These prepared remarks contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Any statements that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements include, but are not limited to, statements regarding Synopsys' short-term and long-term financial targets, expectations and objectives, business objectives and outlook, future acquisitions, customer demand, strategies related to our products and technology, our planned stock repurchase activity, our expected tax rate, and the expected impact resulting from our adoption of Accounting Standard Topic 606. These statements involve known and unknown risks, uncertainties and other factors that could cause our actual results, time frames or achievements to differ materially from those expressed or implied in our forward-looking statements. Accordingly, we caution stockholders and prospective investors not to place undue reliance on these statements. Such risks, uncertainties and factors include, but are not limited to: uncertainty in the growth of the semiconductor and electronics industries; consolidation among our customers and our dependence on a relatively small number of large customers; uncertainty in the global economy; fluctuation of our operating results; increased variability in our revenue due to the adoption of ASC 606, including the resulting increase in recognizing upfront revenue as a percentage of total revenue; our highly competitive industries and our ability to meet our customers' demand for innovative technology at lower costs; risks and compliance obligations relating to the global nature of our operations; cybersecurity threats or other security breaches; our ability to protect our proprietary technology; our ability to realize the potential financial or strategic benefits of acquisitions we complete; our ability to carry out our new product and technology initiatives; investment of more resources in research and development than anticipated; increased risks resulting from an increase in sales of our hardware products, including increased variability in upfront revenue; changes in accounting principles or standards; changes in our effective tax rate; liquidity requirements in our U.S. operations; claims that our products infringe on third-party intellectual property rights; litigation; product errors or defects; the ability to obtain licenses to third-party software and intellectual property on reasonable terms or at all; the ability to timely recruit and retain senior management and key employees; the inherent limitations on the effectiveness of our controls and compliance programs; the impairment of our investment portfolio by the deterioration of capital markets; the accuracy of certain assumptions, judgments and estimates that affect amounts reported in our financial statements; and the impact of catastrophic events. More information on potential risks, uncertainties and other factors that could affect Synopsys' results is included in filings it makes with the Securities and Exchange Commission from time to time, including in the sections entitled "Risk Factors" in its Annual Report on Form 10-K for the fiscal year ended October 31, 2018 and in its latest Quarterly Report on Form 10-Q. The information provided herein is as of February 20, 2019. Although these Prepared Remarks are expected to remain available on Synopsys' website through the date of the earnings results call for the second quarter of fiscal year 2019, their continued availability through such date does not mean that Synopsys is reaffirming or confirming its continued validity. Synopsys undertakes no duty, and does not intend to update any forward-looking statement, whether as a result of new information, future events or otherwise, unless required by law.

These prepared remarks also contain non-GAAP financial measures as defined by the Securities and Exchange Commission in Regulation G. Reconciliations of the non-GAAP financial measures to their comparable GAAP measures are included in the first quarter fiscal year 2019 earnings release and financial supplement, each dated February 20, 2019, and available on Synopsys' website at www.synopsys.com. Additional information about such reconciliations can be found in Synopsys' Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 20, 2019.

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Good afternoon.

Q1 was an excellent start to the year. Revenue was a record $820 million, and non-GAAP earnings per share were $1.08 – both above our target ranges. Strength was across all product groups, including some large, expanded renewals with cornerstone semiconductor companies. We are confident in our outlook for the year, and are reaffirming our guidance.

Please note that this is the first quarter we are reporting two segments: Semiconductor & System Design, and Software Integrity. In Semiconductor & System Design, results exceeded plan, with strength across the board, augmented by timing of customer shipments. In Software Integrity, revenue was right on plan, and operating margin continued to move towards sustainable profitability, as we build for the long-term in this high-growth space. Trac will discuss the financials in more detail.

Looking at the overall landscape, solid demand for our solutions has continued into 2019, notwithstanding the somewhat increased uncertainty in the market. While the global narrative focuses on geo-political realities, electronics companies continue to design ever-more-complex chips and devices at an unabated speed.

One notable driver, of course, is artificial intelligence. The development and proliferation of AI-dedicated chips brings great potential for us, as the number of customers and designs is growing quickly. Competition among AI-specific companies is fierce, and indeed for anyone incorporating AI into their chips, with an intense race to market and a broad set of competing architectures.

In addition, we're seeing an escalation of the security challenges in highly interconnected systems loaded with software. This is in part driven by the proliferation of data-intensive IoT devices, and the emerging 5G connectivity standard, among other applications.

The power of AI and the risks of security breaches require attention for all the products we use every day – from cars to mobile phones to smart homes to medical devices.

Synopsys provides key technology in the midst of this evolving picture. Our results and outlook are not in spite of these challenges, but rather because of them. Our innovation and technologies become even more valuable to our customers when the stakes are so high.

This is evident throughout our business: Our penetration in new and growing AI chip companies has been excellent, and this growth has been visible across our product groups. In EDA, our fusion technology and platform roll-out is progressing well, and reports show increasingly strong results; IP also continued on a positive path, helped by a particularly strong competitive win rate as we deliver sophisticated building blocks in more and more difficult advanced nodes and challenging verticals; On top of this, our Software Integrity business continues to broaden its customer base as software security is increasingly recognized as a "must have" in this era of product development.

With that, let me share some product highlights, starting with EDA.

At the leading edge of technology, we continue to see a steady push towards smaller geometries, as Synopsys continues to be the pioneer and the relied-upon supplier for well over 90% of 12nm and below designs, all the way down to 5, 3 and 2nm research and development.

A particularly noteworthy accomplishment was the tape-out of the industry's first chip using next generation Gate-All-Around transistors. This highly advanced tape-out is the result of an extensive collaboration with Samsung, using a full Fusion Design Platform flow, from synthesis to place & route to signoff.

Even at the earliest stages of process development, our unique position at the roots of silicon helps advance the most difficult research. The latest example of this is the recently announced collaborations with LTAB and IMTAB – important industry innovators – to drive modeling standards for 2nm and beyond.

Meanwhile our breakthrough Fusion Design Platform continued to make great strides and generated strong results in Q1. You may recall that in November, we introduced not only our next-generation synthesizer, Design Compiler NXT, but also a game-changing new product called Fusion Compiler.

Fusion Compiler, which is architected on a unified data model, is the only system on the market that integrates synthesis and place & route and all the key elements of our gold-standard signoff technology. We accomplished this through a novel way of sharing code among the different functions, thus eliminating the need to move between tools. The value to the customer is better chip results such as size, speed, and power, in shorter and more predictable design time.

After just one quarter on the market, we're seeing high initial demand, and have rapidly grown the number of active customers – including many of the top 10 SoC design houses. Fusion Compiler was also recognized with a World Electronics Achievement award for product of the year.

When we pioneered the fusion concept, our aspiration was to build a platform upon which we could roll out new differentiating capabilities for years to come. Stay tuned as we deliver even more exciting advances over the next 12 months.

Now to verification, where our platform vision and technology execution have yielded excellent business and market share growth.

Increasing chip and system complexity means huge verification challenges, in terms of both speed and time-to-market. In addition, the growing desire to run software on top of systems that are still in construction is taxing the state of the art of simulation, emulation and prototyping. Synopsys is at the forefront of enabling this to happen, across software simulation, emulation, FPGA-based and virtual prototyping.

Our Verification Continuum platform continues to drive excellent demand and competitive wins.

This quarter, we saw particularly strong growth in software-based verification at both traditional semiconductor companies and emerging system companies focused on their own in-house design. In emulation, revenue growth has been significant over the past two years, driven by a steadily expanding number of customers and average run rate. While hardware revenue is quite variable from period to period, driven by the timing and magnitude of specific orders, it's clear that strong industry demand continues. Our newly launched ZeBu Server 4 product – the fastest, largest-capacity emulator in the market – is generating broad-based adoption by customers designing storage, networking and AI chips, as well as a large, global systems powerhouse. Orders for our HAPS FPGA-based prototyping solution were strong, particularly in 5G and automotive verticals. We're also seeing very promising progress with virtual prototyping in the automotive vertical benefitting semiconductor, Tier 1, and OEM customers.

Verification is an example of a capability that works well on the cloud. While we've hosted tools on our own cloud for years, including our ZeBu emulation system, we're continuing to make good progress tuning our solutions for cloud optimization. Interest is high. We have many customers who use their own or public clouds, some who are already working directly with us, and many others in proof-of-concept stages to see what structures may best work for them.

Now moving to our IP products. We continue to deliver double-digit revenue growth, with strength across the board, particularly in AI and automotive.

Our AI-related differentiation was readily apparent in Q1, with wins from several very notable AI startups. As an example, Israel's Habana Labs achieved first-pass silicon success on its high-performance AI-processor-SoC using our PCI Express 4.0 IP. In automotive, we had a number of major global wins, including AI automotive startup FABU, which selected a broad portfolio of Synopsys automotive-certified IP. Over the past 12 months, we licensed IP to more than 25 leading automotive semiconductor suppliers covering a range of applications such as autonomous driving, infotainment, and connectivity gateways.

Now to our Software Integrity group, which provides products and services to address code quality and security vulnerabilities early in the software development lifecycle.

Over the last five years, we've systematically scaled this business, and expect it to reach 10% of total Synopsys revenue for fiscal 2019. Our investments in this high-growth market also substantially diversify our customer base into verticals such as financial services and medical, expand our reach in automotive, and increase our business with our well-established electronics customers.

While the need for enhanced security measures has clearly increased, companies still struggle to develop effective strategies on how to get there, given the immense scope of the challenge.

One example is automotive, arguably one of the most vulnerable industries due to the heavy toll that breaches can cause.

A recent survey of global automotive manufacturers and suppliers found that 84% of automotive professionals have concerns that their organizations' cybersecurity practices are not keeping pace with evolving technologies; and that most of them test less than half of the technology they develop for security vulnerabilities.

Bolstered by the acquisition of Black Duck, which was fully integrated in Q1, we offer by far the most comprehensive portfolio of products and services in the market today to help companies solve these challenges. And we are not standing still.

We're on track this year to deliver our integrated Software Integrity platform, which will enable both software developers and management to build essential security and quality checks into their software development lifecycle. Stay tuned for an announcement soon.

In closing, Q1 was a strong start to the year. We delivered excellent financial results, and are reaffirming our outlook for fiscal 2019; Even with some caution around global markets, electronics companies continue to invest in critical chip and system designs, as well as immense amounts of sophisticated software. We are confident in both our near-term execution and our long-term prospects given our position in the market. We are committed and well on-track towards our mid and long-term growth and margin expansion targets. With that, let me thank our customers for their business and our employees for their dedication and hard work in delivering yet another strong quarter.

Trac will now highlight the financial perspective.

Thanks, Aart.

Good afternoon everyone.

Q1 was a great start to the year. Our financial results met or exceeded our targets in all key metrics, as we continue to execute well across the board.

Beginning with this quarter, we are also initiating segment reporting for Synopsys. The investment we made five years ago in Software Integrity has reached critical mass and grown to approximately 10 percent of sales. Reporting this segment separately allows us to better highlight the strengths of the two businesses we're building within and beyond our traditional semiconductor vertical.

Our increasingly diverse customer base and our strong product portfolio, combined with our nearly 90% recurring revenue model, positions us well for success in periods of high demand, as well as those of greater uncertainty. Reflecting this dynamic, we are reaffirming our guidance for the year.

Before I begin with the first quarter results, I want to remind everyone that Synopsys adopted ASC Topic 606, the new accounting standard for revenue recognition, beginning in fiscal 2019. All results I provide today will be under ASC 606. For a summary of these results, as well as equivalent financial metrics under ASC 605, please refer to our Financial Supplement.

Now to the numbers: All comparisons are year-over-year unless otherwise specified.

We generated total revenue of $820 million, a 7% increase over Q1 of last year, which included an extra week. Our growth reflects both strong demand and timing of customer shipments. Recall that ASC 606 creates additional quarterly revenue variability.

Trailing 12-month revenue growth was strong across all product groups and geographies. These results reflect both the depth and breadth of our product portfolio, the increasing diversity of our customer base, and the impact of the investments we've made to drive long-term growth.

Our "contracted but unsatisfied performance obligations" – or backlog – at the end of the quarter totaled $4.3 billion.

Turning to our segments, Semiconductor & System Design revenue was $738 million, up 5% year-over-year or just over 11%, excluding the extra week in 2018.

Software Integrity revenue grew 29% to $82 million, reaching approximately 10% of our total revenue in the first quarter. Software Integrity revenue for the trailing-twelve-months was $299 million, reflecting a strong leadership position in the application security market.

Moving to expenses, total GAAP costs and expenses were $673 million.

Total non-GAAP costs and expenses were $619 million and consolidated non-GAAP operating margin was 24.5%.

For the quarter, Semiconductor & System Design delivered an adjusted operating margin of 26.5%, while Software Integrity delivered an adjusted operating margin of 6.8%. Certain operating expenses such as stock-based compensation, amortization of intangibles, and other expenses that are managed at the consolidated level, have not been allocated to our segments. These items are described in further detail in our Financial Supplement.

Operating margin will fluctuate quarter-to-quarter, due to normal variability of revenue and expenses. ASC 606 can further amplify this quarterly variance within a given year. For this reason, I want to reiterate that we manage the business with a strong emphasis on full-year and multi-year performance. We are on-track to achieve our margin objective for the year, while driving towards our goal of 26% in 2021, and high 20s longer-term.

To wrap up the income statement, GAAP earnings per share were $1.01. Non-GAAP earnings per share were $1.08.

Turning to cash, operating cash outflow was $144 million, reflecting our typical payout of variable compensation in Q1.

We ended the quarter with a cash balance of $592 million, and total debt of $542 million.

Building on last year's significant share repurchases of $400 million dollars, we repurchased $29 million dollars of our stock in Q1.

Since 2016, we've returned more than $1.2 billion dollars to shareholders, and expect buybacks to remain an important piece of our capital allocation strategy.

Moving on to guidance, we remain confident in our outlook for the year and are reaffirming our annual targets.

Our targets are based on ASC 606 revenue recognition rules. For the second quarter, we expect:

• Revenue between $810 and $850 million;
• Total GAAP costs and expenses between $682 and $708 million;
• Total non-GAAP costs and expenses between $620 and $640 million;
• Other income and expense between zero and $2 million;
• A non-GAAP normalized tax rate of 16 percent;
• Outstanding shares between 153 and 156 million;
• GAAP earnings of 71 to 79 cents per share; and
• Non-GAAP earnings of $1.07 to $1.12 per share.

For 2019, the full-year targets are:

- Revenue of $3.29 to $3.34 billion;
- Total GAAP costs and expenses between $2.76 and $2.79 billion;
- Total non-GAAP costs and expenses between $2.52 and $2.54 billion, resulting in a non-GAAP operating margin at the midpoint of just over 23.5 percent;
- Other income and expense between minus $13 million and minus $9 million;
- A non-GAAP normalized tax rate of 16 percent;
- Outstanding shares between 153 and 156 million;
- GAAP earnings of $3.19 to $3.32 per share;
- Non-GAAP earnings of $4.20 to $4.27 per share;
- Cash flow from operations of approximately $700 million;
- And capital expenditures of approximately $270 million, which includes the buildout of our China facility as well as the relocation of some Silicon Valley offices. We continue to expect capex to drop roughly in half in 2020.

To wrap up:

We executed very well in Q1 and we are reaffirming our guidance for the full year. Company-wide, we are delivering robust revenue growth and driving profitability toward our long-term margin objectives. Both of our operating segments performed well and our new segment reporting will provide investors with greater transparency into these results. Finally, we remain committed to a balanced capital allocation strategy, investing in the business while continuing to return capital to our shareholders as we focus on driving sustainable, long-term value.

And with that, I'll turn it over to the operator for questions.