$2.40 to \$2.50.
- We expect operating cash flow to be in the range of \$775 to \$825 million, and
- We expect to use approximately 50% of our free cash flow to repurchase Cadence shares in 2020.

Our guidance assumes that the export limitations that exist today for certain customers will remain in place for all of 2020. We recently completed two acquisitions, and we've included the impact of those acquisitions in our guidance. And finally, please note that Fiscal 2020 will be a 53-week year for Cadence.

You will find guidance for additional items as well as further analysis in the **CFO Commentary** available on our website.

In conclusion, Cadence delivered another year of strong revenue growth and expanding profitability.

- Our focus on delivering profitable revenue growth has resulted in a large portion of our revenue growth flowing through to operating income over the past three years.

- Excluding the impact of the 53rd week and recent acquisitions, our annual guidance assumes that trend will continue, with approximately half of revenue growth in 2020 flowing through to operating income.
- I would like to thank our customers, partners, and our hardworking employees for their continued support, and I look forward to updating you on our progress for 2020.

And with that, operator, we'll now take questions.

Q&A Session

Prepared Closing Remarks of Lip-Bu Tan, Chief Executive Officer

Thank you all for joining us this afternoon.

- The next phase of our strategy, Intelligent System Design, brings new opportunities in Design Excellence, System Innovation and Pervasive Intelligence, and an expanded total addressable market.
- We are capitalizing on multiple technology trends and further proliferating our solutions with a broader base of customers.
- Culture is an important component of our success and who we are as a company in our community. In November, Cadence was named to Investor's Business Daily's first-ever Top 50 Environmental, Social and Corporate Governance (ESG) Companies list. This list, which ranks the companies with regard to sustainability and ethical impact, ranked Cadence #1 in the technology category and #5 overall.
- And in closing, I would like to thank all our shareholders, customers and partners, the board of directors and our hardworking employees for their continued support.