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; strategies related to our products and technology; business and market outlook, opportunities and strategies; customer demand and market expansion; our planned product releases and capabilities; industry growth rates; software trends; planned acquisitions and stock repurchases; our expected tax rate; the expected impact of U.S. and foreign government actions and regulatory changes on our financial results; and the continued 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 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 we make with the Securities and Exchange Commission from time to time, including in the sections entitled “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended October 31, 2021 and in our latest Quarterly Report on Form 10-Q. The information provided herein is as of May 18, 2022. Although these Prepared Remarks are expected to remain available on Synopsys’ website through the date of the earnings results call for the third quarter of fiscal year 2022, their continued availability through such date does not mean that Synopsys is reaffirming or confirming their 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 second quarter fiscal year 2022 earnings release and financial supplement, each dated May 18, 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 May 18, 2022.
Good afternoon. We delivered an outstanding second quarter, exceeding all of our guidance targets and reaching record revenue, operating margin, earnings per share and cash flow. Revenue for the quarter was $1.28 billion. Business was very strong across all product areas and geographies. Backlog grew to $7.3 billion. GAAP earnings per share were $1.89, with non-GAAP earnings of $2.50 and non-GAAP ops margin of 37%. We generated $750 million of operating cash flow.

With our significant first half strength and high confidence in our business, we are raising guidance substantially for the full year. We expect to grow annual revenue approximately 20% to pass the $5 billion milestone, drive further ops margin expansion, grow earnings per share by more than 25%, and generate approximately $1.6 billion in operating cash flow. Trac will discuss the financials in more detail.

Our financial momentum builds on three drivers. An unmatched product portfolio with groundbreaking new innovations, robust semiconductor and electronics market demands, and excellent operational execution. The backdrop for our outlook sits at the intersection of massively growing amounts of data and the demand for “smart everything” empowered by machine learning and AI. This is synonymous to stating that in both consumer and business applications, the need for electronics and chips is relentless. Chips for data capture and IoTs, for data transmission, for data storage, and, of course, for faster, high-bandwidth and dedicated computation. Plus, a huge and intensifying need for more security and safety. All of this means escalating opportunities for Synopsys. We have seen growing demand, not only from our traditional semi and systems customers, but also from impactful new entrants such as hyperscalers, a mounting number of start-ups, and “non-traditional” systems companies across vertical markets. Notwithstanding macroeconomic choppiness in an uncertain geopolitical environment, these companies are investing heavily in highly complex chips, “systems of chips and chiplets,” and security initiatives. Synopsys is a catalyst in enabling this new “smart everything” era, as many customers race forward to invent and deliver highly creative and optimized chips and systems. Our innovations, particularly in AI-driven design flows and at the intersection of hardware and software, are crucial for our customers, and have fueled our accelerating momentum. In addition, our IP focus, particularly in high-speed connectivity and in advanced interfaces supporting multi-chip design, is second to none and yielding excellent business growth.

Let me begin this quarter’s highlights with AI. As we continue to deliver groundbreaking results and as machine learning is revolutionizing chip design. Our DSO.ai solution, which learns and automates a substantial portion of the design flow, is seeing rapid adoption for production use. Many of the largest, highest-profile semiconductor companies are reporting tremendous productivity benefits using DSO.ai in production today. At our user conference in March, MediaTek, Intel, Samsung and Sony shared with
fellow engineers their impressive achievements using our DSO.ai. The reported results were truly remarkable. As much as 20X productivity improvement, 7-to-25% lower power, and a dramatic reduction in turnaround time – with a single engineer completing four design blocks in half the time that it previously took four engineers.

Critical to the high impact of DSO.ai is our powerful Digital Design solution, resulting in significant cross-selling opportunities and competitive wins at cornerstone semiconductor and systems customers. Orders were well ahead of plan, contributing to our backlog growth. In Q2, two major hyperscalers selected Synopsys’ highly differentiated Fusion Compiler product for multiple advanced designs. We also significantly expanded our share at a top U.S. communications semiconductor company. In aggregate, the trailing-12-month revenue for Fusion Compiler more than doubled.

At our user conference, I had the opportunity to highlight not only some of the exciting capabilities to come – using AI in verification, but also how Synopsys overall is technically helping to transform EDA design more broadly.

Our custom design solutions, for example, are seeing strong market disruptions as well, including 19 full-flow competitive displacements year-to-date. Over the past year, revenue grew double digits in this area with adoptions ranging from large semiconductor companies designing at advanced nodes to automotive to memory vendors. While advanced chips are the foundation of continued scale complexity, electronic systems now increasingly grow systemic complexity by tightly connecting many chips and the software to drive them.

Synopsys excels at this. An ideal example of systems leadership and impact is our IP product line. Here, too, business momentum continued with another excellent quarter, as demand remains very high, especially in the AI, high-performance compute, and automotive markets.

In Q2, we enhanced our comprehensive AI IP portfolio with the introduction of the industry’s highest performance neural processor IP. Simultaneously, we extended our lead in the most advanced commercial processes. We can report significant traction with our interface and foundation IP, achieving more than 30 3nm design wins for high-performance compute and networking, as well as notable wins in mobile applications.

In automotive, our decade-plus investments, safety certifications and market engagements are not only generating continued momentum with leading semiconductor suppliers, but also with OEMs and Tier 1s
now developing their own chips. We count among our customers the top-12 leading automotive semiconductor suppliers, 10 automotive OEMs and 12 Tier 1 companies worldwide. For IP, we have close to 600 automotive design wins in advanced nodes, demonstrating the strength of our portfolio.

At the hub of the system is the intersection of hardware and software. This is precisely where our verification solutions are targeted. Let me highlight three success drivers.

First, there is high demand for our market-leading emulation and prototyping hardware products. Demand is high and we’re heading towards another record year. Fueling this are our new powerful application-specific ZeBu emulation and HAPS-100 prototyping systems. While demand is broad-based across customers and geographies, we continue to see significant growth and usage expansion at many of the largest hyperscalers in the world.

Second, multi-die (sometimes called chiplet-based) system design, is driving a strong need for innovation. Synopsys is uniquely differentiated with our 3DIC Compiler solution and the industry’s leading portfolio of die-to-die interface IP – both of which are essential. Our focus and execution are driving adoption momentum with engagements across multiple market segments, including AI servers, automotive, telecom and aerospace.

And third, cloud-enabled design. One of the challenges for chip designers is access to sufficient – yet flexible – compute power. Of course, our EDA customers have been using cloud compute for years, but true flexibility hasn’t been available until now. In Q2, we expanded our cloud offering with the industry’s first broad-scale cloud SaaS solution. It offers unique flexibility in both access and business model. Synopsys now offers three cloud approaches usable for peak demand to full deployment. One, bring-your-own-cloud with pay-per-use access on the customer’s choice of third-party cloud provider. Two, a SaaS model with tools, flows and Microsoft Azure-based compute. Three: hardware-based verification with Zebu Cloud. Initial customer reception has been excellent, ranging from very small start-ups to large companies seeking peak compute flexibility.

Now to Software Integrity, which is both enabling and benefiting from intensifying demand for security and safety across all market verticals. Bolstered by momentum of products and consulting, as well as broadening geography strength, we delivered another strong quarter with 20% year-over-year growth, exceeding our internal plan. Internationally, we had our best quarter ever, reaching 10 new countries that we’ve never sold to before through our channel partners. We also continue to make good progress improving our renewal rates and new logo engagement metrics.
From a product perspective, our broad portfolio is unique in the market, as our three-pronged approach provides differentiated value for all stakeholders the developers, the DevOps group, and the corporate security team. Over the past year, we’ve launched significant new products in each of these areas, and customer response has been excellent.

Industry analysts continue to recognize Synopsys’ strength. For the sixth year in a row, we were named a Leader in the Gartner Magic Quadrant for Application Security Testing, and for the fourth straight year, we were rated the “farthest up, and to the right.”

Finally, a few weeks ago we announced a definitive agreement to acquire WhiteHat Security, a leading provider of SaaS-based dynamic application security testing (or DAST) technology. This acquisition will further expand our portfolio and accelerate the buildout of our SaaS solutions. We look forward to welcoming the WhiteHat team after the close, which we currently expect to be in our third fiscal quarter.

In summary, we delivered a high-momentum quarter and are substantially raising our outlook for fiscal ‘22. Building on a wave of technology innovations fueling growth, strong and resilient markets, and excellent operational and financial execution, we are poised to cross the $5 billion revenue milestone this fiscal year! These results are not possible without the unwavering commitment and diligence of our employee teams. We thank you all! With that, I’ll turn it over to Trac.

Thanks, Aart. Good afternoon, everyone. In Q2, we delivered record revenue, operating margin, non-GAAP EPS, and cash flow. We continue to execute exceptionally well despite uncertainties in the macro environment. This is a testament to our robust portfolio, healthy markets, and financial discipline. Our strong execution is also enhanced by the stability and resiliency of our time-based business model and $7.3 billion of non-cancellable backlog. Our results and growing confidence in our business lead us to again raise our full-year 2022 targets. After surpassing $4 billion in revenue in 2021, we expect to grow 20% and cross $5 billion in 2022 as our growth accelerates for the third straight year.

I’ll now review our second quarter results. All comparisons are year-over-year, unless otherwise stated. We generated total revenue of $1.28 billion, up 25% over the prior year, with strength across all product groups and geographies. Total GAAP costs and expenses were $916 million. Total non-GAAP costs and expenses were $809 million, resulting in a non-GAAP operating margin of 36.8%. GAAP earnings per share were $1.89. Non-GAAP earnings per share were $2.50, up 47% over the prior year. Semiconductor & System Design segment revenue was $1.17 billion, up 25%, with robust demand for EDA software and
hardware, and IP. Semiconductor & System Design adjusted operating margin was 39.2%. Software Integrity segment revenue was $113 million, up 20%. And adjusted operating margin was 11.5%. Turning to cash, we generated a record $750 million in operating cash flow. We used $250 million of our cash for buybacks and have repurchased $890 million of stock in the trailing twelve months. Our balance sheet remains very strong. We ended the quarter with cash and short-term investments of $1.72 billion, and debt of $24 million.

Before providing guidance, let me briefly comment on the WhiteHat acquisition, which is subject to regulatory review and customary closing conditions. We will pay approximately $330 million in cash when the transaction closes, which we expect to occur this quarter. Based on our preliminary review, we expect the acquisition to be roughly neutral to non-GAAP earnings this year.

Now to guidance, which excludes any impact from the WhiteHat acquisition. We are raising our full-year outlook for revenue, operating margins, earnings, and cash flow. For fiscal year 2022, the full year targets are revenue of $5 to $5.05 billion, this represents 19-20% growth and a $225 million increase versus our prior outlook. Total GAAP costs and expenses between $3.928 and $3.975 billion. Total non-GAAP costs and expenses between $3.35 and $3.38 billion, resulting in non-GAAP operating margin improvement of approximately 250 basis points. Non-GAAP tax rate of 18%. GAAP earnings of $6.22 to $6.40 per share. Non-GAAP earnings of $8.63 to $8.70 per share, representing 26-27% growth. Cash flow from operations of $1.55 to $1.6 billion. Capital expenditures of approximately $145 million, up from our prior guidance as we consolidate our campus at headquarters to create a more efficient and economical footprint. Now to the targets for the third quarter. Revenue between $1.21 and $1.24 billion. Total GAAP costs and expenses between $981 million and $1.0 billion. Total non-GAAP costs and expenses between $830 and $840 million. GAAP earnings of $1.32 to $1.44 per share, and non-GAAP earnings of $2.01 to $2.06 per share.

In conclusion, we continue to execute exceptionally well and based on our strong momentum, we expect to deliver 20% revenue growth 250 basis points of non-GAAP operating margin improvement more than 25% non-GAAP earnings growth and $1.6 billion of operating cash flow in fiscal 2022. With that, I’ll turn it over to the operator for questions.