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 product releases and capabilities, our planned stock repurchase activity, our expected tax rate, and the expected impact of the U.S. government action on our financial results. 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: the anticipated timing and customer adoption of our new product offerings, additional administrative, legislative or regulatory action by the U.S. or foreign governments, such as the imposition of additional tariffs or export restrictions, which could further interfere with our ability to provide products and services in certain countries; the response by current or potential customers and their willingness to purchase products and services from us in the future; 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; risks and compliance obligations relating to the global nature of our operations; uncertainty in the global economy; fluctuation of our operating results; increased variability in our revenue due to ASC 606 implementation, 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; 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; product errors or defects; 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; 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, 2019 and in its latest Quarterly Report on Form 10-Q. The information provided herein is as of February 19, 2020. 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 2020, 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 2020 earnings release and financial supplement, each dated February 19, 2020, 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 19, 2020.

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Good afternoon. Q1 was an excellent start to the year, as we met or exceeded all of our guidance targets. Revenue was $834 million, with GAAP earnings per share of 67 cents and non-GAAP earnings above our target range at $1.01.

In December, we communicated our Fiscal '20 guidance: high-single-digit revenue growth, substantial ops margin expansion, mid-teens non-GAAP earnings per share growth, and more than $800 million in operating cash flow. We are reaffirming our guidance for the year. Trac will discuss the financials in more detail.

Looking at the overall landscape, ongoing geopolitical tension and the recent coronavirus outbreak have generated heightened uncertainty around the world. Regarding the virus outbreak, our first priority has been the safety and health of our employees, customers and partners. We continue to monitor the situation and support our China teams as they continue to drive business execution.

Undeterred by these challenges, electronics companies – ranging from traditional semiconductor and systems companies to new startups and hyper-scalers – persist in designing ever-more-complex chips and devices with a high degree of market urgency.

Driven by AI and machine learning, automotive, 5G, IoT, and cloud expansion, the proliferation of "smart everything" is, and will be, the central driver for years to come. As a result, robust demand for our solutions has continued in 2020. Our innovation and technologies – spanning the spectrum from Silicon to Software – are absolutely central to the ambitious products and systems being built.

Let me share some product highlights from the quarter, starting with EDA.

An important differentiator for Synopsys continues to be our leading position in enabling manufacturing process development. With highly sophisticated simulation of new technologies, new transistors, and the structures needed for the most advanced fabs in the world, we not only assist our manufacturing partners, but we also lay the groundwork for our design tools to be tuned and ready well before these technologies go into production design.

On top of that, over the last several years, Synopsys has pioneered a new approach called "Fusion" that literally "fuses" algorithms from different tools, resulting in faster and lower-power chips, in far less time. A showcase example of this is our Fusion Compiler product, introduced about a year ago. Within just a few months of its introduction, Fusion Compiler revealed itself as a revolutionary product: it is winning head-to-head benchmarks with consistently superior performance, power and area results across a broad set of applications. Results thus far are ahead of our initial plan, with many customer engagements progressing very well, from exploring the tool, to usage on a few live design blocks, to production roll-out.

In Q1, we built upon several breakthrough competitive wins ranging from the largest global communications, processor and graphics firms, to high-impact cloud hyper-scalers, to multiple influential system houses: for example: AMD chose Fusion Compiler for its full-flow, digital design implementation of its next-generation processors.

Fusion Compiler is displacing the competition at a large hyper-scaler for a next-generation Arm-core-based graphics design at 5nm and below; we achieved a significant win at a large multi-national consumer electronics company on a next-gen Arm CPU core; we're expanding displacement and deployment at a leading mobile company for critical 5G designs at 5 and 4nm; a leading U.S. semiconductor company is deploying Fusion Compiler on all new graphics designs, taking advantage of better runtime and quality of results; we displaced the competition for Arm core designs at a leading automotive semiconductor company; and we expanded proliferation at a large U.S. semiconductor leader, with a new win in wireless designs.

While still relatively early in our multi-year product cycle, these important wins represent significant momentum and "usage" share gains, which will flow into revenue over time. The Fusion concept is very powerful and is getting great results across Synopsys as our innovation continues at a rapid pace! Stay tuned for some exciting new product announcements as we approach our March Silicon Valley user group event!

Let me now turn to custom design, a product area that underwent a multi-year innovation push and has seen excellent progress over the last 18 months. Not only are we now highly competitive for advanced nodes, we continue to see a growing number of displacements and full-flow engagements. Our expansion is driven by fresh innovations focused on maximizing designer productivity. Customers are experiencing this benefit, and we saw excellent growth in revenue from our Custom Compiler product again this quarter. For example, a high-impact global systems company expanded its full-flow usage in Q1, proliferating after a significant competitive displacement. Additional Custom Compiler wins include a leading silicon photonics developer and a CMOS image sensor company.

Let me now move to our Verification Continuum platform, where we maintain our #1 market share position. In verification software, we gained share in Q1 at a large, global hyper-scaler, driven by their growing needs for verification capacity across our platform.

Meanwhile, demand for hardware-based verification is high across the board, driven by continued complexity growth in new designs. The speed and capacity of our solutions are particularly well-suited whenever software bring-up is involved. While a strong Q1 last year makes for a tough year-over-year hardware comparison, we continue to gain momentum, with both new and existing customers: in Q1, we gained nine new logos and 34 repeat orders, including very high-profile systems and semiconductor companies. NEC, for example, chose our ZeBu emulation system over the incumbent for their high-performance compute solutions, due to our superior performance, very fast bring-up time, and unique debug visibility.

In Q1, we also announced the acquisition of the Dini Group, which further expands our HAPS FPGA-based prototyping portfolio.

Now to IP, which continues to deliver strong results. As the #1 provider of interface, embedded memory, analog, and foundry-specific IP, we provide the industry's broadest portfolio covering all key markets – AI, automotive, cloud, IoT and 5G/mobile.

Our demonstrated strength in high-performance cloud computing applications is evident in several areas. We've already achieved more than 60 design wins in PCI Express 5.0; our new die-to-die 56- and 112-gig SerDes continues to gain market traction; we also had a significant IP portfolio win with a major China e-commerce company for micro server applications. Our leadership position in USB led to multiple Tier 1 processor semiconductor companies adopting our newest generation USB 4.0 IP in a leading 5nm process.

We are also seeing unmatched leadership and momentum in automotive, where our automotive-grade IP is being used by 10 of the 11 top semiconductor suppliers to that industry. One notable example is Qualcomm, which selected our automotive IP portfolio, including interface, ARC processors and embedded test-and-repair solutions for their new Snapdragon Ride Platform for autonomous driving.

Finally, we continued to expand our IP portfolio with the acquisition of technologies from eSilicon and Invecas, the latter closing just last week. Along with valuable technology, these acquisitions also enable us to further scale our IP development to meet high customer demand across growing markets.

Now to Software Integrity – the tools that test software code for security vulnerabilities and quality issues.

We delivered a solid beginning to the year, with business levels up more than 30% over the same period last year. We saw continued progress in driving multi-year, multi-million-dollar agreements, booking several across multiple verticals.

As I mentioned in December, we have entered Phase 2 of our strategy – scaling into the $500 million to $1 billion revenue space. To accomplish this, we're focused on four areas: One, expanding our cloud-based Polaris Software Integrity Platform through additional product integrations. Two, scaling consulting engagements to fully leverage a key differentiator in the software dev-ops market. Three, refining our channel to better serve large enterprise customers, key market verticals, and new regional business. And four, evolving our management team for the complexity and size of a larger business.

We are moving fast on all of these: just last week, we announced the expansion of the Polaris Platform, bringing static testing and software composition analysis directly to the developer's desktop. This first-of-its-kind solution enables developers to seamlessly find and fix security weaknesses in proprietary code and known vulnerabilities in open source code, all within their desktop development environment.

We also added the team and products from Tinfoil Security, broadening our product offerings for Dynamic Application Security Testing (or DAST) and adding API scanning capability.

Our scaling efforts in the field are also progressing well as we've ramped up hiring activity and are excited about the sales energy in the organization. A good example of the power of the combination of products and consulting is one of the largest pharmaceutical companies in the world. A relationship that began with a small initial services engagement to help them respond to a security breach has grown to include both product purchases and now additional services to help them proliferate our solutions.

We are also moving fast to scale our leadership and management team to the next level: we have launched an external search for a new general manager to lead the organization into the $500 million to $1 billion level.

While these efforts will flow into revenue over time, we're encouraged by the positive start. There is a tremendous opportunity in this space, and we're well-positioned to enable companies to improve the security and quality of their software, with a combination of high-value products, a great new platform, and enabling consulting services.

In closing, Q1 was a very good start to the year. We delivered strong financial results, and are reaffirming our outlook for fiscal 2020; 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. Our innovation engine is prolific, and this quarter we will be introducing a number of exciting new products and differentiating capabilities. We are committed and on-track towards our mid- and long-term growth and margin expansion targets.

Finally, let me thank our customers for their business, and our employees for their dedication and hard work in delivering continued strong results.

Trac will now highlight the financial perspective.

Thanks, Aart. Good afternoon everyone.

We delivered a strong start to the year, meeting or exceeding our guidance targets for the quarter, and we are on pace for our full-year plan.

We remain relentlessly focused on execution, generating revenue for the quarter at the high-end of our target range and non-GAAP earnings per share well above the range. We produced another quarter of strong collections, which contributed to positive cashflow in a quarter that is typically an outflow due to variable compensation payouts, and we launched a $100-million-dollar share repurchase.

Our increasingly diverse customer base and strong product portfolio, combined with our nearly 90% recurring revenue model, position us for success in periods of high demand, as well as those of greater uncertainty. Multiple factors, including the Entity List export restrictions and broader trade tensions, as well as the coronavirus situation, have added to market volatility. Based on our current view, and the strength of our business, we are confident in our ability to manage through this uncertainty, and we are reiterating our guidance for the year.

I’ll now review our first quarter results. All comparisons are year-over-year, unless otherwise stated.

We generated total revenue of $834 million. Semiconductor & System Design segment revenue was $749 million, with strong growth in IP and a tough hardware comparison over a strong Q1 of last year. Excluding hardware and the impact of Entity List trade restrictions, EDA software results remained within our long-term target range of mid-to-high single-digits. Software Integrity segment revenue was $86 million – 10% of total, and business levels for the quarter increased more than 30%. Because of our largely time-based model, the associated revenue will be recognized over the life of the contracts.

Moving on to expenses, total GAAP costs and expenses were $747 million, which includes approximately $9 million in restructuring costs. Total non-GAAP costs and expenses were $647 million, resulting in a non-GAAP operating margin of 22.4%. Our Q1 margin reflects the revenue profile this year, as well as a change in the timing of general salary increases – now in Q1. We are on track to generate approximately 200 bps of op margin expansion for the year. Adjusted operating margin for Semiconductor & System Design was 23.9%, and Software Integrity was 9.4%. Finally, GAAP earnings per share were 67 cents, and non-GAAP earnings per share were $1.01.

Turning to cash, we generated a $10 million in operating cash flow. Including the $100 million Q1 ASR, we've repurchased $1.9 billion of our stock since 2015, or approximately 80% of our free cash flow returned to shareholders over that period. We ended the quarter with a cash balance of $700 million, and total debt of $331 million.

A couple comments before I move on to our targets. As I've noted, we delivered a strong start to the year, and we are reiterating our full year guidance. We are maintaining our first half / second half revenue split of roughly 45% / 55%, which reflects forecasted timing of IP and hardware deliveries, as well as general prudence given the uncertainty around the unfolding coronavirus situation.

For fiscal year 2020, we are targeting:

- Revenue of $3.6 to $3.65 billion;
- Total GAAP costs and expenses between $2.95 and $3.0 billion;
- Total non-GAAP costs and expenses between $2.63 and $2.66 billion;
- Resulting in a non-GAAP operating margin of approximately 27%;
- GAAP earnings of $3.68 to $3.87 per share;
- Non-GAAP earnings of $5.18 to $5.25 per share;
- Cash flow from operations of $800 to $825 million;

- And capital expenditures of approximately $180 million. We expect capital expenditures to decline in 2021.

Now to the targets for the second quarter:

- Revenue between $820 and $850 million;
- Total GAAP costs and expenses between $724 and $758 million;
- Total non-GAAP costs and expenses between $645 and $665 million;
- GAAP earnings of 49 to 62 cents per share;
- Non-GAAP earnings of 96 cents to 1 dollar 1 cent per share.

In conclusion, our focused execution enabled us to again deliver strong results, meeting or exceeding our targets. With a very good start in Q1, we are re-affirming the full-year guidance provided in December. We are also tracking well to our goals of high 20s operating margin by 2021, and profitability in the 30% range longer-term, as we move towards our next milestone of $4 billion in revenue.

We remain committed to a balanced capital allocation strategy consisting of investing in the business for growth, while continuing to return capital to shareholders, as we focus on driving sustainable long-term shareholder value.

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