M&A DEAL ANALYSIS
"Creating a Leader in Systems Design Solutions"

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BOCCONI STUDENTS FOR COMMERCIAL AND INVESTMENT BANKING

M&A DIVISION

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M&A DEAL ANALYSIS

Acquirer: Synopsys Inc.
Target: Ansys Inc.
Deal value: $24.77 billion
Sector: Technology – EDA software
Type of M&A: Acquisition
Exit multiple: N/A
Announced date: 16/01/2024
Completed date: First Half of 2025

Acquirer details
Name: Synopsys
Founding year: 1986
Headquarters: Sunnyvale, California
CEO: Sassine Ghazi (2024 – Present)
Number of employees: 20,300
Market Cap: $89.21B
EV: $88.60B

- LTM Revenues: $6.13B
- LTM EBITDA: $1,74B
- LTM EBITDA margin: 28.42%
- LTM EV/EBITDA: 50.85x
- LTM Price/Sales: 14.81x

(All financial data as of 27/03/2024)

Company industry: electronic design automation (EDA) for semiconductor design.

Target details
Name: Ansys
Founding year: 1970
Headquarters: Canonsburg, Pennsylvania
CEO: Ajei Gopal (2017 - Present)
Number of employees: 6,200
Market Cap: $30.47B
EV: $30.46B

- LTM Revenues: $2.26B
- LTM EBITDA: $771.78M
- LTM EBITDA margin: 34.00%
- LTM EV/EBITDA: 39.46x
- LTM Price/Sales: 13.48x

(All financial data as of 27/03/2024)

Company industry: engineering simulation software and tools for product design.

Deal Overview

Synopsys, the bigwig in the Electronic Design Automation (EDA) industry, is acquiring Ansys, the company specializing in AI-augmented 3D simulation software, in an all-cash deal worth approximately $35 billion. This blockbuster deal, announced on January 16, 2024, is set to be one of the most important transactions in years, and poised to give rise to a new leader in the silicon to systems design sector.

Under the agreement, the shareholders of Ansys will be entitled to receive $197.00 in cash and 0.3450 shares of Synopsys common stock for every single share of Ansys. The deal amounts to an enterprise value of almost $35 billion under the agreement based on Synopsys' common stock closing price on December 21, 2023. The acquisition is being financed with Synopsys' cash resources and approximately $16 billion of debt financing, fully committed, along with $19 billion in cash.

The acquisition is strategic in the fact that it marries the strength of Synopsys in semiconductor electronic design automation with the powerful capabilities of Ansys in the simulation and analysis. In synthesis, these combined entities will be in a position to answer the call of integrated solutions in front of the growingly complex environment of technological innovation, which the semiconductor industry is causing.

Ansys is a leader in engineering simulation, with history to 1970. It sells software solutions which give companies, such as automotive, aerospace, and health care industries, a chance to design and optimize their product. Founded in 1986, Synopsys is one of the leading companies in the EDA market. It is indispensable for the design of complex, state-of-the-art chips required by countless applications: from everyday devices to those that have emerged with the latest sophistication in AI.

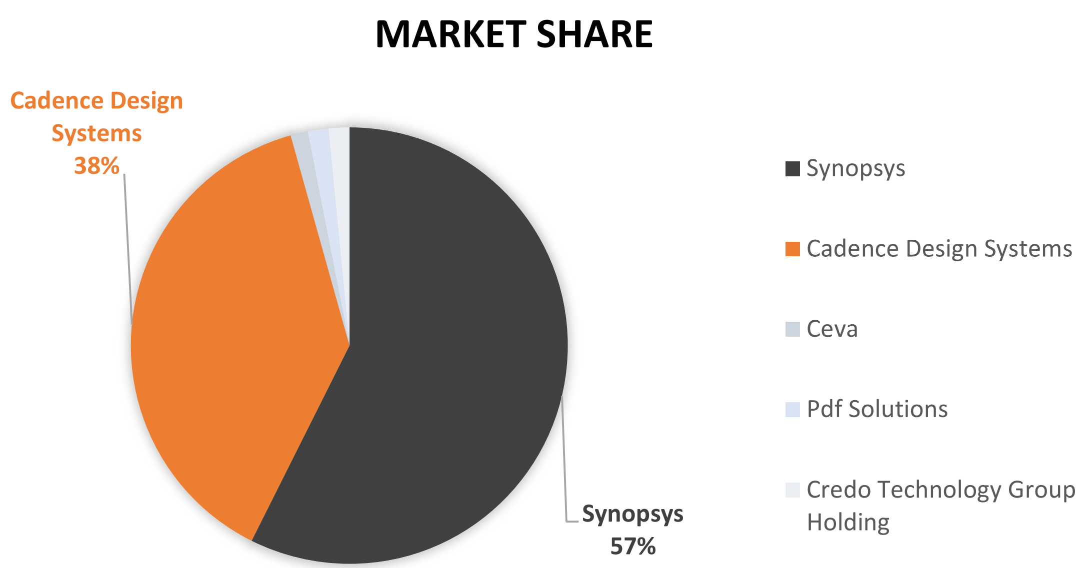
The merger will also further expand the Total Addressable Market (TAM) of the combined entity to about $28 billion, growing at a Compound Annual Growth Rate (CAGR) of approximately 11 percent. This expansion reflects the increasing integration of electronics and physical systems in industry megatrends. Financially, the transaction is expected to result in an accretion to operating revenue for the combined entity from a strong flow of high-growth, high-margin recurring revenues, increasing financial resilience.

However, regulatory scrutiny, especially in key markets like China, may serve as a headwind for the closing of the deal, as approval processes may drag out. The biggest immediate hurdles in integrating the two companies are likely to be cultural assimilation and managing expectations of stakeholders.

Very strategic to the deal is the realization that it will position the new entity with the potential to come out with a holistic range of solutions covering the whole product development life cycle right from planning to verification and testing. This is further expected to improve the R&D capability of its technology teams in these industries, therefore boosting innovation and efficiency as the technology landscape is changing extremely rapidly.

Industry Overview

Synopsys is a leading American company offering a wide range of services in electronic design automation (EDA), intellectual property (IP), and other services for semiconductor design and manufacturing. Since today semiconductor chips have billions of components, these EDA instruments turned into a fundamental segment in planning.
North America is leading in the EDA market since they were one of the first adapters of this technology, therefore many different services and software were developed for each specific need. In the latest years, in Asia and Europe the market has shown a significant growth, and from 2020 to 2024 the expected CAGR worldwide is 13.8%, mostly due to the expected growth of semiconductor sector and AI.
Synopsys is the leader company in the market with a market share of 57%, far away from the second biggest company, Cadence Design System, with 38% of market share, and other smaller players.



The target company, Ansys, is one of the leader engineering simulation software companies thanks to its wide portfolio of software solutions for structural mechanics, fluid dynamics, electromagnetics, and other engineering simulations.
Engineering software market size was valued $33bn in 2022 globally and is expected to grow at 18.8% CAGR from 2023 to 2030, primarily because of the reduction of errors and costs in the industry where engineering simulations are used.
Tech M&A market fell sharply in the first half of 2023, but in the latest months few big deals were announced and closed, including the $69bn VMware acquisition by Broadcom and Cisco's announcement to acquire Splunk for $28bn.

Deal rationale

The $35 billion definitive agreement for Synopsys to acquire Ansys is the largest enterprise software acquisition since Broadcom acquired VMware last November for $69 billion.
Both companies were worth $20 billion in early 2020, but before the deal was completed, Synopsys was valued at a market cap of $77.5 billion and Ansys at $28.5 billion. The deal of $35 billion represents a 29% premium over Ansys's current valuation. This acquisition has the potential to broaden the breadth and size of digital twins, hence easing engineering design workflows across multiple disciplines. They addressed digital twins from slightly different, but increasingly complimentary perspectives. Synopsys specialized in semiconductor design simulation but has recently expanded into software testing and Software Bill of Materials (SBOM) management technology, which is required for software security.

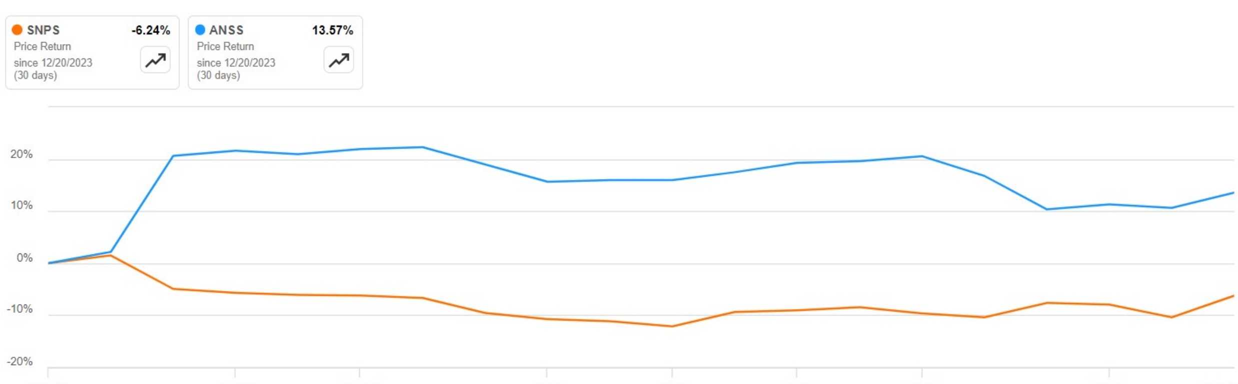
Ansys' key competency is in physic simulations of mechanical, electrical, and heat properties, which are becoming increasingly crucial in designing smaller chip features that incorporate these effects. This combination will allow them to develop a more integrated stack to improve the design of not only chips but all the sustainability infrastructure, such as electric automobiles, solar panels, and heat pumps.

Revenue Synergies:

By combining Synopsys' EDA technology with Ansys' extensive simulation and analytic capabilities, customers may benefit from a complete, powerful, and system-focused approach to innovation. All Ansys customers, including those outside the semiconductor industry, have access to a complete array of goods and technology that will promote innovation.

Synposys' total addressable market (TAM) is expected to increase by 1.5x to about $28 billion. The combined TAM is expected to grow at 11% CAGR which is driven by megatrends and the need of fusion of electronics and physics across industries. It is expected to expand Synopsys' non-GAAP operating margin by 125 bp and unlevered free cash flow margins by approximately 75 bp.

Both companies have highly complementary businesses, and the deal will enhance Synopsys' Silicon to Systems strategy across the core EDA segment and adjacent areas like Automotive, Aerospace and Industrial where Ansys has a better market presence. Since 2017, the relationship between the two players have been successful and the collaboration will only benefit the customers with a broader, deeply integrated suite of software tools



Cost Synergies:

The combined company which is expected to generate substantial and sustained free cash flow will enable rapid de-leveraging to less than 2x debt to Adjusted EBITDA within 2 years after completion. The long-term leverage target is less than 1x. Given Synopsys' cash flow abilities and promise to de-lever, the investment grade credit ratings are expected to remain constant.
The expected run-rate cost synergy 3 years post-completion is $400 million and expected run-rate revenue synergy 4 years post-closing is also $400 million, growing to more than $1 billion annually in the long term.

Deal Structure

Acquirer (Synopsys Inc.):

- Business Overview: Synopsys Inc., a publicly traded company, supplies tools and services to the semiconductor design and manufacturing industry. The products sold by the company include tools for logic synthesis, simulators for development, physical design of integrated circuits and also debugging environments to assist the design of the logic for chips and computer systems.
- Financial Overview: With revenues of $5.85 billion in FY23, Synopsys has grown particularly after 2020. Moreover, it has a increasing CAPEX trend during the last three years.

Target (Ansys Inc):

- Business Overview: Ansys Inc. is a public entity that engages in the development and marketing of engineering simulation software and services. The solutions sold by the firm include automotive, aerospace and defense, construction, energy, autonomous engineering and electrification.
- Financial Overview: In FY23 Ansys had revenues for $ 2.27 billion, with a EBITDA margin of over 34%. For what concern CAPEX, the company had an average of 1.17% during the last three years.

Deal Value: The $33.6 billion deal emphasizes its size and strategic importance. Various factors, including the competitive landscape, financial standing of the parties, and expected synergies, contribute to this assessment. In particular, as said before, it is expected to achieve $800 million of cost and revenues synergies combined by the fourth year.

Deal Type: The deal is categorized as a strategic merger. In particular, the deal come from a collaboration between Ansys and Synopsys that started already in 2017.
Financing and Capital Allocation: in the deal, as underlined before, Synopsys will acquire Ansys for $197 in cash and 0.345 shares of Synopsys common stock per share of Ansys. Therefore, the transaction will be paid by 54% with cash and by 46% with stock. Following the transaction, shareholders of Ansys will own approximately the 16.5% of the combined business. Synopsys stated that it intends to fund the $19 billion of cash through a combination of cash and debt, for which it has already obtained a fully committed financing for $ 16 billion. The cash that Synopsys would need ($19 billions) include the refinancing of the Ansys' existing debt and transaction expenses. The company plan to obtain a combined company leverage less than 2x over the adjusted EBITDA within two years from the closure. Moreover, Synopsys plan to maintain a investment grade credit rating and a long-term leverage ratio less than 1x due to the expected future free cash flows. The company plan to suspend temperately the share buyback program, expecting to resume them as soon as the leverage approaches <2x.

Regulatory Approvals: the leaders of the companies demonstrated their self fairly that the regulatory approval process would be manageable during the last M&A special conference. However, it is important to underline that the deal falls below China's new merger thresholds and that in recent years acquisitions by U.S. companies have faced some difficulties due to the geopolitical tensions between the two countries. Nevertheless, the management of the company is preparing itself and Ansys to comply with export protocols.

Risks and Implications

Short Term:

Short-term market dynamics are expected to be uncertain following the Synopsys-Ansys merger announcement. Shareholders' confidence levels may fluctuate, resulting in stock price volatility for both companies. The progress of regulatory approvals, as well as perceived risks associated with the merger, are likely to have a significant impact on investor sentiment. Any delays or setbacks in the approval process may exacerbate market uncertainty, influencing short-term investment decisions. Additionally, customer concerns about changes in pricing strategies or service offerings following the merger may contribute to short-term demand fluctuations. Proactive communication and strategic measures to address stakeholder concerns will be critical for reducing short-term market volatility and maintaining investor confidence.

Short-term outcomes may be impacted by operational challenges during the merger's initial phases. The divestiture of certain assets held by stakeholders such as Cerberus Capital Management LP, Apollo Asset Management Inc, Schottenstein Stores Corp, and Kimco Realty Corp is expected to streamline consolidation efforts and make the integration process go more smoothly. However, managing the divestiture process effectively while maintaining operational continuity may present short-term challenges. Addressing workforce concerns and minimizing disruptions to daily operations will be critical during this transitional period. Furthermore, the effect of supply chain optimization initiatives on short-term operational performance will necessitate careful management. While efforts to improve supply chain efficiency are intended to ensure long-term viability, any disruptions or inefficiencies during the integration process may have an impact on short-term operations and financial performance.

Long Term:

Looking ahead, the long-term success of the Synopsys-Ansys merger is dependent on a number of factors, including market positioning, customer experience, supply chain optimization, and regulatory compliance. Capitalizing on synergies between the two companies is critical for long-term market competitiveness. By leveraging complementary strengths and expanding product offerings, the merged entity can strengthen its position as a technology leader and drive long-term growth.

Customer experience and loyalty will continue to be critical factors in long-term success. Ensuring a seamless integration that improves overall customer satisfaction while also addressing pricing concerns will be critical to maintaining customer loyalty. By providing exceptional value while remaining affordable, the merged entity can mitigate potential long-term challenges and foster long-term customer relationships.

Long-term operational and financial viability will be heavily reliant on supply chain optimization efforts. By leveraging economies of scale, optimizing procurement processes, and fostering strong supplier relationships, the merged entity can drive cost efficiencies and ensure timely delivery of innovative solutions. Streamlining operations and maximizing resource utilization will allow the merged entity to remain competitive in the rapidly changing technology market.

The successful completion of the FTC approval process is critical to Synopsys and Ansys' long-term operating environment. To ensure the merged entity's long-term viability and competitiveness, compliance with regulatory requirements must be maintained, as will proactive engagement with regulatory authorities. By demonstrating a commitment to regulatory compliance and ethical business practices, the merged entity can earn the trust of stakeholders and position itself for long-term success.

Market reaction

Synopsys Inc. (SNPS) saw its stock price rise early Tuesday after the company announced a significant strategic move: a cash-and-stock acquisition of Ansys Inc. (ANSS), a longtime partner in the semiconductor design and simulation domain. This announcement marks the end of a seven-year partnership between the two companies, during which they worked on a variety of projects, combining Synopsys' expertise in semiconductor electronic design automation (EDA) with Ansys' renowned simulation and analysis tools.

Under the terms of the acquisition, Ansys shareholders will receive $197 in cash and 0.345 shares of Synopsys common stock for each Ansys share they own, for a total enterprise value of approximately $35 billion. This valuation represents a 35% premium over Ansys' 60-day average price prior to December 21, 2023, demonstrating Synopsys' belief in the merger's strategic value. Synopsys intends to finance the acquisition with $19 billion in cash reserves and an additional $16 billion in debt offerings.

The strategic rationale for the acquisition is emphasized by Synopsys' assertion that the combined company's total addressable market (TAM) will grow significantly, 1.5 times to approximately $28 billion. Despite the increased leverage resulting from the acquisition, Synopsys remains optimistic about its financial prospects, projecting a rapid deleveraging to less than two times debt within two years. Furthermore, the merger is expected to result in significant cost synergies, with run-rate savings totaling $400 million by Year Three.

Sassine Ghazi, President and CEO of Synopsys, articulated the company's strategic vision, emphasizing its intent to capitalize on the current "megatrends of AI, silicon proliferation, and software-defined systems." Ghazi envisions the combined entity as an R&D powerhouse across a wide range of industries, ready to drive innovation and technological advancement.

Synopsys shares surged in response to the acquisition announcement, rising as much as 4.6% before easing to 1.5% higher by late afternoon. Ansys stock fell about 5%, reflecting market sentiment and potential investor concerns about the merger's implications.

As Synopsys works through the regulatory approval process and closes the deal, market observers and stakeholders will closely monitor developments to assess the merger's implications for both companies and the broader semiconductor design landscape.

Deal Advisors

Synposys
Financial advisors: Evercore
Legal advisors: Cleary Gottlieb Steen & Hamilton LLP

Ansys
Financial advisor: Qatalyst Partners LP
Legal advisor: Skadden, Arps, Slate, Meagher & Flom LLP and Goodwin Procter LLP

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