These prepared remarks contain forward-looking statements, including, but not limited to, statements regarding Synopsys’ short-term and long-term financial targets, expectations and objectives; business outlook, opportunities and strategies; customer demand and market expansion; strategies related to our products and technology; our planned product releases and capabilities; industry growth rates; software trends; planned acquisitions and buybacks; our expected tax rate; the expected impact of U.S. and foreign government action on our financial results; and the expected impact of the COVID-19 pandemic. These statements involve 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. Such risks, uncertainties and factors include, but are not limited to: risks from the effect of the COVID-19 pandemic and the associated economic downturn on our business, operations and financial condition; 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 as well as actions by the U.S. or foreign governments, such as measures in response to the COVID-19 pandemic or the imposition of additional tariffs or export restrictions; macroeconomic conditions and 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; and more. Additional 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, 2020 and in its latest Quarterly Report on Form 10-Q. The information provided herein is as of February 17, 2021. Although these Prepared Remarks are expected to remain available on Synopsys’ website through the date of the earnings results call for the second quarter fiscal year 2021, 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 2021 earnings release and financial supplement, each dated February 17, 2021, 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 17, 2021.
Good afternoon.

Q1 was a very good start to the year, as we met or exceeded all of our guidance targets. Revenue was $970 million, with GAAP earnings per share of $1.03 and non-GAAP earnings above our target range at $1.52. Business was strong across all geographies and product groups. And for the year, we are reaffirming our guidance with: low-to-mid teens non-GAAP EPS growth, revenue surpassing the $4B milestone, non-GAAP operating margin of 29-30%, and more than $1 billion in operating cash flow.

Meanwhile, our markets are strong! Wherever one looks, be it at AI & machine learning, hyperscale-enabled cloud computing, 5G, next-generation automotive, massively connected IoT, or software-enhanced medical devices – all require more chips and software: chips to store and move huge amounts of IoT data through the cloud, chips for massive general compute and AI-driven smarts in every vertical end market, still more chips to tie these huge hardware/software systems seamlessly together and make them both secure and safe, and the escalating need for ever-more-secure software, whether embedded on an electronic system or in the enterprise software space.

This is the center of gravity for Synopsys! With our product portfolio that not only excels in advanced system-on-chip design, but reaches down into the critical foundation of silicon manufacturing, and up to the intensifying needs of smart software, we are uniquely positioned at the heart of this opportunity space. It’s quite rewarding to see the adoption and business momentum of the innovations we’ve introduced over the past several years, and the enthusiasm around our further expansions into brand new domains through our next wave of technology disruptions.

Let me share some highlights, beginning with EDA.

Our groundbreaking Fusion Design Platform continues to drive proliferation and competitive displacements, supporting strong revenue growth. This includes major expansions and evaluations at historical competitor strongholds. Customers clearly recognize our leadership at the most advanced nodes – now down to 5 and 3nm. Our Fusion Compiler product, specifically, delivers superior performance, power and area results. With numerous competitive wins and wide deployments with influential, high-impact semi and systems companies around the world, we see growing business momentum.

Integral to our sustainable differentiation is native integration of our golden signoff products, which guarantees the most accurate and timely results. Our deep collaboration with foundries ensures that our mutual customers can access the most advanced technologies with well-honed design flows. This quarter,
for example, we announced a collaboration with Samsung Foundry to deliver the fastest design closure and signoff for 5 and 3nm.

We continue to also see good growth and momentum in custom. We again added several new Custom Compiler customers, including two in the wireless communication segment. Also, further inroads with memory companies who are adopting our complete end-to-end custom solution.

A never-ending challenge in today’s complex designs is verification – not only of the chips, but also the intersection of the chips with the software that runs on top of them. Our Verification Continuum platform is uniquely powerful in this sweet spot of modern design and is driving strong growth. Adoptions are expanding rapidly at influential customers ranging from leading hyperscalers to automotive to the most sophisticated global semis and systems companies. For example, AWS, which utilizes our verification software to accelerate the development of datacenter chips, and automotive supplier Almotive, for its autonomous driving applications.

Strong demand continues for our market-leading hardware solutions. Just this quarter we added 10 new customers and had 45 repeat orders. The power of our comprehensive design-plus-verification solution is evident in full-portfolio adoptions. This quarter, it included a global design services leader, who adopted both Fusion and Verification platforms for highly complex designs, replacing their legacy tools.

Now to IP, where we again delivered strong double-digit revenue growth. Outsourcing of sophisticated IP blocks continues unabated. Our track record of innovation, reliability and advanced node leadership have led to our #1 position in interface, embedded memory and foundry-specific IP. We provide the broadest portfolio by far, accelerating time-to-market and reducing risk for our customers.

This quarter, we continued to show strong momentum across multiple applications and products. In high-performance compute, which is one of the most dynamic segments today, our comprehensive IP portfolio has driven more than 450 wins in 7nm and over 100 in 5nm. We achieved silicon-proof of our 112Gb Ethernet PHY on 5nm, driving the leading edge in this key product area. With the tremendous growth in internet traffic, security is a big concern in protecting the data transfer in hyperscale cloud centers. This quarter, we launched the industry’s first security IP modules for PCI Express 5.0 and CXL communication interfaces. We have already secured the first design win, with a growing pipeline. Building on our lead in advanced technology, we released the first phases of our 3nm foundation IP offerings.
Building on our innovation and momentum in EDA and IP, we have invested in unique and breakthrough solutions to next generation challenges our customers face. We do this in close collaboration with ecosystem partners through a combination of R&D and technology acquisitions.

While we have a number of these in our innovation pipeline, let me highlight three that we recently announced: 3D multi-die design, AI-driven design flows, Silicon Lifecycle Management.

Starting with 3D multi-die design – think of it as combining and stacking multiple die together, not on a board, but on a specialized large chip. This leads to extremely tight configurations with much higher data speed and bandwidth than with a traditional board-and-packages approach.

Our new 3DIC Compiler product enables the design and analysis of these complex 3D systems, taking full advantage of our technical breadth by leveraging both Fusion Compiler and our sign-off tools. Early momentum is building rapidly with expanding evaluations and adoptions. Designers are seeing the performance and capacity benefits of a single environment and are beginning to move away from older mix-and-match solutions. For example, 3DIC Compiler helped a large Asian semiconductor company complete a highly advanced test chip in record time – saving weeks of design time. With this, we also combine our high-bandwidth memory and die-to-die IP that enables interconnecting these complex systems.

Moving next to AI-driven design – We have a breakthrough and already award-winning new solution: DSO.ai. DSO stands for “Design Space Optimization.” While maximizing the contribution of engineering teams, DSO.ai leverages machine learning techniques and computation to explore the design space for still better solutions in terms of chip performance, power and area. This autonomous search substantially accelerates the work of the human design team. Indeed, in Q1, customers using DSO.ai reported remarkable productivity improvements, consistently realizing better results in a fraction of the time and effort typically required. On top of that, multiple production tape-outs have recently been completed. Our customers are already heralding DSO.ai as an anchor product and are beginning to deploy it across their organizations.

Finally, Silicon Lifecycle Management – a new platform to monitor, analyze, and optimize chips as they are designed, manufactured, tested and deployed in the field. Synopsys is uniquely well-equipped to provide a comprehensive solution through our long-standing expertise in design, manufacturing and IP. We add sensors, monitors and data analytics on-chip to provide insight to test, yield, and reliability management tools. This gives smart visibility into critical performance, reliability, safety and security.
issues for a chip’s entire lifespan. In Q1 we expanded our capabilities with the acquisition of Moortec, which provides leading-edge process, voltage and temperature sensors. Initial interest and activity are strong and expanding. We’re in talks with a number of leading IDM and fabless customers. We are also engaged with major cloud service providers to deploy aspects of our solution into their platforms.

These new innovation areas create not only new business growth opportunities, they also leverage strong cross-disciplinary expertise in Synopsys from design, to manufacturing, to IP.

Now to Software Integrity – testing software code for security vulnerabilities and quality issues. We delivered a solid beginning to the year and are on-track towards meeting our fiscal ‘21 goals to reaccelerate growth. As I mentioned in December, we have implemented several important enhancements, all showing encouraging progress: first, evolving our go-to-market strategy and customer success organization, including tuning our sales coverage and building an indirect channel program. Second, bolstering our strategic consulting capabilities to better serve growing market needs. And third, evolving our product roadmap to capitalize on the latest security trends.

These improvements are beginning to show in our results. All geographies delivered results at or above plan. We had numerous multi-million-dollar new agreements and sizeable expansions with customers ranging from industrials and aerospace to electronics and financial services. The trend towards adoption of multiple products continues. Customer interest in a consulting-led approach to software security is growing. And recent publicized security breaches only underscore that need. Our expanded team is ramping up, and we see very good long-term opportunity.

In addition, industry analysts continue to recognize the quality and breadth of our portfolio. Synopsys was again named a leader in the Forrester Wave for Static Application Security Testing.

To summarize: Q1 was a very good start to the year. We delivered strong financial results and are reaffirming our outlook for fiscal ‘21. Our markets are healthy, as customer investment in critical chip and system designs, as well as immense amounts of software, remains very strong. Our differentiated portfolio of solutions – including exciting innovations in brand new areas of technology disruption – is generating high demand and strong growth.

Lastly, keep an eye out for our second annual Corporate Social Responsibility report, to be published in the next few weeks. We’re proud of the progress we’ve made in the areas of environmental stewardship,
social solidarity, and corporate governance. We look forward to sharing with you our metrics and future objectives.

With that, I’ll turn it over to Trac.

Thanks, Aart. Good afternoon everyone.

We delivered a very strong start to the year, and continue to execute well on our short- and long-term targets. We grew revenue broadly across all product groups and geographies. We reported non-GAAP earnings above our target range and continued to expand non-GAAP operating margin. We produced another quarter of robust collections leading to very strong cash flow, and we announced a $250 million repurchase in the quarter.

Our strong start, market leadership, and the resiliency of our business model -- with nearly 90% recurring revenue give us the confidence to reiterate our 2021 financial targets.

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

We grew total revenue to $970 million, up 16% as design activity generally, and demand for our products in particular, remain high. The quarter also reflected -- the timing of some product shipments shifting forward into Q1.

Semiconductor & System Design segment revenue was $878 million, with both EDA and IP performing well. Software Integrity segment revenue was $92 million, a solid start towards our full-year objectives.

Moving on to expenses, total GAAP costs and expenses were $822 million. Total non-GAAP costs and expenses were $684 million, resulting in a non-GAAP operating margin of 29.6%. Adjusted operating margin for Semiconductor & System Design was 31.8%, and Software Integrity was 8.6%.

Finally, GAAP earnings per share were $1.03, and non-GAAP earnings per share were $1.52.

Turning to cash, we generated $174 million in operating cash flow, our highest first quarter operating cash flow to date, driven by strong collections and a couple of large customer payments that came in early.
We initiated a $250 million stock repurchase, consistent with our commitment to increasing buybacks this year. We ended the quarter with a cash balance of $1.02 billion, and total debt of $123 million.

I’ll now provide our guidance. We are reiterating -- a very solid outlook for growth and profitability for the year:

- Revenue of $4.0 to $4.05 billion;
- Total GAAP costs and expenses between $3.234 and $3.279 billion;
- Total non-GAAP costs and expenses between $2.825 and $2.855 billion;
- A non-GAAP operating margin of 29 to 30%;
- Other income and expenses between minus $11 and minus $7 million;
- Non-GAAP normalized tax rate of 16%;
- GAAP earnings of $4.29 to $4.45 per share;
- Non-GAAP earnings of $6.23 to $6.30 per share;
- Cash flow from operations of $1.2 to $1.3 billion;
- And capital expenditures of approximately $100 million.

Now the targets for the second quarter:

- Revenue between $970 million and $1 billion;
- Total GAAP costs and expenses between $801 and $819 million;
- Total non-GAAP costs and expenses between $697 and $707 million;
- GAAP earnings of 93 cents to $1.02 per share; and
- Non-GAAP earnings of $1.50 to $1.55 per share.

As we announced in December, we are raising our long-term financial objective to manage to a “rule of 45” model over the next several years. We’ll achieve this through a combination of solid revenue growth and non-GAAP operating margin expansion further beyond 30%.

Reiterating a strong outlook for the year and executing to our plan is an important step towards that objective. At the same time, we continue to work through our long-term planning process and will provide additional details, as we have in the past, once that process is complete.
In conclusion, we delivered a very good start to the year. We drove double-digit revenue and earnings growth, and generated strong cash flow. Our ongoing focus on managing the business for sustainable, long-term growth has served us well. While steadily expanding profitability, we continue to invest in the critical, next-generation technologies driving our customers’ momentum. And we’ve prudently managed the strong cash flow we’ve generated through a balance of value-enhancing M&A and substantial buybacks.

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