

**CADENCE DESIGN SYSTEMS, INC.
Second Quarter 2019 Financial Results Conference Call**

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

**July 22, 2019
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 July 22, 2019 for the quarter ended June 29, 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

Good afternoon everyone and thank you for joining us today.

Cadence achieved strong operating results for the second quarter of 2019, delivering 12% year-over-year revenue growth on broad-based strength across our product lines. Based on the strength of our business, we are raising our outlook for the year. John will provide more details shortly.

While there is ongoing global economic and geopolitical uncertainty, we remain confident about the multiple long-term trends that continue to drive strong design activity. Driven by trends such as Artificial Intelligence (or AI), 5G, autonomous driving and IoT, design activity is being fueled by workload specific computing, system companies building custom silicon, new silicon startups, and the digital transformation of industries such as automotive, aerospace, medical, and other industrial applications.

Our **Intelligent System Design** strategy will enable us to provide more capabilities and value to our customers, while also expanding our current total addressable market from about \$10 billion to an estimated \$30 billion over the next five years. The foundation of the strategy is Design Excellence, which is comprised of our core EDA and IP business. In addition, we are building upon our core competency in computational software to expand into two new areas:

- The first one is System Innovation, where we are expanding into new system domains with products like Clarity, our new 3D electromagnetic solver that was launched last quarter. Clarity has received considerable customer interest with numerous evaluations underway, and
- And the second new area is Pervasive Intelligence, where we are beginning to apply AI and our algorithmic know-how to our core business and specific verticals.

Now let's turn to the quarterly highlights for our core business.

Our innovation engine continued to deliver, as we introduced four significant new products in the quarter. [Protium X1, Spectre X, Smart JasperGold, Tensilica Vision Q7]

We grew revenue in **Digital and Signoff** by double-digits year-over-year through both ongoing proliferation with market-shaping customers and adoption by new customers at advanced nodes.

- Samsung Austin R&D Center, a leader in high performance design, has selected the Cadence digital implementation Solution for a next-generation high-end mobile CPU core design. Cadence's state-of-the-art Innovus-based flow delivered the best quality of results for that design and enabled Samsung Austin R&D Center to meet its advanced process node objectives.
- Innovium, a leading provider of innovative data center switching solutions adopted Innovus for its highly scalable TERALYNX ethernet switch designs.
- There were more than 40 tape-outs at 7-nanometer and below using our full digital flow in the first half of 2019, and Innovus, our digital implementation solution, has over 80 active customers for 7-nanometer and below designs, including 10 customers at 5-nanometer.

Next, I will discuss highlights of our **System Design and Verification** solutions, for which revenue grew 7% year-over-year.

- Our hardware-assisted verification products, which are an integral part of our Verification Suite, had another good quarter. With the addition of Protium X1, we now provide a comprehensive solution across IP and SoC verification, hardware/software regressions, system validation and early software development.
- Palladium Z1, our flagship emulation platform, added 6 new customers and had 9 repeat orders.
 - Habana Labs, a leading AI processor start-up, said that Palladium was instrumental for the development of GAUDI, the industry's first AI training processor that natively integrates Ethernet and RDMA, and for their GOYA inferencing chip.
 - Fungible Inc., a pioneer in data-centric computing, uses a combination of Palladium Z1 and Protium S1 systems in the development of their DPU family of products. The DPU is a new

type of microprocessor that will revolutionize the performance, reliability, and economics of data centers at all scales.

- We introduced the Protium X1 Enterprise Prototyping Platform, which is the first data center-optimized FPGA-based prototyping system and provides multi-megahertz speed for billion gate designs, accelerating early software development and hardware/software convergence.
 - Customer reception of the Protium X1 has been very positive, with early adoption from some market-shaping customers, including Nvidia.
- Protium S1 and X1, also added 3 new customers, and received 7 repeat orders.
- We also delivered the Smart JasperGold Formal Verification Platform, that delivers an average of 2X faster proofs out of the box and 5X faster regression runs, by leveraging new machine learning-enabled Smart Proof Technology. STMicro has been able to significantly boost its verification productivity with Smart JasperGold.

Custom/Analog grew a strong 11% year-over-year.

- In the quarter we introduced an important new product, Spectre X Simulator, which is a next generation massively parallel circuit simulator designed to provide:
 - Up to 10X performance gains, while solving 5x larger designs, and
 - While maintaining the golden accuracy customers expect from 25 years of Spectre industry leadership in analog, mixed-signal and RF applications.
- Spectre X was endorsed by MediaTek, Mellanox, Renesas and Silicon Works.

Now let me make a few comments on the geopolitical situation. We have and will continue to comply with the United States Department of Commerce export control regulations. The situation is fluid and we will continue to closely monitor it. While there is ongoing uncertainty, thanks to our strategy, continued innovation and operational execution, we are well positioned to capture growth opportunities arising from the longer-term trends driving strong design activity. While we do not provide detail about any specific customer, I do want to emphasize that we have a very broad, diversified and global customer base.

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 results for Q2 and our updated outlook for fiscal 2019.

- Q2 was a little unusual due to the export limitations that were imposed during the quarter.
- The export limitations that took effect on May 16th and June 24th, in respect to certain customers, remain in place today.
- We're aware that this is a very fluid situation, so for the purpose of providing guidance for the second half of 2019, we've assumed that these current export limitations remain in effect for the remainder of the year.

Now, let me walk you through the key results for Q2 beginning with the P&L:

- Total revenue was \$580 million.
- Non-GAAP operating margin was 33.6%.
- GAAP EPS was 38 cents, and
- Non-GAAP EPS was 57 cents.

Next, turning to the balance sheet and cash flow.

- At the end of the quarter, cash totaled \$633 million while the principal value of debt outstanding was \$350 million.
- Operating cash flow for Q2 was \$246 million.
- DSOs were 38 days, and
- During Q2 we repurchased \$75 million of Cadence shares.

Now, I will provide our updated guidance.

For Q3, we expect the following results:

- Revenue in the range of \$570 to \$580 million,
- Non-GAAP operating margin of approximately 30%,
- GAAP EPS in the range of 32 to 34 cents, and
- Non-GAAP EPS in the range of 50 to 52 cents.

Our updated guidance for fiscal 2019 is as follows:

- Revenue in the range of \$2.315 to \$2.335 billion.
- Non-GAAP operating margin in the range of 31 to 32 percent.
- GAAP EPS in the range of \$1.44 to \$1.50.
- Non-GAAP EPS in the range of \$2.11 to \$2.17.
- Operating cash flow in the range of \$680 to \$720 million, and
- For the year we continue to expect to use approximately 50% of free cash flow to repurchase Cadence stock.

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

In summary, I am pleased with our execution so far this year. We are living in uncertain times, and I am proud of how we are adapting to a fluid environment.

- Our improved outlook speaks to the:
 - Diversification of our customer base,
 - The underlying strength of demand for our technology and solutions, and
 - The continued focus of our employees throughout the company, on achieving our key financial metrics.

I would like to thank our customers, partners and of course our employees. We look forward to updating you on our progress throughout the second half of 2019. 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.
- Of course, Cadence is complying with all export regulations and will continue to assess and adapt to the situation.
- In summary, we are capitalizing on multiple technology waves and further proliferating our solutions with a broader base of customers.
- 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.