



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 continued impact and duration 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 continued impact of the COVID-19 pandemic on the global economy and on our business, operations and financial condition; macroeconomic conditions and uncertainty in the global economy; uncertainty in the growth of the semiconductor and electronics industries; the highly competitive industry we operate in; 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 the imposition of additional tariffs or export restrictions; 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, 2021 and in its latest Quarterly Report on Form 10-Q. The information provided herein is as of February 16, 2022. 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 2022, its 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 2022 earnings release and financial supplement, each dated February 16, 2022 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 16, 2022.

Good afternoon. Q1 was an excellent start to the year. Building on the strength and momentum from 2021, we met or exceeded all of our key guidance targets, with strength across all product groups and geographies. Revenue was \$1.27 billion, with GAAP earnings per share of \$1.99 and non-GAAP earnings at the high end of our target range at \$2.40.

As a result of this solid start and confidence in our business, we are raising our full-year revenue and earnings guidance. We are also executing well on the long-term accelerated revenue growth and margin expansion objectives we communicated to you in December. The excellent results can be attributed to three reasons: strong semiconductor market, strong technology with increasing differentiation, strong execution by our teams and adoption of new products. Trac will provide more financial details.

Assessing the landscape: our market is very sound and growing in a way that is positive for Synopsys. As the power and impact of massive amounts of ‘big data’ are increasingly realized, demand for “smart everything” continues to intensify. As a result, customers ranging from traditional semiconductor companies to AI startups, hyperscalers and vertical system houses are all investing heavily and prioritizing design activity.

Rapidly escalating technical complexity – as big data and AI software are brought together in increasingly advanced ways – means that today’s products require highly complex chips, “systems of chips,” and more security and safety. As a result, customer investments are increasing across all market segments.

Synopsys has invested heavily over the past five years in a wave of unique innovations targeted at, and ideally suited for this new era. These investments are yielding excellent technical differentiation and business results. At the center of enabling the “smart everything” era sits the power of AI to develop more complex chips, better and faster.

Our solutions have featured machine learning technology for many years. About a year and a half ago, though, after a multi-year development effort, we released a groundbreaking new AI-driven solution that directs not just individual tools but greatly impacts results and productivity on major segments of the design flow.

Our award-winning DSO.ai solution is the first of its kind and the only one proven in customer production environments today. DSO.ai learns and autonomously drives our design tools in the design space to find the best combinations of chip performance, power and area.

This automation substantially accelerates the work of design teams while delivering better results than traditional design flows. Customers are seeing remarkable outcomes and are deploying quickly to production use. DSO.ai has already been adopted in production-design by five of the top ten semiconductor leaders. In Q1, we saw multiple additional deployments across verticals including mobile, datacenter and processor design. Samsung has completed multiple tape-outs in mobile, including a state-of-the-art, high-performance design in their latest process technology. A leading hyperscaler boosted DSO.ai by using hundreds of CPUs on the cloud and achieved excellent results for an advanced SoC. This breakthrough result demonstrates how DSO.ai can leverage abundant cloud compute for deep design space optimizations.

Critical to the success of DSO.ai are the powerful engines that sit underneath – the integrated Fusion Design Platform. The overall solution is resulting in significant cross-selling opportunities and accelerating growth across our platform. Momentum is manifest across a wide spectrum of market verticals and manufacturing processes: during the quarter, we achieved multiple 3nm design wins, including at a top processor provider, 100% plan-of-record adoption for a 3nm flagship SoC at a leading mobile provider, and advanced node wins at the world's largest CPU providers. We're also achieving competitive wins at established nodes, including at a leading LCD driver provider.

As a result of these high value innovations, hyperscalers continue to expand their reliance on us throughout our portfolio – including multiple new designs using the Fusion Platform. A critical aspect of enabling Smart Everything is tackling technical complexity across the entire system.

The Synopsys maxim – from Silicon to Software – is truly indicative of not only our long-standing focus on the system, but also our differentiating portfolio that puts us in a unique position to enable today's designs.

A bellwether of systems leadership is IP. Following a record 2021, we continued to deliver excellent results in Q1, and demand remains very high. Driven by tremendous complexity and time-to-market pressures, customers increasingly choose to jumpstart their designs by relying more and more on the market-leading IP portfolio we've built and honed for more than 20 years.

In fact, a recent comprehensive IP market study performed by an independent research firm ranked Synopsys #1 for the best IP, highest quality IP, and best support compared to other providers in the industry. We are seeing great momentum across key market segments, including automotive, high-performance compute, mobile and consumer. In automotive, for example, Infineon announced at the

Consumer Electronics Show their next-generation AURIX TC4x microcontroller family, which utilizes Synopsys' IP and virtualization technologies.

Securing their data center is a top priority for our customers. We see strong demand for our Integrity and Data Encryption security IP with 20-plus design wins to-date and a rapidly growing number of active opportunities. Given the skyrocketing data requirements, storage is an important market for us as well. We continue to gain wide adoption of our PCI Express, ARC processors and next-generation mobile storage protocol IP.

Let me talk a bit about some of the innovative system solutions driving our results. First, at the intersection of hardware and software, system verification is a Synopsys strong suit. Adjacent to our long-standing market leadership with chip simulation, static analysis and debug technology, we are early innovators in software- and hardware-based prototyping – now a critical enabler of complex systems. Building on another record year in 2021, we continue to see excellent growth in hardware with both our ZeBu emulation and HAPS prototyping products. Demand is very strong, as our solutions – with the fastest engines, highest capacity and lowest cost of ownership – are especially compelling for today's "sweet spot" of software bring-up. This quarter, we achieved major expansions with our newest ZeBu and HAPS-100 hardware at several of the largest semiconductor, systems and hyperscaler companies in the world. This included noteworthy wins over the newest solutions from our competition.

Second, 3DIC design. This is a new generation of system design that uses tightly abutting or stacking multiple die on a specialized connection chip, in order to enable massively more compute, storage and data management. Our 3DIC Compiler platform is a single unified design environment that combines exploration, construction and signoff analysis. It showcases significant performance, capacity and ease-of-use differentiation over much older competitor solutions. In the quarter, 3DIC continued its strong momentum deployed on production tape-outs at a leading U.S. hyperscaler and a large networking systems company. Our 3DIC platform was recognized by winning TSMC's Customers' Choice Award for leadership in 3DIC design and analysis.

And third, we have leveraged our expertise in design, manufacturing and IP to develop an innovative approach that expands and redefines what's possible in terms of optimizing an entire electronic system.

Our Silicon Lifecycle Management platform allows customers to monitor, analyze, and optimize systems as they are designed, manufactured, tested and deployed in the field. We are seeing strong customer traction and growing adoptions of key elements, including by AI pioneer Cerebras,

who used our embedded monitors to understand on-chip dynamic thermal and voltage conditions in order to optimize power and performance. The growing complexity of systems greatly expands security and safety requirements across the spectrum from chips all the way up to the application software.

Our Software Integrity business attacks this very challenge with the industry's leading portfolio of security testing products and services. Software Integrity had a very good start to the year, crossing the \$400 million trailing-twelve-month revenue threshold with strong growth across product groups, consulting, and geographies. Companies from a wide range of verticals – including hyperscalers, financial services, mil-aero and industrial – continue to grapple with the challenge of bolstering their security posture. Security vulnerabilities for the entire software supply chain, including open-source software, are top-of-mind for developers – reinforced by government directives and recent publicized breaches.

Our strategic consulting services are not only becoming more vital to customers, they are also driving increasing product sales, adoptions and longer-term engagements. In Q1, this was particularly evident in the financial services space. In DevOps, we see increased customer traction with our solutions, including Intelligent Orchestration to integrate application security testing into DevOps workflows, and Code Dx, to correlate and prioritize findings to help developers efficiently address remediation, while maintaining development velocity. In addition, the progress of our indirect partner strategy is very encouraging. Even in these early stages, the program is resulting in many new company adoptions around the globe and business that is ahead of plan.

In summary, Q1 was an excellent start to the year. We delivered strong financial results and are raising our outlook for fiscal '22. Our significant, game-changing innovations are driving outstanding technical and business results. The market we serve is strong, with intensifying customer investment in critical chips, system designs, and immense amounts of software.

Lastly, we will publish our third annual Corporate Social Responsibility report, in which we share the solid progress we've made – and the goals we've set – in the areas of environmental stewardship, including achieving our third year of carbon neutrality, social solidarity, and corporate governance. With that, I'll turn it over to Trac.

Thanks, Aart. Good afternoon everyone. First quarter results reflect good momentum across the company. We delivered a very strong start to the year, with significant revenue growth across all product groups and geographies, expanding non-GAAP operating margin, non-GAAP earnings at the high end of our target range, and solid operating cash flow.

Driving these results is a compelling combination of unprecedented market opportunities, accelerating customer adoptions of our ground-breaking new products, and our excellent execution. Our confidence in our business is strong, and we are raising our full-year 2022 targets.

I'll now review our first quarter results. All comparisons are year-over-year, unless otherwise stated. We generated total revenue of \$1.27 billion, up 31% over the prior year. As expected, the quarter reflected strength in EDA software, as well as outstanding demand for IP and hardware. Total GAAP costs and expenses were \$923 million. Total non-GAAP costs and expenses were \$811 million, resulting in a non-GAAP operating margin of 36.2%. GAAP earnings per share were \$1.99. Non-GAAP earnings per share were \$2.40, up 58% over the prior year.

Semiconductor & System Design segment revenue was \$1.16 billion, with both EDA and IP performing well. Software Integrity segment revenue was \$108 million, a better-than-expected start to the year. We are on track to reaching our 15-20% growth objective for Software Integrity with expanded adjusted operating margin in 2022.

Turning to cash, we generated \$156 million in operating cash flow, higher than plan primarily due to early collections. We used \$250 million of our cash for stock buybacks and ended the quarter with cash and short-term investments of \$1.27 billion, with total debt of \$24 million.

Now to guidance – we are raising our full-year outlook for revenue, earnings, and cash flow.

For fiscal year 2022, the full year targets are:

- Revenue of \$4.775 to \$4.825 billion, representing 14-15% growth;
- Total GAAP costs and expenses between \$3.809 and \$3.856 billion;
- Total non-GAAP costs and expenses between \$3.255 and \$3.285 billion, resulting in non-GAAP operating margin improvement of more than 100 basis points;
- Non-GAAP tax rate of 18%;
- GAAP earnings of \$5.53 to \$5.72 per share;
- Non-GAAP earnings of \$7.85 to \$7.92 per share, representing 15-16% growth;
- Cash flow from operations of \$1.45 to \$1.5 billion.

Now to the targets for the second quarter:

- Revenue between \$1.24 and \$1.27 billion;
- Total GAAP costs and expenses between \$931 and \$951 million;
- Total non-GAAP costs and expenses between \$800 and \$810 million;
- GAAP earnings of \$1.67 to \$1.78 per share; and non-GAAP earnings of \$2.35 to \$2.40 per share.

We continue to anticipate revenue for Q3 and Q4 to be roughly evenly distributed, with expenses skewed to Q4.

As we announced in December, our long-term financial objectives are to deliver annual double-digit revenue growth, non-GAAP operating margin expansion of more than 100 basis points a year, and non-GAAP EPS growth in the mid-teens range.

In conclusion, we delivered a very good start to the year, and are raising our 2022 outlook. Our long-standing commitment to managing the business for enduring long-term growth has not only generated the most compelling product portfolio we've ever had, but also positions us uniquely well for the current dynamic market landscape. As a result, we remain confident in the accelerated long-term financial targets we communicated to you in December. With that, I'll turn it over to the operator for questions.